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AGENDA
OXNARD CITY COUNCIL
OXNARD COMMUNITY DEVELOPMENT COMMISSION SUCCESSOR AGENCY
OXNARD FINANCING AUTHORITY
OXNARD HOUSING AUTHORITY

Meeting Location: Council Chambers, 305 West Third Street

December 6, 2022

Closed Session - 5:00 PM

Regular Meeting - 6:00 PM

Zoom details to call-in for public comment during a meeting:

- 1. Dial Phone Number: (888) 475-4499**
- 2. Enter Meeting ID: 846 8574 6950**
- 3. Passcode: 105297**

If you wish to speak during public comments or a particular item on the agenda, please sign-on by following the zoom calling in steps listed above. Once the presiding officer calls for public speakers, **press *9 to raise your hand to inform the City Clerk you would like to speak during the public speaking section for that particular item on the agenda, while in the zoom waiting room.**

IN ACCORDANCE WITH ASSEMBLY BILL 361 AND IN RESPONSE TO THE DECLARED STATE AND LOCAL EMERGENCIES DUE TO THE NOVEL CORONAVIRUS, THE LEGISLATIVE BODY WILL MEET IN-PERSON AND REMOTELY. TO PARTICIPATE REMOTELY VISIT WWW.OXNARD.ORG.

To find out how you may provide public comment, please refer to the instructions below or at [www.https://www.oxnard.org/city-meetings/](https://www.oxnard.org/city-meetings/).

The public may view the meeting from home on Spectrum channel 10, Frontier channel 35, or YouTube at [Youtube.com/oxnardnews](https://www.youtube.com/oxnardnews). Video recordings of the meeting are typically available online following the meeting at the City's website at www.oxnard.org/city-meetings.

*Please see the link for the Measure M pre-recorded presentation video for each item listed on this agenda.

YOU MAY PARTICIPATE IN THE MEETING IN THE FOLLOWING WAYS:

- 1. ATTEND THE MEETING AT THE LOCATION LISTED ABOVE:** Submit a speaker card to the City Clerk.
- 2. EMAIL COMMENTS OR SIGN UP TO SPEAK REMOTELY BEFORE THE MEETING**
 - a. Submit a request to speak remotely by no later than 3 p.m. on the day of the meeting by using the form available at www.oxnard.org/citymeetings.
 - b. Submit an email to cityclerk@oxnard.org no later than 3 p.m. on the day of the meeting (indicate the agenda item number in the subject line). All email correspondence will be forwarded to the legislative body prior to the start of the meeting and made part of the legislative record.
 - c. Contact the City Clerk's Office at (805) 385-7803 to submit your request.

In compliance with the Americans with Disabilities Act, if you require special assistance to participate in a meeting, please contact the City Clerk's Office at 385-7803. Notice at least 72 hours prior to the meeting will enable the City to reasonably arrange for your accessibility to the meeting.

Agenda Item Time Estimates include: (Minutes for Presentation + Council Discussion + Public Comment)

3. PROVIDING PUBLIC COMMENTS REMOTELY DURING THE MEETING

- a. To provide public comment during the meeting dial (888) 475-4499 and enter the Meeting ID and Passcode listed above as the Zoom details for this meeting. When the presiding officer announces the particular item on the agenda you want to speak on, **press *9 to raise your hand** while in the zoom waiting room. Once called on, **press *6 to unmute** your phone.
- b. Public comments on agenda items will be taken following the announcement of the item. After the item is announced, members of the public may register or otherwise be recognized for the purpose of providing public comment.

Please review the Zoom instructions on the registration page to help ensure there are no technical difficulties during your comments and help you understand public comment procedures using Zoom. Detailed participation instructions can be found at www.oxnard.org/city-meetings.

In the event of a disruption which prevents a legislative body of the City of Oxnard from broadcasting a meeting using a call-in option or internet-based service option, or in the event of a disruption within the City's control which prevents members of the public from offering public comment using the call-in option or internet-based service option, the legislative body shall take no further action on items appearing on a meeting agenda until public access to the meeting via the call-in option or internet-based service option is restored. However, if any of the broadcast options are disrupted, but any of the other broadcast options is still available to the public, the legislative body may take further action on items appearing on a meeting agenda without waiting for the disrupted broadcast option(s) to be restored.

* The City has filed pre-election and post-election lawsuits regarding the validity of Measure M.

A. ROLL CALL, POSTING OF AGENDA

THE FOLLOWING LEGISLATIVE BODIES ARE MEETING: City Council

B. PUBLIC COMMENTS ON CLOSED SESSION ITEMS

C. CLOSED SESSION (5:00 PM)

1. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code section 54956.9(d)(1))
City of Oxnard v. Fox Canyon Groundwater Management Agency, Los Angeles Superior Court Case No. 20STCP00929, a Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief.

D. OPENING CEREMONIES (6:00 PM)

Pledge of allegiance to the flag of the United States.

E. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

A person may address the legislative body only on matters not appearing on the agenda and within the subject matter jurisdiction of the legislative body. Speaker requests shall be submitted as set forth on the first page of this agenda. Speakers are limited to three minutes. After 30 minutes, if all speakers have not had the opportunity to speak, the remaining speakers will be given an opportunity to speak prior to adjournment of the meeting. The legislative body cannot enter into a detailed discussion or take action on any items presented during public comments at this time. Such items may only be referred to the City Manager/Executive Director/Secretary for administrative action or scheduled on a subsequent agenda for discussion. Persons wishing to speak on public hearing items should do so at the time of the hearing.

F. REPORT OF CITY MANAGER/EXECUTIVE DIRECTOR/SECRETARY

1. City Manager Department

SUBJECT: COVID-19 Update from Director of Emergency Services.

RECOMMENDATION: That the City Council re-authorize remote teleconference meetings of the legislative bodies of the City of Oxnard in accordance with Assembly Bill 361 based on the following findings: (i) the current COVID-19 situation, particularly with its variants, is causing, and will continue to cause, imminent risks to the health and safety of persons within the City, including City Council members, City staff, appointed officials, and members of the public; (ii) state and local officials continue to impose or recommend measures to promote social distancing; and (iii) the Governor's COVID-19 State of Emergency is still in effect; and (iv) numerous public agencies throughout Ventura County are still operating in accordance with Assembly 361, for the reasons stated herein.

Legislative Body: City Council

Contact: Stephen Fischer, (805) 385-7483

G. PUBLIC HEARINGS

1. Community Development Department

SUBJECT: Appeal of Planning and Zoning Permit No. 18-500-02 (Special Use Permit); Undeveloped parcel (approximately 34 acres) located at the southeast corner of Hueneme Road and Perkins Road; APNs: 231-0-092-105 and 231-0-092-245 Project Name: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility. (240 minutes)

RECOMMENDATION: That the City Council conduct a public hearing and:

1. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and
2. Adopt a Resolution denying the appeal and uploading the Planning Commission's decision to grant Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.

(This item did not originate in Committee.)

Please click the following link to view the required Measure M pre-recorded presentation video: <https://youtu.be/i2vFQjFenYA>

Legislative Body: City Council

Contact: Ashley Golden, (805) 385-7478

H. ADJOURNMENT



CITY COUNCIL AGENDA REPORT

PUBLIC HEARINGS AGENDA ITEM NO. G.1

DATE: December 6, 2022

TO: City Council

FROM: Ashley Golden, Assistant City Manager, (805) 385-7478, ashley.golden@oxnard.org

SUBJECT: Appeal of Planning and Zoning Permit No. 18-500-02 (Special Use Permit); Undeveloped parcel (approximately 34 acres) located at the southeast corner of Hueneme Road and Perkins Road; APNs: 231-0-092-105 and 231-0-092-245 Project Name: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility. (240 minutes)

RECOMMENDATION

That the City Council conduct a public hearing and:

1. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and
2. Adopt a Resolution denying the appeal and uploading the Planning Commission's decision to grant Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.

(This item did not originate in Committee.)

Please click the following link to view the required Measure M pre-recorded presentation video: <https://youtu.be/i2vFQjFenYA>

BACKGROUND

On October 20, 2022, the Planning Commission (the "Commission") held a public hearing to consider Environmental Impact Report (EIR) No. 22-01 and Planning and Zoning Permit No. 18-500-02 requesting approval of a Special Use Permit (SUP). The project scope involves a temporary outdoor vehicle storage facility for a maximum of five years on an approximately 34-acre project site. The facility includes the following: vehicle parking area with gravel base, temporary guard house (240 square feet), portable restroom, perimeter site lighting, security fencing (6-foot-high), landscaping, site drainage, and associated infrastructure improvements (i.e., curb cuts, apron, etc.). The temporary outdoor vehicle storage facility includes approximately 27.5 parkable acres to accommodate up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre. Upon expiration of the Special Use Permit, the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface would be removed. The 6-foot-high fencing, landscaping, and drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner. The project site is located at the southeast corner of Hueneme Road and Perkins Road. Staff presented the project with a recommendation for approval to the Planning Commission (Attachment 1).

At the public hearing, the Commission heard public testimony, deliberated, and voted 4-1, with two Commissioners recused, to adopt the resolutions certifying the EIR (Attachment 3) and approving the requested SUP (Attachment 4).

Pursuant to Sections 16-544 and 16-545 of the Oxnard City Code ("OCC"), the action of the Planning Commission is

final unless an appeal application to the City Council is filed within 18 days after the date of the decision. On November 7, 2022, the Appellant (The Central Coast Alliance United for a Sustainable Economy, Earthjustice, Natural Resources Defense Council, and Wishtoyo Chumash Foundation) filed a timely Appeal application with the City (Attachment 5).

DISCUSSION

The Appellant appealed the decision of the Planning Commission based on five grounds of appeal. The Appellant's five grounds of appeal are noted below, verbatim, with staff's response following each ground of appeal:

Ground of Appeal 1:

The FEIR is replete with inconsistencies, omissions, and misrepresentations of facts by the Oxnard Harbor District and the Lead Agency that tainted environmental review.

The FEIR has several inconsistencies. During the October 20, 2022 Planning Commission hearing, these inconsistencies were once again made evident in the answers given by the Oxnard Harbor District (hereinafter "Applicant" or "Port") and the Lead Agency to questions by the Commission. The Commission abused its discretion by ignoring these inconsistencies and certifying the FEIR. A table of these inconsistencies is attached as Exhibit A.

Staff Response:

Staff disagrees with Ground of Appeal 1, as the Appellant refers to statements from the one Commissioner who voted against staff recommendations. The Planning Commission is comprised of seven members. The statements of the one Commissioner who voted against staff recommendations are not the findings of the Planning Commission, as the Planning Commission voted 4-1 to follow staff recommendations. Therefore, the findings of the Planning Commission are the findings discussed in the Planning Commission Staff Report.

The Planning Commission listened to several hours of testimony, considered the entire record, deliberated, and voted 4-1 to certify the EIR and grant the SUP. Thus, any "contradictory" statements from individual Commissioners, staff, applicants, the public and others were considered by the Planning Commission.

The topics discussed in this Ground of Appeal are addressed in the Final EIR as follows: piecemealing is addressed in Global Response GR-3; cumulative impacts and growth are addressed in Global Response GR-8, Section 4, and Section 7; project description and project surroundings are addressed Section 3; alternatives are addressed in Global Response GR-7 and Section 6.

Ground of Appeal 2:

The Commission erred in certifying a flawed Environmental Impact Report.

The Commission certified an FEIR that failed to comply with CEQA and contained numerous flaws that made it unreliable as an environmental review document. These flaws include unlawful piecemealing of the Project; failure to assess the cumulative impacts; failure to consider reasonable alternatives that would avoid building a parking lot near environmental justice communities and sensitive habitats such as wetlands; failure to properly mitigate environmental impacts, as well as inaccurate and inconsistent assessment of impacts related to traffic, air pollution, biological resources, cultural resources, toxic hazards, and environmental justice. As a result, Oxnard residents and this City Council have been deprived of the necessary information and analysis concerning this Project's true near and long-term environmental impact.

Staff Response:

Staff disagrees with Ground of Appeal 2, as these topics discussed in this Ground of Appeal are addressed in the Final EIR as follows: piecemealing is addressed in Global Response GR-3; cumulative impacts are addressed in Global Response GR-8 and Section 4; alternatives are addressed in Global Response GR-7 and Section 6; traffic impacts are addressed in Global Response GR-4, Global Response GR-6, and Section 5.19; air quality impacts are addressed in Section 5.3; biology impacts are addressed in Section 5.4; cultural impacts are addressed in Section 5.5; hazards are addressed in Section 5.9, and environmental justice is addressed in Global Response GR-5.

Ground of Appeal 3:

Public engagement and outreach failed to provide a meaningful opportunity for public comment by ignoring clear

language access barriers.

Despite knowing that the impacted South Oxnard neighborhoods have a high percentage of households where English is not a dominant language, and after hearing numerous calls to translate the FEIR documents and provide simultaneous interpretation of public workshops and hearings, the Lead Agency refused to do so—creating additional barriers to meaningful participation in the environmental review process.

Staff Response:

Staff disagrees with Ground of Appeal 3, as this ground was the subject of many comment letters regarding the Draft EIR that were addressed in the Final EIR. Staff prepared Global Response GR-2 to respond to these multiple letters. Thus, staff prepared the EIR pursuant to CEQA. The Planning Division has Spanish speakers that regularly interact with the public. To date, no one has requested a Spanish speaker to discuss the Port of Hueneme Temporary Outdoor Vehicle Storage Project. Furthermore, during the Planning Commission Hearing, translators were available to translate testimony from Spanish to English. During the Planning Commission Hearing, no one provided testimony in a language other than English. Therefore, the City did not provide barriers to public participation, as the City provided many additional opportunities for public participation in the Planning process.

Ground of Appeal 4:

Questions remain as to the temporary nature of this Project and concrete steps for fixing this issue remain vague.

During the October 20, 2022 Planning Commission hearing, commissioners raised concerns regarding the temporary nature of the Project and the site's future remediation. For example, Commissioner Arruejo stated, "I do have ...serious concerns that it may not be temporary or even if it is that the cleanup will not happen in the manner that is put in the conditions of approval and so I intend to offer an amendment to ensure that there is more confidence by the community and Planning Commission that there is going to be a cleanup." Additional concerns were raised by Commissioner Nash, who stated, "I do not find this Project as being a reasonable manner of preserving, protecting, providing for, and fostering the health safety and welfare of the citizenry in general, and the persons who work, visit, or live in this development in particular." This was especially concerning in light of the Port's admission that they are anticipating "one and a half million" in restoration costs, that should not be borne by the taxpayer. Residents and City leaders deserve to know how the site might continue to impact the region in the years ahead. Concrete plans need to be in place to address these serious concerns. For example, the final resolution could include amendments explaining how restoration should be carried out (e.g., including access points to the beach in South Oxnard, wetlands restoration, and consideration of how it the restored area could become an educational site where residents can learn and connect to the land), which experts the Lead Agency will work with to ensure sensitive habitats and species are adequately considered, what process will be in place to engage the surrounding community in developing the restoration plans, and who would bear final restoration costs.

Staff Response:

Staff disagrees with Ground of Appeal 4, as the Planning Commission granted the SUP subject to conditions of approval and Condition No. 57 requires that upon the expiration of the five year permit life, the site is returned to its existing condition. Since the Planning Commission expressed concerns regarding the site's return to its existing condition within a timely manner, the Planning Commission amended the staff recommended Condition No. 57 to require a bond to return the site to its existing condition (with the exception of the drainage improvements, landscaping, and fencing which shall remain on the site and be maintained by the property owner). Since the project site is not located within the Coastal Zone and therefore not subject to the California Coastal Commission coastal access requirements, there is not a nexus for the project site property owner to be required to provide coastal access for this temporary project. In addition, a nexus does not exist to require off-site wetlands remediation or a dedication of a portion of the site for an educational site.

Ground of Appeal 5:

The Commission made its decision based on an incomplete record.

The Lead Agency should have ensured that the Commission had all necessary information available before the Commissioners heard the matter and voted. Yet, despite many requests to ensure a complete record, several key items were still missing prior to the hearing—calling into question whether Commissioners had all records necessary to decide the matter properly.

Staff Response:

Staff disagrees with Ground of Appeal 5, as the record that was presented to the Planning Commission included the complete Final EIR. The Appellant states that four comment letters regarding the Draft EIR were not included in the Final EIR. Those comment letters are as follows: 1) Letter from Mati Waiya, Tevin Schmitt, and Eva Pagaling to Jay Dobrowalski dated February 14, 2022; 2) Letter from Christina Zubko to Jay Dobrowalski dated February 10, 2022; 3) Letter from Nancy Lindholm to Chair Daniel Chavez and members of the Planning Commission dated February 14, 2022; and 4) Letter from Carolina Gallardo Magaña & Southwinds Neighborhood Council to Jay Dobrowalski dated February 14, 2022. These four letters are included in the Final EIR and that was published on the Planning Division website on October 12, 2022 and was attached to the Planning Commission Staff Report dated October 20, 2022.

Conclusion:

The Appellant requests the Planning Commission decision to certify the EIR and grant the SUP be overturned based on several grounds.

Based on the previous discussion (see above Analysis Section), staff recommends that City Council find there is no merit to the Appellant's Grounds of Appeal, deny the Appeal and uphold the decision of the Planning Commission to certify the Environmental Impact Report and grant the Special Use Permit for a vehicle storage facility. Subject to certain findings and conditions. Pursuant to OCC Section 16-551, the decision of the City Council is final.

STRATEGIC PRIORITIES

This agenda item supports Economic Development strategy. The purpose of Economic Development strategy is to focus on the retention and expansion of Oxnard businesses by increasing the skills and employability of our local workforce, invite new business investments, and target site-based redevelopment opportunities.

FINANCIAL IMPACT

Denial of the requested Appeal would uphold the Planning Commission's approval and allow for the redevelopment of the project site, and, if redeveloped, the Project may generate additional tax revenue in an amount that is undetermined at this time.

COMMITTEE OUTCOME

This item is a public hearing and was heard by the Planning Commission; therefore, this item did not originate in Committee.

Prepared by: Joe Pearson II, AICP, Principal Planner, Jay Dobrowalski, Planning Supervisor

ATTACHMENTS

1. Planning Commission Staff Report dated October 20, 2022
2. Planning Commission Transmittal Memos (Public Comments)
3. Planning Commission Resolution No. 2022-35
4. Planning Commission Resolution No. 2022-36
5. Appeal Form with Grounds of Appeal submitted by Appellant dated November 7, 2022
6. Draft City Council CEQA Resolution
7. Draft City Council SUP Resolution
8. Presentation

**PLANNING COMMISSION
STAFF REPORT**

TO: Planning Commission

FROM: Jay Dobrowalski, Planning Supervisor

DATE: October 20, 2022

SUBJECT: **Project Name: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility;** Planning and Zoning Permit No. 18-500-02 (Special Use Permit); Undeveloped parcel located at the southeast corner of Hueneme Road and Perkins Road; APNs: 231-0-092-105 and 231-0-092-245

- 1) **Recommendation:** That the Planning Commission (“**Commission**”):
 - a) Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and
 - b) Adopt a Resolution approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.
- 2) **Project Description and Applicant:** The applicant requests a permit to construct and operate a temporary outdoor vehicle storage facility for a maximum of five years on an approximately 34-acre project site. The facility includes the following: vehicle parking area with gravel base, temporary guard house (240 square feet), portable restroom, perimeter site lighting, security fencing (6-feet-high), landscaping, site drainage, and associated infrastructure improvements (i.e., curb cuts, apron, etc.). The temporary outdoor vehicle storage facility includes approximately 27.5 parkable acres to accommodate up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre. Upon expiration of the Special Use Permit, the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface would be removed. The 6-foot-high fencing, landscaping, and drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner.

The request includes certification of the proposed Final Environmental Impact Report (EIR) No. 22-01 (State Clearinghouse No. 2020069039) and approval of the Findings of Fact and the Mitigation Monitoring and Reporting Program (MMRP) which has been prepared pursuant to the California Environmental Quality Act (CEQA) Public Resources Code (California Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

The project site is located at the southeast corner of Hueneme Road and Perkins Road (APNs: 231-0-092-105 and 231-0-092-245) within the Light Manufacturing with Planned Development Additive Zone (M-1-PD) (Attachment A). For purposes of this staff report, the foregoing project description shall be referred to as the “Project.”

Filed by Christina Birdsey, 333 Ponomo Street, Port Hueneme, California 93044-0608, designated agent (the “Applicant”) on behalf of A&J Oxnard LLC, 18980 Ventura Boulevard, Unit 200, Tarzana, California 91356 (the “Property Owner”).

Please see the reduced Project plans (Attachment B) for more details.

- 3) Existing & Surrounding Land Uses:** The Project site is currently vacant and undeveloped. The Project site is not located in a 2030 General Plan identified neighborhood. The following table lists and identifies the General Plan Land Use Designations, Zoning Designations, and existing land uses of the Project site and properties immediately adjacent to the site, which are also illustrated in Attachment A:

Table 1
 Existing and Surrounding Land Uses

LOCATION	GENERAL PLAN	ZONING	EXISTING LAND USE
Project Site	Industrial Limited (ILT), Park (PRK)	Light Manufacturing Zone with Planned Development Additive Zone (M-1-PD)	Vacant and undeveloped
North	Commercial General (CG), Residential Medium High (RMH), Residential Low (RL), Residential Medium (RM), School (SCH), and Park (PRK)	Single Family Residential with Planned Development Additive Zone (R-1 PD), Multiple Family Residential with Planned Development Additive Zone (R-2 PD), Garden Apartment with Planned Development Additive Zone (R-3 PD), High-Rise Residential (R-4),	Hueneme Road is adjacent to and north of the project site. Commercial uses are located north of the project site across Hueneme Road, and residential, school, and park uses are located north of the commercial uses.

		Community Reserve (CR), General Commercial All Affordable Housing Permitted (C-2-AHP), Neighborhood Shopping Center with Planned Development Additive Zone, All Affordable Housing Permitted (C-1 PD-AHP)	
South	Industry Priority to Coastal Development (ICD), Resource Protection (RP)	Coastal Development Industrial (CDI), Coastal Reserve Protection (RP), Coastal Recreation (RC)	The Ventura County Railway (VCRR) line is located immediately adjacent to the southeastern portion of the project site. The City of Oxnard Advanced Water Purification Facility is located north of the VCRR and immediately adjacent to the southwestern portion of the project site. South and east of the VCRR is the Ormond Lagoon Waterway and vacant and undeveloped land that is currently in the conceptual planning stages for future wetland restoration.
East	Industrial Light (ILT), Resource Protection (RP)	Light Manufacturing with Planned Development Additive Zone (M-1-PD) and Coastal Resource Protection (RP)	Vacant and undeveloped land. A 3-acre trailer truck storage facility is proposed for this land, and is currently in the land permit process.
West	Industry Priority to Coastal Development (ICD), Commercial General (CG)	Coast Development Industrial (CDI), General Commercial (C-2), High-Rise Residential (R-4)	Coastal dependent industrial uses

4) Background Information: The Project site is currently vacant and undeveloped. The Project site has been subject to discretionary development as follows:

On July 20, 1995, the Land Use Advisors (the decision making body that was later renamed as the Planning Commission) recommended that the City Council approve a tentative subdivision map (Tract No. 987). The application included a zone change (No. 805), tentative tract map (Tract No. 4987), and a Special Use Permit (No. 1473). Prior to the City Council public hearing, the application was withdrawn.

On January 8, 2002, the City Council reviewed a Pre-Application submittal to develop the 38-acre site with a vehicle preparation facility that included several structures for a total of 95,000 square-feet of floor area. Subsequently, the application was formally submitted.

On August 5, 2002, the Planning Commission granted a Special Use Permit (Planning and Zoning Permit No. 02-500-09) for the development of a vehicle processing and distribution facility that included several buildings for a total of approximately 100,000 square-feet of floor area, and adopted a Mitigated Negative Declaration (Planning and Zoning Permit No. MND 02-08) to determine that the proposed project would not result in a significant effect on the environment. The Planning Commission also recommended that City Council approve a General Plan Amendment (Planning and Zoning Permit No. 02-620-2) to change the General Plan designation of the site from Medium Density Residential and Commercial to Light Industrial to be consistent with the site zoning designation of Light Industrial.

On October 1, 2002, the City Council granted an appeal of the Planning Commission's decision to adopt the Mitigated Negative Declaration and grant the Special Use Permit, and directed staff to prepare an Environmental Impact Report for the proposed project. Subsequently, the application was withdrawn.

On March 20, 2008, the Planning Commission granted a Special Use Permit (Planning and Zoning Permit No. 07-500-13) for the development of the Groundwater Recovery Enhancement and Treatment Program Advanced Water Purification Facility on a 4.65-acre site that used to be part of the 34-acre project site. The Planning Commission also recommended that the City Council approve a General Plan Amendment (Planning and Zoning Permit No. 08-620-01) to change the General Plan designation of the site from Residential Medium to Light Industrial to be consistent with the site zoning designation of Light Industrial.

On April 14, 2008, the City Council upheld the Planning Commission's decision to grant the Special Use Permit and also approved the General Plan Amendment. Subsequently, the water facility was developed and is currently in operation.

On March 29, 2018, the applicant submitted the current application for a Special Use Permit for the proposed temporary vehicle storage facility.

- 5) Environmental Determination:** Pursuant to the California Environmental Quality Act (CEQA) Section 15060, the City of Oxnard as the Lead Agency, prepared a Mitigated Negative Declaration (MND) in accordance with CEQA and the CEQA Guidelines. The MND identified and discussed potential impacts, mitigation measures, monitoring requirements, and residual impacts for identified subject areas. The MND was available for public review from December 13, 2018 to January 14, 2019, but was extended to January 31, 2019. The City of Oxnard received over 220 comment letters on the MND from agencies, organizations, and interested parties. In response to the areas of concern identified in those letters, the City, at its own discretion, elected to prepare an EIR for the proposed project.

Pursuant to the California Environmental Quality Act (CEQA) Section 15060, the City of Oxnard as the Lead Agency, has prepared an EIR (State Clearinghouse No. 2020069039) in accordance with the requirements of the California Environmental Quality Act (CEQA, Public resources Code § 21000, et seq.), the regulations promulgated thereunder (14 California Code of Regulations, §15000, et seq., CEQA Guidelines), and the City's Environmental Review Guidelines (Attachment C). The EIR identifies and discusses potential impacts, mitigation measures, monitoring requirements, and residual impacts for identified subject areas.

The Draft EIR (DEIR) identified the potential environmental impacts of the proposed development and was available for public review from December 16, 2021 to February 14, 2022 (a total of 61 days), however only a 45 day public review period was required. During the public review period, the City received over 200 comments. As a result of the comments received, revisions were made to the DEIR to form the Final EIR (FEIR). The written comments and responses to each of those comments received during the public review period of the DEIR are included in the FEIR. The DEIR revisions are discussed in the FEIR (Section 1.1).

The FEIR did not identify any significant and unavoidable (Class 1) impacts (impacts that cannot be reduced to a less than significant level). The FEIR identifies potentially significant but mitigable (Class 2) impacts (impacts that can be reduced to a less than significant level with mitigation measures) and less than significant (Class 3) impacts (impacts that do not require mitigation measures because the proposed project will not have a significant impact). The FEIR concludes that after implementation of standard conditions and mitigation measures, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The FEIR includes a Mitigation Monitoring and Reporting Program (Section 11) that details the process to implement the required mitigation measures.

Therefore, staff has determined that there is no substantial evidence that the Project will have a significant effect on the environment and recommends that the Planning Commission certify that: (1) The final EIR has been completed in compliance with CEQA; (2) The final

EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and (3) The final EIR reflects the lead agency's independent judgment and analysis.

6) Project Analysis:

a) *General Discussion:*

The applicant requests a permit to construct and operate a temporary outdoor vehicle storage facility for a maximum of five years on the approximately 34-acre project site. The facility includes the following: vehicle parking area with gravel base, temporary guard house (240 square feet), portable restroom, perimeter site lighting, security fencing (6-foot-high), landscaping, site drainage, and associated infrastructure improvements (i.e., curb cuts, apron, etc.). The temporary outdoor vehicle storage facility includes approximately 27.5 parkable acres to accommodate up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre. Upon expiration of the Special Use Permit, the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface would be removed. The 6-foot-high fencing, landscaping, and drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner.

The temporary outdoor storage facility is being requested because the auto shipping logistics market is highly competitive and subject to larger global economic trends. The Port of Hueneme and its customers are subject to those trends as auto industry sales rise and fall with the economy. The auto industry is predicting national car sales reductions of two to three percent annually in the next several years. The Port anticipates reductions in car throughputs as a result of this economic trend, and this project would help to create storage space for up to 30,000 cars annually, which would offset an anticipated throughput reduction of approximately the same number of vehicles.

The Port is seeking to facilitate the success of one of its customers, GLOVIS, so that GLOVIS' operations remain at Port Hueneme. GLOVIS does not own land near the Port and instead leases land from the United States Navy at NVBC Port Hueneme. Thus, the Port of Hueneme is acting as project sponsor to assist GLOVIS in consolidating its current off-Port vehicle storage operations with this project to make its operations more efficient. Additionally, jobs for 14 new employees would be created as a direct result of this project. New cars that would be stored at the vehicle storage facility would not require additional ships to arrive at the Port, because the current fleets of scheduled vessels have enough capacity to add cars without any need for additional vessel calls. Any increased volume of new vehicles is anticipated to be offset by the softening of the market for other auto customer vehicles moving through the Port.

Pursuant to Oxnard City Code (OCC) §16-163, the proposed vehicle storage facility located within the M-1 Zone District requires a Special Use Permit. Pursuant to OCC §16-536, the Planning Commission is the decision maker for the requested Special Use Permit.

- b) *General Plan Consistency:*** The City's 2030 General Plan land use designations for the subject site are Industrial Limited (ILT) and Park (PRK). The Industrial Limited designation allows the following land uses: light manufacturing, assembly, work/live, and warehousing uses developed to high performance and development standards. All activity occurs within buildings with the exception of incidental outdoor uses. The Park designation allows the following land uses: City, County, State, and National-owned parks, beaches, regional parks, community parks, neighborhood parks, special purpose facilities, golf courses, athletic fields, and open space areas.

The proposed project includes the development of temporary structures for temporary vehicle storage. Given the temporary use of the site for outdoor vehicle storage for a maximum of five years and that the proposed project does not include permanent structures, the proposed project does not preclude future development for park land or other industrial land uses. Thus, the proposed project is consistent with the General Plan Industrial Limited and Park designations. As shown in Attachment D, the approval of this project has been determined to be consistent with the 2030 General Plan and the property's land use designation.

- c) *Conformance with Zoning Code Development Standards:*** The proposed development is located within the Light Manufacturing Zone with Planned Development Additive Zone (M-1-PD) zone district and is subject to the Light Manufacturing (M-1) development standards.

The proposed project was evaluated for consistency with the M-1 development standards. As shown in Attachment E, the Project is designed to be consistent with the development standards.

- d) *Site Design, Circulation, and Parking:*** The primary access to the proposed vehicle storage facility would be from two entrance/exit driveways on Perkins Road. Both driveways would include a Knox Box for emergency access, and would remain upon expiration of the Special Use Permit. In addition, one emergency access driveway at the terminus of Saviers Road at Hueneme Road would be provided. This emergency access driveway would also include a Knox Box for emergency access, and would remain upon expiration of the Special Use Permit.

The vehicle storage facility includes 12 employee parking spaces, a temporary guard house, and a portable restroom located in the northwestern corner of the facility and drainage improvements located in the southeastern area of the facility. The rest of the

project site will be used for vehicle storage on a gravel surface. The gravel surface will be removed upon expiration of the requested Special Use Permit.

The facility includes nine drive aisles that cross the facility from west to east and three drive aisles that cross the facility from north to south. All of the drive aisles will be 25 feet wide to accommodate emergency vehicles. The vehicle storage area will have vehicles stored in rows that cross the site from west to east. The facility includes a storage area for a maximum of 4,944 vehicles.

Vehicles would be individually driven to the vehicle storage facility in groups of ten at a time. No vehicle carrier trucks would be used to load or offload vehicles at the facility. The vehicle fleet mix traveling to and from the vehicle storage facility would include only passenger cars and shuttle vans; no semi-trucks or other heavy transports would be used. The typical vehicle movement operation for this facility would involve two different actions: 1) vehicles arriving at the facility and 2) vehicles leaving the facility.

Vehicles to be stored at the vehicle storage facility would be driven from the vehicle processing area on Naval Base Ventura County (NBVC) Port Hueneme property, out through the NBVC Pleasant Valley gate and would head south on Ventura Road and then turn east on Hueneme Road. These vehicles would be driven east on Hueneme Road to Perkins Road where they would turn south onto Perkins Road and east into the vehicle storage facility via the access driveways on Perkins Road.

Vehicles stored at the vehicle storage facility would be started in groups of up to ten at a time and would be driven out of the facility and turn north onto Perkins Road. The cars would then turn west onto Hueneme Road and drive west toward the Port, where they would turn north onto Ventura Road to enter NBVC Port Hueneme at the Pleasant Valley gate and drive through to the NBVC Port Hueneme vehicle processing area. When cars leave the vehicle storage facility, they would return to NBVC Port Hueneme for processing from where they enter the existing commerce stream of delivery to auto dealers in eight western states via locomotives and car-carrier trucks. This distribution method is the same as that currently used for all automobiles that are imported through the Port, and because this vehicle storage facility would not result in an increase in the throughput of vehicles and would only keep up with existing capacities, there would be no change in the impacts associated with delivering these cars to market. The vehicles would be stored at the vehicle storage facility, and the process would repeat until the vehicles (a maximum of 240 vehicles per day) have been moved from the Port to the facility. The entire process of driving from the Port to the vehicle storage facility and returning to the Port takes approximately 20 minutes.

- e) **Building Design:** The vehicle storage facility includes a 240-square-foot temporary guard house/office trailer, and a portable restroom located in the northwestern corner of the facility. The guard house/office trailer would be used for 24-hour security services

and the restroom would be available only for on-site personnel, and would be serviced as needed by a waste services provider.

The facility also includes 19 solar-powered, mobile, low-intensity LED tower light fixtures along the perimeter. The light fixtures are approximately 20 feet in height and would provide security lighting for the project site that is inward facing, downcast, and shielded. The placement of the lights is intended to minimize lighting impacts to the natural habitat south of the project site and would meet the City's security and Code standards for site lighting.

The guard house/office trailer, portable restroom, and mobile light fixtures will be mostly screened from the adjacent roadways. The site will be screened by a 6-foot-high chain-link fence and landscaping, so the top portion of the structures will be visible from the adjacent roadways.

The guard house/office trailer, portable restroom, and mobile light fixtures will be removed upon expiration of the requested Special Use Permit.

- f) Landscaping:** The project site would be screened with a 6-foot-high chain-link fence and native landscaping around the perimeter.

The project site is located along Hueneme Road, which is a City designated scenic roadway. As such, the General Plan requires a 30-foot landscape buffer. The northern side of the project site frontage along Hueneme Road includes a 30-foot landscaping buffer as follows: the first 20 feet (adjacent to the roadway) will be planted with groundcover and the next 10 feet will be planted with native landscaping. The landscaping will be located in front of a 6-foot-high chain-link fence. The emergency access driveway located across from the southern terminus of Saviers Road will be paved for vehicle access.

The project site is also located along Perkins Road. Perkins Road is not a City-designated scenic roadway. The western side of the project site frontage along Perkins Road includes landscaping as follows: the first 15 feet (adjacent to the roadway) will be left vacant and the next 10 feet will be planted with native landscaping. The landscaping will be located in front of a 6-foot-high chain-link fence. The two driveways located along Perkins Road will be paved for vehicle access.

The eastern side of the project site (facing the adjacent trucking operation) includes landscaping as follows: inside the property line, the first 10 feet will be planted with native landscaping. The landscaping will be located on the inside of a 6-foot-high chain-link fence (the fence will be located along the property line).

The southern side of the project site (facing the adjacent railroad tracks) includes landscaping as follows: the southern edge of the property will be planted with native

landscaping to grow on a chain-link fence. The landscaping will be located on the inside of a 6-foot-high chain-link fence (the fence will be located along the property line).

The 6-foot-high chain-link fence and landscaping will remain on the site upon expiration of the requested Special Use Permit and will be maintained by the property owner. The Landscape Plans are provided in Attachment B.

g) Project Operations:

Vehicles would be driven to and from the facility Monday through Saturday, between the hours of 7:30 a.m. and 3:30 p.m. Nighttime operations would not occur. The vehicle storage facility would be staffed 24 hours a day, 7 days a week for security purposes.

The vehicle storage facility would be staffed by 14 employees: 3 security guards, up to 10 vehicle drivers, and 1 shuttle van driver. Vehicle-moving employees (vehicle and shuttle van drivers) would arrive at the vehicle storage facility between 7:30 to 8:00 a.m. and would leave the facility no later than 4:00 p.m. The three security guards would each work an 8-hour shift, such that one security guard would remain on-site at all times. A maximum of three parking spaces would be dedicated solely for employee parking. The vehicle drivers would not park their personal vehicles at the vehicle storage facility; they would arrive via shuttle when vehicles need removing or via cars being driven to the site for storage.

The vehicle storage facility would serve as an off-site storage lot for vehicles that could not be stored at GLOVIS' current facility at NBVC Port Hueneme due to a lack of space while still allowing GLOVIS to accommodate its customers, including Hyundai, Kia, GM, and Honda, as well as electric vehicles. The vehicles would remain at the facility for several weeks to several months, depending on market conditions. When it is necessary for GLOVIS to process the vehicles, drivers would use a van to drive from the GLOVIS facility to the vehicle storage facility, then drive each vehicle back to NBVC Port Hueneme to be processed and then transported by either truck or rail to GLOVIS customers in the United States. The vehicles would utilize the same travel route back to the GLOVIS' facility at NVBC Port Hueneme from the vehicle storage facility.

The vehicle storage facility would function under the operating scenario described below. A maximum of 240 vehicles per day would be transported to or from The Port of Hueneme to the vehicle storage facility. Most days the vehicle storage facility would see small numbers of vehicle moves. However, many days the facility would see no vehicle movements at all. All vehicles stored at this vehicle storage facility would be light duty vehicles; no trucks or diesel-powered vehicles would be stored at this facility. The rate of vehicles entering or leaving the facility would not exceed 30 cars per hour for 8 hours daily, or 240 vehicle trips (one way) per day. The vehicles would be individually driven to or from the vehicle storage facility and would not require the use of transport trucks.

It is planned that the movement of vehicles to and from the vehicle storage facility would follow that of similar storage areas that currently support Port customer automobile operations where groups of ten vehicles are moved at a time by a crew of ten drivers who are transported to the cars via a shuttle van. The ten vehicle drivers and the shuttle van driver would report to The Port of Hueneme, and the ten vehicle drivers would each individually drive a vehicle to the facility. The shuttle van would follow the vehicles to the facility.

h) Project Lighting:

Nineteen solar powered, mobile, low-intensity LED tower light fixtures would be placed along the perimeter of the property. The light fixtures are approximately 20 feet in height and would provide security lighting for the project site that is inward facing, downcast, and shielded. The placement of the lights is intended to minimize lighting impacts to the natural habitat south of the project site and would meet the City's security and Code standards for site lighting. These mobile light fixtures would be removed upon expiration of the Special Use Permit.

- 7) Development Advisory Committee:** On April 25, 2018, the Project was reviewed by the Development Advisory Committee (DAC) which resulted in changes to the project and recommended conditions of approval. The DAC conditions of approval are included in the attached Resolution.
- 8) Community Workshop:** On November 19, 2018 and March 21, 2022, the Project was presented to the public during a Community Workshop meeting. Although the project site is not located within a General Plan Neighborhood, the applicant mailed notice of the meeting to residents within the Southwinds and Cypress Neighborhoods. Notice of the meeting was also posted on the site at two separate locations. During the meetings, commenters submitted verbal and written testimony. The comments were generally related to the following topics: air quality impacts, biology impacts, land use incompatibility, traffic impacts, inadequate public participation opportunities, environmental justice, and inadequate environmental review. These public comments are the same as the comments that have been addressed in the EIR.
- 9) Noticing and Public Comments:** Consistent with public noticing requirements, the Planning Commission Hearing was advertised with on-site postings in two locations and by mail to property owners within 300 feet of Project Site. Following the end of the public comment period for the Draft EIR the City received 45 comments on the project. The public comment letters submitted following the end of the Draft EIR public comment period are attached (Attachment F). Since the release of the notice of this public hearing, Planning Staff has received no other inquiries from the public regarding the proposed Project.

10) Appeal Procedure: In accordance with Section 16-545 of the Oxnard City Code, the Planning Commission's action may be appealed to the City Council within 18 days after the decision date. Appeal forms may be obtained from the City Clerk and must be submitted with the appropriate fees before the end of the appeal period. If an appeal to the City Council is not filed within 18 days of the Planning Commission's decision, the decision of the Planning Commission shall be considered final.

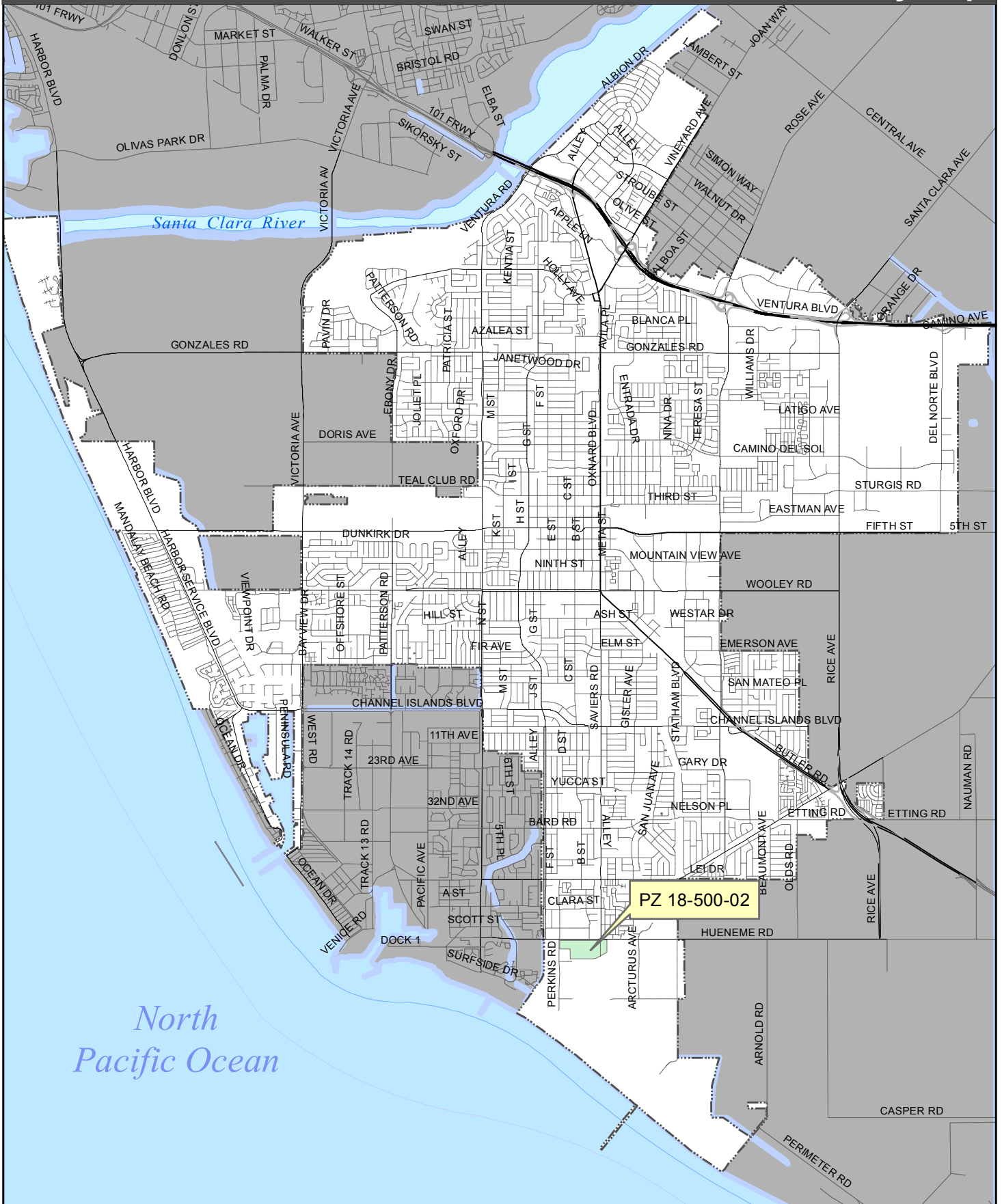
Attachments:

- A. Maps (Vicinity, General Plan, Zoning, Aerial)
- B. Reduced Project Plans
- C. Final Environmental Impact Report No. 22-01
- D. General Plan Consistency Table
- E. Zoning Code Development Standards Consistency Table
- F. Public Comment Letters
- G. Draft Planning Commission Resolution Certifying Environmental Impact Report No. 22-01
- H. Draft Planning Commission Resolution Approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit)
- I. Staff Presentation

Attachment:

A. Maps (Vicinity, General Plan, Zoning, Aerial)

Vicinity Map



PZ 18-500-02

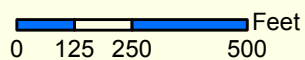


2030 General Plan Land Use Map



Oxnard Planning
November 7, 2018

PZ 18-500-02
APN: 2310092245, 2310092105

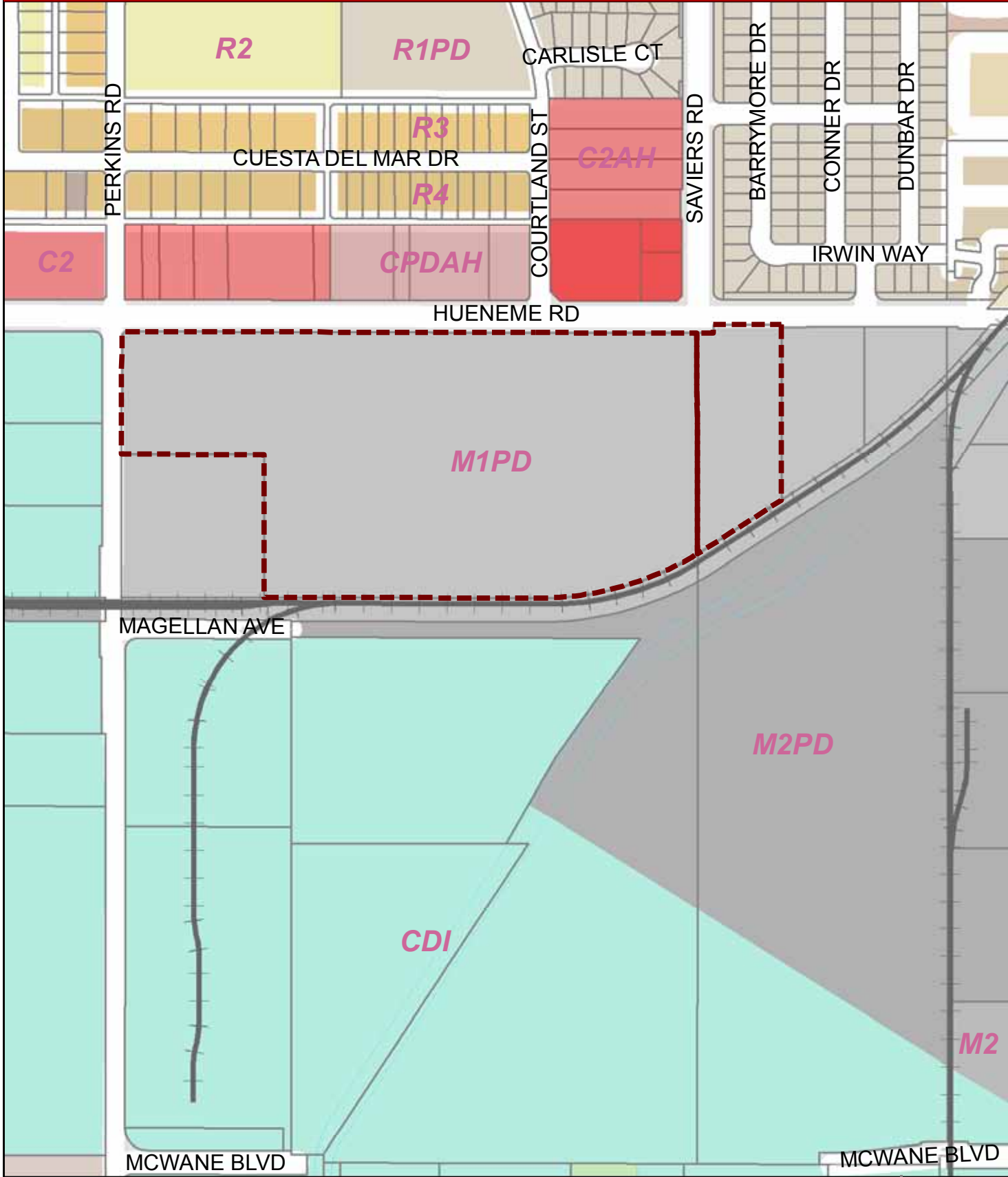


2030 General Plan Land Use Map



1:5,000

Zoning/Specific Plan Map



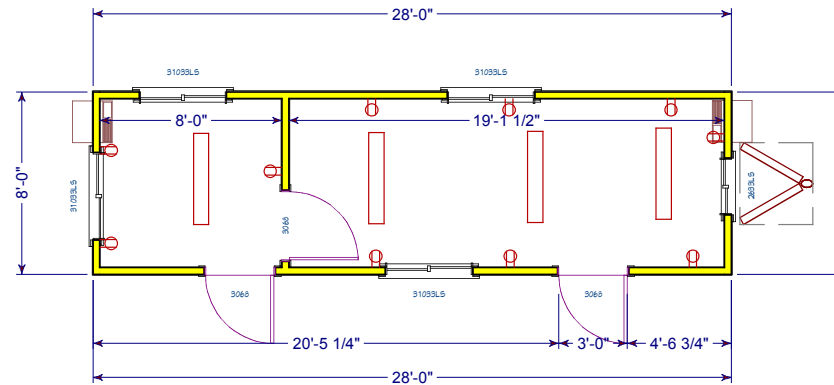
Aerial Map



Attachment:

B. Reduced Project Plans

API Inv#:082000021



Attachment:
 Scale: 3/16"=1' @ 11x17
 Last Revision Date: 11/13/2014
 e-mail: sales@apitrailers.com
 Web Site: www.apitrailers.com
 Phone: 800 394-9217
 Fax: 805 928-9190



API Inv#:082000021

Notes

ALL DOOR LOCATIONS, WINDOW LOCATIONS, & MEASUREMENTS ARE APPROXIMATE.

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Modular Building size: 8x28	Floor Cover: Charcoal Carpet	HVAC: Bard wall mount 2ea@1ton ea	
Electrical: 100-125 amp sub-panel, single phase, 110-220volt	Base Cove: 4" Vinyl Charcoal Gray	Code: Commercial Modular Department of Housing	
Interior wall Finish: Minnesota Birch	Windows: Aluminum	Body Paint: Sherwin Williams Gloss Latex, Color: Taupe	
Roofing: EPDM		Trim Paint: Sherwin Williams Gloss Latex, Color: White	
Siding: Smart Panel	Ceiling: T-Bar 2x4 suspended		
Exterior Doors: 3'-0" x 6'-8" Metal	Lighting: 2x4 Recessed Fluorescent		

Atlas Performance Industries, Inc. Phone: 800 394-9217 e-mail: sales@apitrailers.com

www.apitrailers.com

Vehicle Storage at Hueneme & Perkins

Temporary Office Trailer Photos



TMP SERVICES
 2929 KANSAS AVE.
 RIVERSIDE, CA 92507
 (951) 213-3900 FAX (951) 213-3997

ACCESSIBLE RAMPS/LANDINGS/STAIRS

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EXL
STRUCTURAL ENGINEERS, INC.

MEMBER
 STRUCTURAL ENGINEERS
 ASSOCIATION OF CALIFORNIA
 AMERICAN CONCRETE
 INSTITUTE
 4081 RIVERSIDE DRIVE, SUITE 114
 CORONA, CALIFORNIA 92703
 (951) 613-0234
 Fax (951) 613-0238

NOTES:

LOADS:

- RAMP LIVE LOAD = 100 PSF
- NO SNOW LOADING
- NO FLOOD LOADING
- WIND:
WIND SPEED = 120 MPH
RISK CATEGORY = II
EXPOSURE = C
 $K_z = 1.0$
WIND DESIGN PER ASCE 7-10 CHAPTER 29
- SEISMIC:
RISK CATEGORY = II
 $I_e = 1.0$
 $S_s = 3.73$
 $S_1 = 1.30$
SITE CLASS = D
 $S_{ps} = 2.487$
 $C_s = 0.9332$ (ASCE 7-10 EQUATION 15.4-2)
 $R = 3.25$ (ASCE 7-10 TABLE 15.4-1)

- ALLOWABLE SOIL BEARING = 1000 PSF

CODES:

- 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC)....(PART 1, TITLE 24, CCR)
 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART
 2, TITLE 24, CCR) (2015 EDITION INTERNATIONAL BUILDING CODE WITH
 2016 CALIFORNIA AMENDMENTS)
 2016 CALIFORNIA FIRE CODE (CFC), (PART 9, TITLE 24, CCR)
 (2015 EDITION INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA
 AMENDMENTS)
 2016 CALIFORNIA GREEN CODE (CFC), (PART 9, TITLE 24, CCR)
 2016 CALIFORNIA REFERENCED CODE, (PART 12, TITLE 24, CCR)
 NFPA 13 2016
 NFPA 72 2016
 2016 CODE SECTIONS FOR APPLICABLE STANDARDS
 2016 CBC, CHAPTER 35
 2016 CFC, CHAPTER 45

TABLE OF CONTENTS

Sheet No	Description	Dated	Revised
1	COVER SHEET	01 FEB. 2017	
2	ACCESSIBLE RAMP ELEVATIONS & DETAILS	01 FEB. 2017	
3	ACCESSIBLE RAMP DETAILS & NOTES	01 FEB. 2017	
4	DETAILS & NOTES	01 FEB. 2017	
5	ACCESSIBLE RAMP SWITCH BACK DETAILS	01 FEB. 2017	
6	STAIRS - OPTIONAL	01 FEB. 2017	
7	ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK	01 FEB. 2017	
8	ACCESSIBLE RAMP ELEVATIONS & PLAN VIEWS	01 FEB. 2017	

ALTERNATE PLANK RAMP/LANDINGS

Sheet No	Description	Dated	Revised
1A	COVER SHEET	01 FEB. 2017	
2A	ACCESSIBLE RAMP ELEVATIONS & DETAILS	01 FEB. 2017	
3A	ACCESSIBLE RAMP DETAILS & NOTES	01 FEB. 2017	
4A	DETAILS & NOTES	01 FEB. 2017	
5A	ACCESSIBLE RAMP SWITCH BACK DETAILS	01 FEB. 2017	
6A	STAIRS - OPTIONAL	01 FEB. 2017	
7A	ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK	01 FEB. 2017	
8A	ACCESSIBLE RAMP ELEVATIONS & PLAN VIEWS	01 FEB. 2017	

REVISIONS	BY



COVER SHEET
 TMP SERVICES
 2929 KANSAS AVE.
 RIVERSIDE, CA 92507
 PHONE: (951) 213-3900
 FAX: (951) 213-3997

SITE:
 STATE OF CALIFORNIA

DRAWN
 CHECKED
 DATE
 01 FEB. 2017
 SCALE
 JOB NO.
 1
 OF 8 SHEETS



STRUCTURAL ENGINEERS, INC.

[illegible]

LICENSE EXPIRES 6-30-18

DATE SIGNED
FEB 06 2017

ACCESSIBLE RAMP DETAILS & NOTES

TEMP SERVICES
2929 KANSAS AVE.
RIVERSIDE, CA 92507
PHONE: (951)213-3900
FAX: (951)213-3997

STATE OF CALIFORNIA

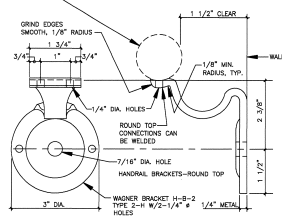
SITE:

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CHECKED
DATE FEB. 2017
SCALE
JOB NO.

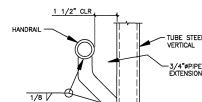
3

8 SHEETS

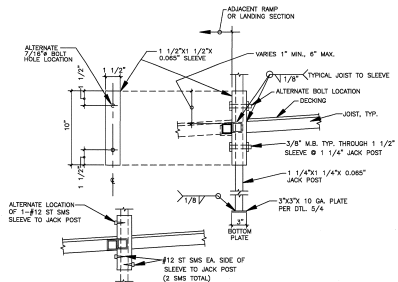
NOTE: HANDRAILS, THE GRIP PORTION SHALL NOT BE LESS THAN 1 1/4 INCHES
NOR MORE THAN 1 1/2 INCHES, OR THE SHAPE SHALL PROVIDE AN
EQUIVALENT GRIPPING SURFACE AND ALL SURFACES SHALL BE SMOOTH
WITH NO SHARP CORNERS. HANDRAILS SHALL NOT ROTATE WITHIN
THEIR FITTING. ANY WALL OR OTHER SURFACE ADJACENT TO THE
HANDRAIL SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS, EDGES
SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.



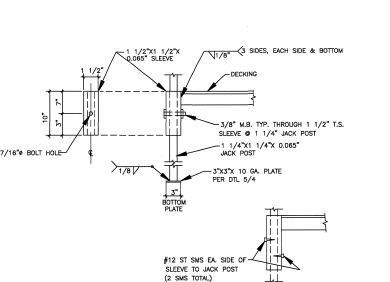
1 OPTIONAL HANDRAIL ARMS



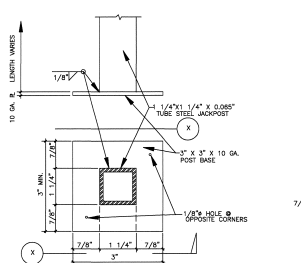
2 TYPICAL HANDRAIL ARMS



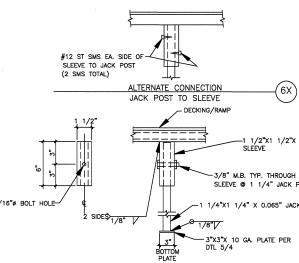
3 RAMP POST SLEEVES 1 1/2" T.S.



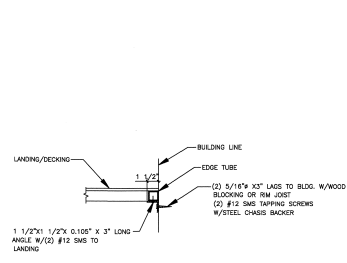
4 LANDING POST SLEEVES 1 1/2" T.S.



5 POST BASE

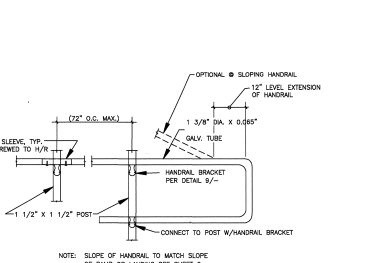


6 MID SPAN POST

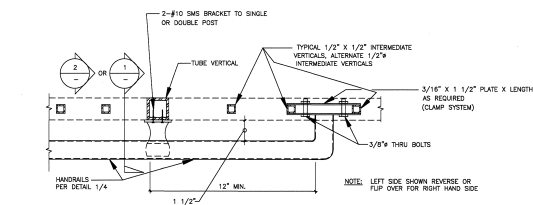


7 LANDING TO BUILDING

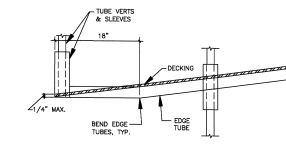
NOTE: DECK SECTIONS ARE FREE
STANDING FOR VERTICAL
LOADS.



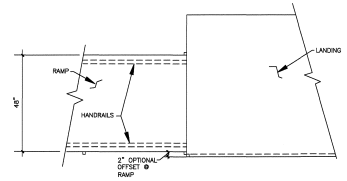
8 OPTIONAL CONNECTION @ HANDRAIL DETAIL



9 OPTIONAL HANDRAIL DETAIL @ TOP OF STAIRS
OR RAMP



10 TOE @ END OF RAMP



11 NO SCALE

NOTES:
CODES:
2014 CALIFORNIA BUILDING CODE (CBC)
DESIGN LOADS:
WIND LOAD: 100 PSF
WIND LOAD: SEE SHEET 1
SEISMIC: SEE SHEET 1
HANDRAIL & GUARD RAIL LOADS:
50#/FT
200# POINT LOAD
MATERIAL SPECIFICATIONS:
STEEL: ALL TUBE STEEL ASTM A-1008 CS TYPE A99 B (Fy = 40KSI)
ALL STEEL TO BE COATED WITH A FLUOROPOLYMER COATING
BOLTS: ASTM A307
PLYWOOD OPTION: APA RATED STRIKE EXTERIOR PLYWOOD
WELDER: ALL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY
D-1.3-2008 FOR SHEET STEEL
ELECTRODES SHALL BE E70XX
GENERAL NOTES:
1) RAMP HAVING SLOPES STEEPER THAN 1 VERTICAL TO 20
HORIZONTAL SHALL HAVE LANDINGS AT TOP AND BOTTOM AND
AT LEAST ONE INTERMEDIATE LANDING SHALL BE PROVIDED FOR EACH
30' OF RISE. PER CBC 11B-405.7.
2) LOCATION OF LANDINGS:
LANDINGS SHALL BE PROVIDED AT TOP AND BOTTOM OF EACH RAMP.
INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT
EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF
DIRECTION. LANDINGS ARE NOT CONSIDERED IN DETERMINING THE
MAXIMUM HORIZONTAL DISTANCE OF EACH RAMP.
NOTE: EXAMPLES OF RAMP DIMENSIONS ARE:
SLOPE MAX. RISE (INCHES) MAX. HORIZONTAL PROJECTION
1:12 30 30'-0"
1:16 30 40'-0"
1:20 30 50'-0"
1:15 30 37'-6"
3. SIZE OF TOP LANDINGS: TOP LANDINGS SHALL NOT BE LESS THAN 60 INCHES WIDE
AND SHALL HAVE A LENGTH OF NOT LESS THAN 60 INCHES IN THE DIRECTION OF RAMP
RUN. PER CBC 11B-405.7.2 AND 3.
4) DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM
DIMENSION OF THE LANDING TO LESS THAN 42" AND SHALL NOT
REDUCE THE REQUIRED WIDTH BY MORE THAN 3" WHEN FULLY
OPENED. CBC 11B-405.7.5.
5) RAMP SHALL BE CONSTRUCTED AS REQUIRED FOR STAIRWAYS.
6) THE SURFACE OF RAMP SHALL BE ROUGHED OR SHALL BE OF SLIP-
RESISTANT MATERIAL, TYP. FOR LANDINGS & STAIRS.
7) RAMP REQUIREMENTS SHALL BE PER CBC 11B-405.
8) RAMP SHALL CONFORM TO CBC 11B-405.
9) STRIKE EDGE EXTENSION: THE WIDTH OF THE LANDING SHALL EXTEND 24" PAST
THE STRIKE EDGE OF ANY DOOR OR GATE FOR EXTERIOR RAMPS AND 18" PAST
THE STRIKE EDGE FOR INTERIOR RAMPS.
10) LANDING WIDTH: AT BOTTOM AND INTERMEDIATE LANDINGS, THE WIDTH
SHALL BE AT LEAST THE SAME AS REQUIRED FOR RAMPS. CBC 11B-405.7.4.
11) THE WIDTH OF RAMPS SHALL BE AS REQUIRED PER STAIRWAYS
AND EXITS. CBC 11B-405.5.
12) SLOPE RAMPS AND LANDINGS AS REQUIRED TO PREVENT ACCUMULATION
OF WATER ON WALKING SURFACES.
13) ALL WORK SHALL CONFORM TO TITLE 24 CALIFORNIA CODE OF REGULATIONS
TITLE 24, CCR.

REVISIONS	BY



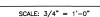
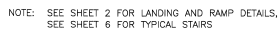
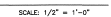
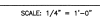
DETAILS
AND NOTES
TAP SERVICES, INC.
2929 KANSAS AVE
RIVERSIDE, CA 92507
PHONE: (951)213-3900
FAX: (951)213-3997

SITE:
STATE OF CALIFORNIA

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DATE	01 FEB. 2017
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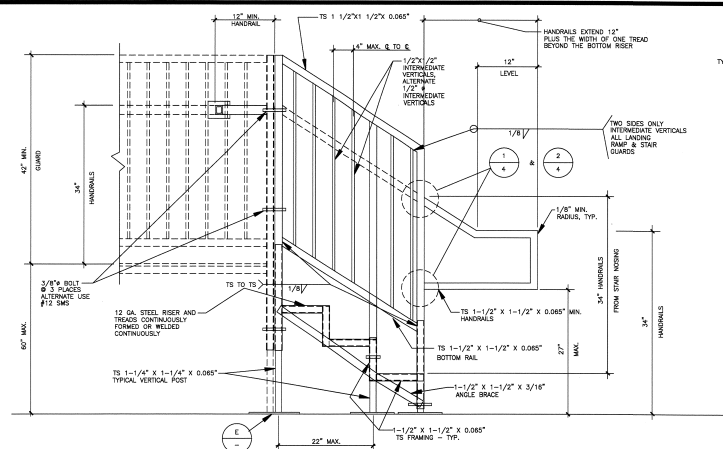
OF 8 SHEETS

EXL
STRUCTURAL ENGINEERS, INC.
4081 RIVERSIDE DRIVE, SUITE 114
CANA, CALIFORNIA 91710
MEMBER
STRUCTURAL ENGINEERS
ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE
INSTITUTE
(909) 813-0234
FAXING 913-353-5538



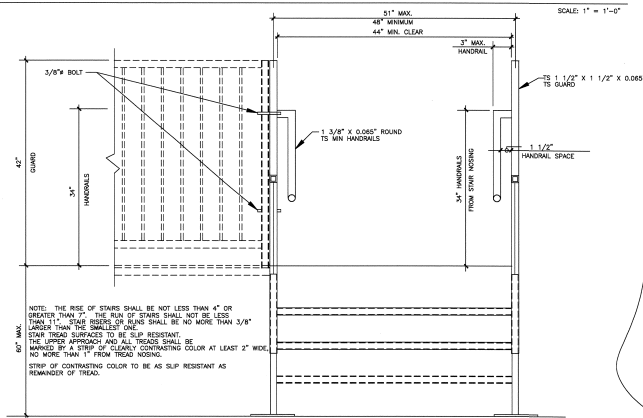
MEMBER
STRUCTURAL ENGINEERS
ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE
INSTITUTE
(909) 613-0234
Fax(909) 613-0238

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JOB NO.
5
OF 8 SHEETS



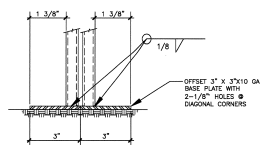
SIDE VIEW

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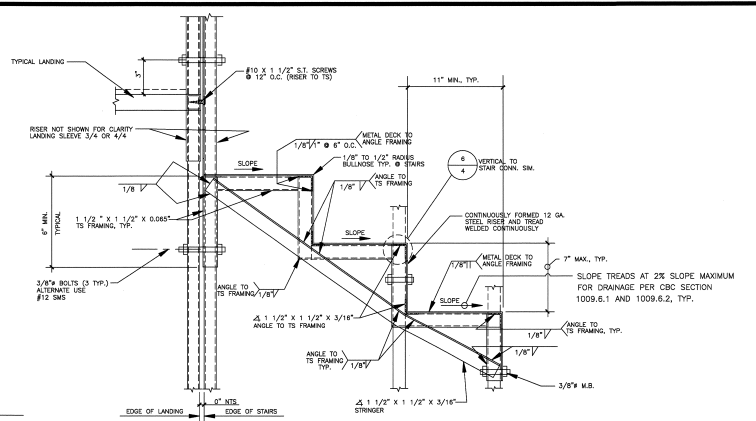


FRONT VIEW

C

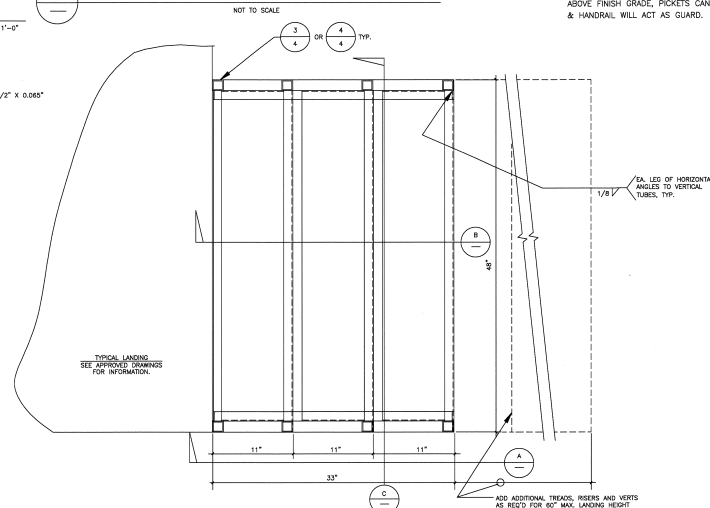


E



SECTION

B



PLAN VIEW

D

NOTE: PICKETS & 42" HIGH GUARD REQUIRED FOR THRESHOLD HEIGHTS GREATER THAN 30" ABOVE FINISH GRADE. FOR THRESHOLD HEIGHTS LESS THAN 30" ABOVE FINISH GRADE, PICKETS CAN BE OMITTED & HANDRAIL WILL ACT AS GUARD.

PROPRIETARY DESIGN: THIS DRAWING AND THE MATERIAL CONTAINED THEREIN ARE THE PROPERTY OF TMP SERVICES, INC. AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS, APPARATUS OR PARTS THEREOF WITHOUT THE FULL KNOWLEDGE AND CONSENT OF TMP SERVICES, INC. ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATED WITH TMP SERVICES, INC. SHALL BE THE PROPERTY OF TMP SERVICES, INC.

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FACSIMILE 913-6238

REVISIONS	BY



STAIRS OPTIONAL
TMP SERVICES
9939 KANSAS AVE
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SITE:
STATE OF CALIFORNIA

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SCALE
JOB NO.

6
OF 8 SHEETS



35

Medium Solar Light Towers

- Four high-output LED lights on 20-foot tower
- Long run times
- Automatic and manual operating modes
- Battery powered and solar charged
- Maintenance-free AGM batteries

Wanco's Medium Solar Light Towers provide bright lighting for areas up to 9,900 square feet, with longer run times than our small light tower. Common applications include overflow parking lots, small construction sites, material staging areas and freight yards.

These light towers feature four high-efficiency, high-output LED light fixtures that provide twice the light of our small light tower. The 20-foot telescoping tower rotates nearly 360 degrees without lowering the lights, which operate at any height. The lights can be individually aimed without the use of tools, and they stay where you point them. The tower remains vertical at all times, and the trailer's low center of gravity keeps the tower stable.

Batteries provide power and an automated solar-based charging system keeps the batteries charged. Functions include manual control and a choice of automatic modes that include dusk-to-dawn operation. Autonomous operation is possible from spring through fall in most locations.

Brief specifications

Lights	Four adjustable light fixtures
Luminosity	13,500 lumens per fixture 54,000 total lumens
Coverage area	9900 sq. ft.
Power draw	100 watts per light fixture
Light height	20 feet when fully extended; lights operate at any height
Batteries	800 Ah, wired as a 24-volt system
Solar	1050 W
Charger	40 A
Deployed footprint	181 × 111 in. (460 × 282 cm), L × W
Deployed height	236 in. (599 cm)
Travel height	108 in. (273 cm)
Weight, approx.	1900 lbs. (862 kg)

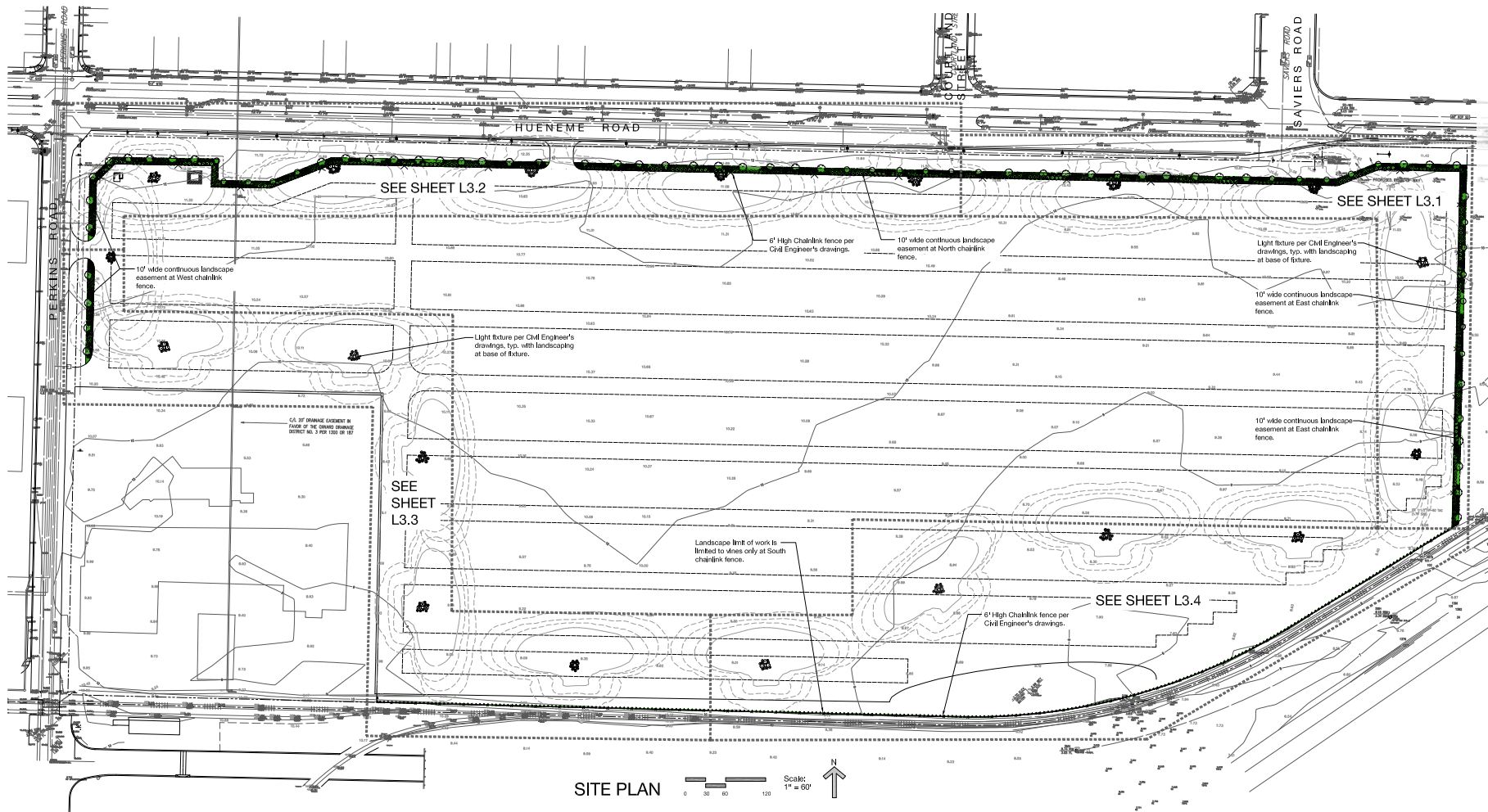
Options

Light fixtures	Four 60 W Four 100 W*
Batteries	Four AGM, 400 Ah total capacity Eight AGM, 800 Ah total capacity*
Solar	600, 900 or 1050* watts

*Pictured



Drawing Name: C:\Users\mcc\OneDrive\Documents\Projects\Hueneme\Hueneme Auto Storage\Hueneme Auto Storage Landscape Cover Sheet.dwg; Plot Date: 2018-11-16 1:28 PM



SITE PLAN



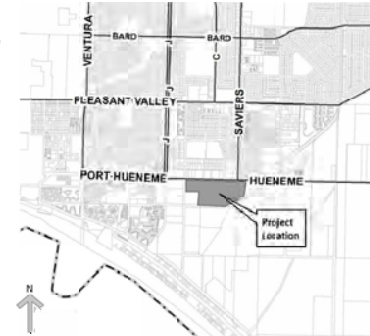
Landscape Scope of Work / Design Intent:

Installation of a 6' high chainlink fence and coastal California native and adopted species landscaping at West, North and East property lines for vegetative screening of an automotive storage facility. The goal is to have the chainlink fence 90% covered from the public side of the fence with vines and other plantings within 6 months after planting installation.

Total new landscaping proposed is 30,059 square feet.

Temporary drip irrigation will be installed at all new landscaping.

Site Vicinity Map (not to scale):



Sheet Index:

Sheet #	Sheet Title
L1.0	Landscape Cover Sheet
L2.1	Irrigation Plan and Irrigation Notes
L2.2	Irrigation Plan and Irrigation Details
L3.1	Planting Plan, Planting Details and Planting Notes
L3.2	Planting Plan
L3.3	Planting Plan
L3.4	Planting Plan

17-31



KIESEL+DESIGN
Landscape Architecture
423 East Main Street
Ventura, CA 93001
(805) 805-9470
jack@kiesel-design.com
CL# 5206

Auto Storage At:
Perkins Road and
Huene Road
Port of Huene
CA, 93003

Revisions:
NAME DATE



Type: Construction Drawings
Submit Date:
November 16, 2018

Drawn By:
NAME DATE
EC 11/16/2018

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Title:
Landscape Cover
Sheet

Sheet Number:

L1.0



Auto Storage At:
Perkins Road and
Hueneme Road
Port of Hueneme
CA, 93003

Revisions:		
y	NAME	DATE



Drawn By:

NAME	DATE
EC	03/19/2018

Title:
**Planting Plan,
Planting Notes
and Planting
Details**

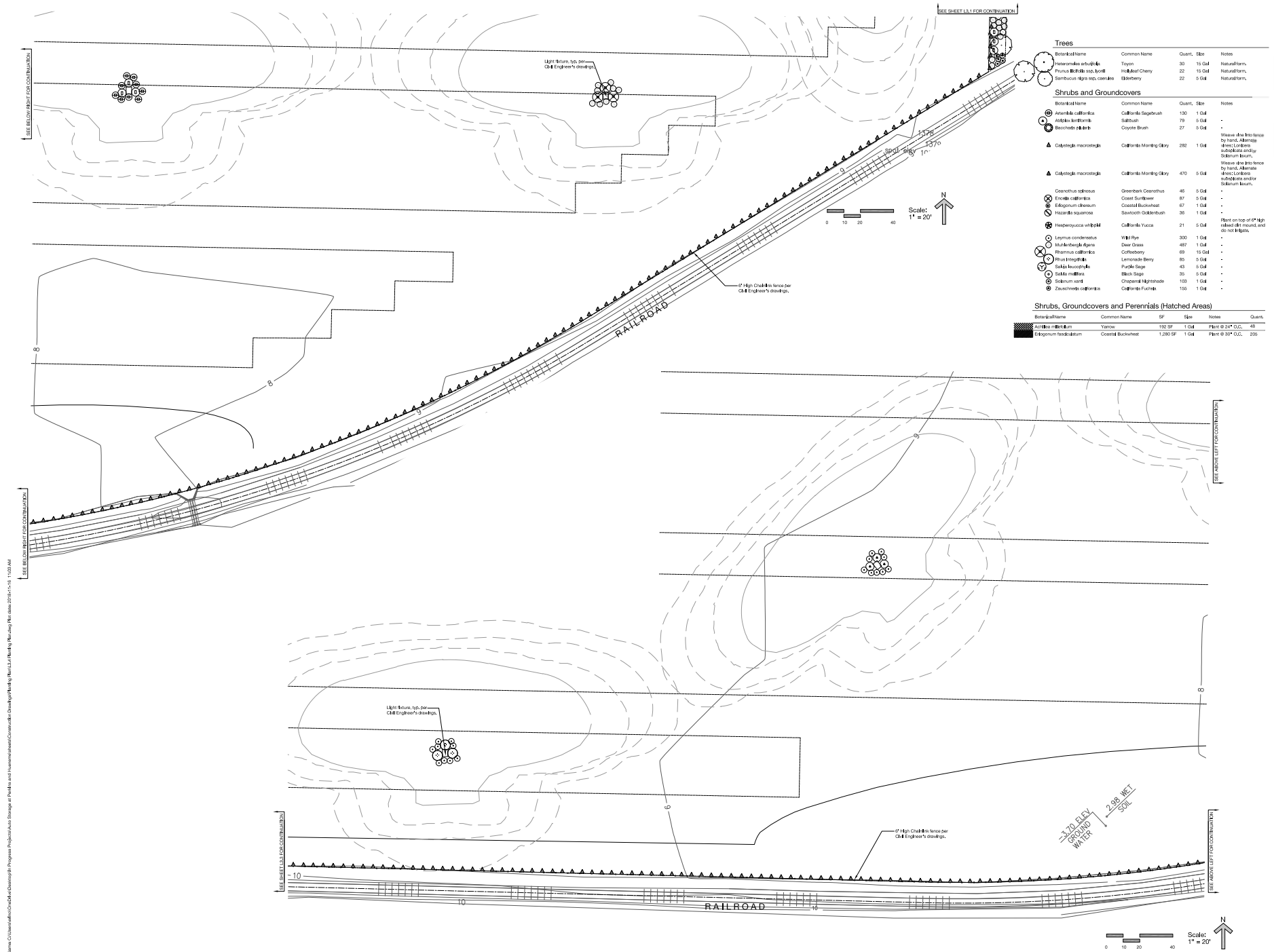
Sheet Number:

L3.1

Revisions:		
#	NAME	DATE

[illegible]

Shrubs, Groundcovers and Perennials (Hatched Areas)					
Botanical Name	Common Name	SF	Size	Notes	Quant.
 Achillea millefolium	Yarrow	192 SF	1 Gal	Plant @ 24" O.C.	48
 Erigeron fasciculatus	Coastal Buckwheat	1,280 SF	1 Gal	Plant @ 30" O.C.	205



Attachment:

C. Final Environmental Impact Report No. 22-01
www.oxnard.org/city-department/community-development/planning/environmental-documents/

Attachment:

D. General Plan Consistency Table

Attachment D

General Plan Consistency Table for Port of Hueneme Temporary Outdoor Vehicle Storage Facility Industrial Limited (ILT) and Park (PRK) Designations

Policy	Level	Policy or Title	Explanation
SC-1.1	II	Inventory and Monitor GHG Emissions	GHG emissions associated with the proposed project have been quantified. Refer to EIR Section 5.8, Greenhouse Gas Emissions.
SC-2.3	II	Sea Level Rise Consideration in Decision Making	The 2030 General Plan Figure 2-1, California Flood Risk: Sea Level Rise (Oxnard area), depicts the extent of a coastal storm flood event after sea level has increased by 5.2 inches by the year 2030. Per Figure 2-1, the project site is not presently mapped in an area that could be subject to sea level rise by the year 2030.
SC-3.8	II	Require Use of Passive Energy Conservation Design	The proposed project includes solar lighting.
CD-1.2	I	Infill Development, Priority to Mixed Use	The proposed project is surrounded by urban development and therefore is infill development. The project results in fewer vehicle trips/vehicle miles traveled and less greenhouse gas emissions than current operations. The proposed project is sustainable development with features such as native landscaping and solar lighting.
CD-1.10	II	Jobs-Housing Balance	The proposed project would be staffed by 14 employees, which

			would add jobs on a site designated for industrial uses.
CD-3.1	II	Neighborhood Preservation	The proposed project includes a 30-foot landscaped buffer and fencing along Hueneme Road and Perkins Road. The closest residential uses are located east of Saviers Road and north of Hueneme Road. The proposed project does not introduce industrial uses north of Hueneme Road, thus, the existing residential neighborhoods north of Hueneme Road would not be subject to encroachment of industrial uses. The EIR reviews all environmental topical areas and the analysis concludes that the proposed project minimizes or mitigates all environmental impact to less than significant levels.
CD-5.1	I	Industrial Clustering	The proposed project is located in an area of the City zoned for industrial uses. The Advanced Water Purification Facility (AWPF) is located immediately adjacent to the site, and permitted coastal dependent industrial uses are located to the west of the project site. Proposed industrial development to the east of the project site is in the permit process.
CD-5.2	II	Compatible Land Use	The proposed project includes

			a 30-foot landscaped buffer and fencing along Hueneme Road and Perkins Road. The closest residential uses to the project site are located east of Saviers Road and north of Hueneme Road. The project site location on the south side of Hueneme Road provides additional buffering between the proposed project and residential uses north of Hueneme Road to ensure land use compatibility issues are less than significant. Additionally, noise, air quality, and odor impacts associated with the proposed project have been reviewed and analyzed in the EIR (Section 5.3, Air Quality, and Section 5.13, Noise).
CD-5.3	I	Available Services	The proposed project is located in an area of the City with access to municipal services, connections to water and storm drain facilities, and access to a variety of transportation options, including vehicle, bus, bicycle, and walking.
CD-5.4	II	Environmentally Friendly and “Green” Industry	The proposed project would reduce pollution and noise from the current conditions of the operator which transports vehicles to and from the Port at a greater distance than the proposed project location.
CD-5.5	I	“Green” Major Transportation	The proposed project is located

		Routes	on the southern side of Hueneme Road, which is a commercial truck route, and would facilitate goods movement to/from the Port of Hueneme along a roadway designed for such purpose without decreasing the level of service (EIR Section 5.19, Transportation).
CD-8.1	II	Limiting Development	The proposed project is located in an area of the City serviced by existing utilities, transportation and service systems.
CD-8.2	II	Services	Necessary public services and facilities for the proposed project have been reviewed by the City of Oxnard as part of the project application process and in the EIR. The review has concluded that the proposed project would provide all required on-site facilities that would connect to off-site service systems and that the proposed project would result in less than significant impacts to these systems.
CD-8.5	II	Impact Mitigation	The EIR includes a review and discussion of all environmental topical areas, and the impact analysis concludes that the proposed project minimizes or mitigates all environmental impacts to less than significant levels.
CD-8.9	II	Jobs/Housing Balance & Sustainable Communities Strategy (SB 375)	The proposed project is considered infill development and would be staffed by 14

			employees. The EIR (Section 5.19, Transportation) concludes that the proposed project would result in fewer vehicle trips/vehicles miles traveled than current operations.
CD-9.2	I	Revitalization and Redevelopment	The proposed development will revitalize a vacant and undeveloped parcel along Hueneme Road, which is a scenic roadway, and includes new landscaping.
CD-9.4	I	View Corridor Preservation	The proposed project includes a 30-foot landscaped buffer along Hueneme Road and a 25-foot landscaped buffer along Perkins Road and complies with City design requirements.
CD-14.1 CD-14.2	II	Design review process Development Advisory Committee (DAC) Function	The Development Advisory Committee (DAC) review process led to changes in the Project and/or conditions of approval that meet these Level II policies.
CD-15.1	II	Quality of Life	The proposed project would provide new employment opportunities in the City for up to 14 employees, which is intended to enhance the business operations of the Port's customer and the customer's employees.
CD-15.9	II	Regional Cooperation	The proposed project supports the local and regional economy by providing support to a large business operator at the Port of Hueneme.
CD-16.3	II	Balanced Economic Base	The proposed project supports

			the City's industrial sector and economic base with the addition of employment opportunities.
CD-16.5	II	Industrial and Commercial Development Standards	The proposed development is proposed on an existing industrial zoned lot and potential impacts have been mitigated to less than significant levels (refer to EIR).
CD-17.1	II	Retain Local Talent	The proposed project would provide new employment opportunities in the City for up to 14 employees.
CD-17.6	II	Business Expansion	The proposed project supports the local and regional economy by providing support to a large business operator at the Port of Hueneme and would provide new employment opportunities in the City for up to 14 employees.
CD-20.1	I	Port Trade Enhancement	The proposed project supports Port Trade Enhancement by providing a temporary outdoor vehicle storage facility to support a large business operator at the Port of Hueneme.
ER-10.1	I	Promote use of Native and Water Wise Plants	The Project incorporates native and water wise plants to be compatible with nearby vegetation and is conditioned to comply with City's Landscape and Water Conservation Standards (Ordinance No. 2822) and applicable water conservation requirements of the State of California.

SH-6.4	II	New Development Noise Compatibility	The proposed project would result in less than significant impacts related to noise (EIR Section 5.13, Noise).
MC-3.1	II	New Development to Protect Operations	The proposed project would not result in military use conflicts (EIR Section 5.11).
MC-3.2	II	Vertical Obstructions	The proposed project includes one temporary structure (guard house) and temporary light fixtures, along with permanent site perimeter fencing and landscaping. Thus, there would not be temporary structures or permanent fixtures (i.e., lighting, fencing) that are more than 200 feet above ground level, and as such the proposed project is not subject to FAR Part 77.
MC-3.4	II	Reference the Navy's Military Influence Area Map	The project site is located within the Military Influence Area for Naval Base Port Hueneme and Naval Base Point Mugu. Naval Base Ventura County has received notification of the proposed project from the City, which includes the Notice of Preparation (NOP) of an Environmental Impact Report for the proposed project, and provided comments that are analyzed in the EIR (Section 5.11, Land Use).
All Others	III	All policies not listed above	No or Distant Applicability to the Proposed Project.

Attachment:

E. Zoning Code Development Standards Consistency Table

Attachment E

Zoning Code Consistency Table for Port of Hueneme Temporary Outdoor Vehicle Storage Facility Light Manufacturing (M-1-PD) Zone

Development Standard	Oxnard City Code Citation	Standard	Proposed Project	Complies with Development Standard?
Minimum Lot Size	Section 16-164	15,000 square feet	33.6 acres (1,467,972 square feet)	Yes
Minimum Lot Width Interior Lots Corner Lots	Section 16-164	100 feet 150 feet	N/A 465 feet	Yes
Maximum Building Height	Section 16-164	55 feet	Guard House: 10.25-feet high and would be raised by 2.75 feet for a total height of 13-feet.	Yes
Front Yard Setback	Section 16-164 Section 16-165(D)(3)(a)	10 feet; 30 feet when adjacent to designated thoroughfare	Hueneme Road – 30 feet	Yes
Side Yard Setback	Section 16-164 Section 16-165(D)(3)(b)	None. No side yard setback required along interior property lines where the abutting zoning is M-1 or M-2.	0 feet	Yes
Rear Yard Setback	Section 16-164 Section 16-165(D)(3)(c)	Equivalent to height of structure	18 feet	Yes
Street Side Yard Setback	Section 16-164	Same as Front Yard Setback	Perkins Road – 30 feet	Yes
Setback from Residential Zoned Property	Section 16-164	30 feet; same setback applies if parcel abuts an alley separating the	115 feet	Yes

		parcel from a residential zone; see Section 16-165		
Maximum Lot Coverage	Section 16-164	70%	Less than 1%	Yes
Maximum Floor Area Ratio	Section 16-164	70%	Less than 1%	Yes
Minimum Lot Depth	Section 16-164	150 feet measured at right angles to the front property line	378 feet	Yes
Walls	Section 16-165(D)(4)(b)	A 6-foot solid decorative masonry wall or other type of visual buffering, such as landscaping, architectural treatment, or combination thereof shall be provided and maintained on the boundary. On the front or side front portion of the property, the wall or visual buffer shall be placed in a location to provide the necessary screening from the public right of way	6-foot-high chain-link fence with landscaping along entire project boundary	Yes
Landscaping – Front Yard Setback	Section 16-165(D)(6)(b)(2)	Entire front yard setback shall be landscaped, with the exception of that area provided for vehicle or pedestrian access.	Hueneme Road – 30 feet landscaping and fencing Perkins Road – 25 feet landscaping and fencing	Yes
Undergrounding Utilities, Lighting and Trash Enclosures	Section 16-165(D)(7)(a) and Section 16-165(D)(7)(b)	All trash enclosures, on-site lighting, and utility lines, including but not limited to, electric,	The proposed project includes the installation of water lines for landscaping to	Yes

		communication, street lighting, and cable television, shall be installed in accordance with this code. Appurtenances and associated equipment, including but not limited to, surface-mounted transformers, pedestal mounted terminal boxes, meter cabinets, and concealed ducts in an underground system, may be placed above ground if approved as part of the project plan and provided that such facilities are adequately screened by landscaping or other means.	support the temporary vehicle storage facility. The proposed project would be supplied with 96-gallon trash and recycling containers from the City of Oxnard Environmental Resources Division.	
Source: Oxnard City Code, Chapter 16, Zoning Code, Division 11, Industrial Zones				

Attachment:

F. Public Comment Letters

Attachment F

Public Comment Letters

No.	Name	Date
1	Alex Mireles	2.14
2	Alex Mireles	2.14
3	Sandra Arroyo	2.14
4	Yesenia Ponce	2.14
5	Jasmine Martinez	2.14
6	Lucas Grandcolas	2.14
7	Linda Gray Calderon	2.14
8	Ron Whitehust	2.14
9	Erica Helson	2.14
10	Insert n	2.14
11	Mary Duncan	2.14
12	Elizabeth Segura	2.14
13	Coastal Keepers	2.14
14	Adriana Sanchez	2.14
15	Valerie Lavenza	2.14
16	Javier Gomez	2.15
17	Saraisabel Virgen	2.15
18	Diane Pina	2.15
19	Michael Landeros	2.15
20	Fatima Munoz	2.15
21	Michael L. Doto II	2.16

22	Chuck Caulkins	2.17
23	Len Mazzella	2.23
24	Daniela Soleri	2.24
25	Monique Sonoquie	2.24
26	Yudin Roa	2.25
27	Christiane Schlumberger	2.27
28	Sam Stewart	2.27
29	Sarah Shahbazian	2.28
30	Francisco Tapia	3.2
31	Irene Rauschenberger	3.2
32	Irene Rauschenberger	3.8
33	Irene Rauschenberger	3.8
34	CAUSE et al.	7.1
35	Esequiél Vargas	8.3
36	Sanaz Shirazi	3.21
37	Jay Turner	3.21
38	Irene Rauschenberger	3.23
39	Lucia Marquez et al.	3.21
40	Loan Ado	8.8
41	Rose Calleros	8.8
42	Yesenia Guzman	8.8
43	Daniel Torres	8.8
44	Elizabet Arellano	8.8
45	Loan Ado	8.8

Public Comment on Port DEIR PZ 18-500-02

Alex Mireles <alexmlocal585@gmail.com>

Mon, Feb 14, 2022 at 5:13 PM

To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Dear Jay:

Attached is a public comment letter on the City's DEIR on the Port's proposed project on behalf of LULAC Oxnard Council #3147.

Thank you

Alex Mireles, President
LULAC, Manuel Lopez- Council 3147



Oxnard LULAC 3147 Letter.pdf
187K

February 11, 2022



Jay Dobrowalski, Senior Planner
City of Oxnard Planning Division
214 South C Street Oxnard, CA 93030

Re: Port Project Draft EIR (PZ 18-500-02)

Dear Mr. Dobrowalski:

On behalf of the LULAC Oxnard Council #3147, I submit this letter to acknowledge the results of the Draft Environmental Impact Report for the Port vehicle storage facility – one mile away from the Port.

LULAC is the largest and oldest Hispanic organization in the United States. LULAC advances the economic condition, educational attainment, political influence, housing, health and civil rights of Hispanic Americans through community-based programs operating at more than 1,000 LULAC councils nationwide. The organization involves and serves all Hispanic nationality groups. Our Oxnard Council focuses on equitable distribution of city services, economic justice, and voter outreach and education initiatives.

That is why we felt it was important to highlight what many residents and organizations already know: the storage project is an environmental benefit to the community, especially the Latino community. There is lots of misinformation about the increased use of trucks and pollution from this specific project. This project actually works to eliminate the use of diesel-powered trucks by consolidating vehicle storage locations into one central location one mile away from the Port. Vehicle Miles Traveled is also dramatically reduced, thereby improving air quality.

For instance, imported cars are driven individually or transported using diesel powered trucks through Ventura Road to a storage facility off of Johnson Drive in Ventura and then back to the Port. There are 10 census tracts on the Ventura Road corridor with an average Latino population of 70%. Six of these census tracts also have the highest incidents for asthma in Oxnard according to Cal Enviro Screen. By moving their storage facility one mile away from the Port, thousands of cars and trucks will be removed from this busy corridor which will result in a reduction of auto and truck emissions of 80%.¹ This results in increased quality of life for the surrounding Latino community due to improved air quality and less traffic.

¹ Port of Hueneme, "Auto Emissions Reduction and Job Creation Project Details," https://www.portofhueneme.org/wp-content/uploads/2022/02/POH_Local_Community_Benefits_8.5x11Flyer_Final_Web.pdf

Further, diesel powered auto transporters heading to a storage facility in Camarillo will also be removed from the very busy Hueneme Rd. corridor resulting in improved air quality for the low-income Latino families that we serve in the Southwinds neighborhood.

The Draft EIR confirms that the status quo – trucking cars to Ventura and Camarillo is *environmentally inferior* to the proposed project on key metrics, including Air Quality and Green House Gas emissions.²

Further, we are requesting that the Lead Agency study the impact to Air Quality and Green House Emissions from the amount of vehicle miles traveled (VMT) that would be eliminated by this auto storage consolidation project. In addition, the Lead Agency should also study the Air Quality and Green House Emissions impacts of the elimination of diesel-powered car carriers that currently transverse Ventura Rd and Hueneme Rd to shuttle cars to the current offsite locations. Doing so would further prove that this project is a step in the right direction toward addressing the distressing impact of climate change. The status quo is not acceptable for our families and the health of our children.

Aside from the improved air quality and GHG emission reductions resulting from this project, the subject property gets a much-needed restoration. The property is unsafe, unsanitary, and the soil is disturbed and growing mostly non-native grasses and weeds.³ When the Port vacates the site after 5-years, the property's restoration will last for years beyond the proposed use. We also envision this being a gateway to Ormond Beach and the Port is the ideal partner to help facilitate this vision. Not doing anything and leaving this property as-is will not get us there.

Further, there has been much speculation and criticism that the Draft EIR does not take into account the Port's future plans for a larger logistics center. We believe that a speculative project with no details on the scope of operations is irrelevant and out of scope to this Draft EIR. This line of reasoning is merely a distraction from the conclusive results of this DEIR – that this project has no or less than significant impact on key environmental metrics.

If this project had significant impacts to the environment, we would not be in favor regardless of the number of jobs it would create as the health and safety of the Latino community surrounding this project is paramount to LULAC's mission. According to the Draft EIR, this is not the case.

This project presents the community with many benefits, in addition to improved air quality and a reduction of dangerous GHG emissions, this project also restores a long vacant property which will keep our community safer. We believe in the principles of Crime Prevention through Environmental Design which states that the design of buildings, landscaping and outdoor environments can either encourage or discourage crime. CPTED attempts to minimize crime and the fear of crime by reducing criminal opportunity. With perimeter fencing, curated landscaping, access gates, perimeter lighting, security cameras, and 24-hour security, this is accomplished and the surrounding community is safer.⁴

² Draft EIR, Volume I, Section 6.7, "Alternative Two"

³ Draft EIR, Volume I, Section 5.4.5, "Sensitive or Special Status Biological Resources, or Riparian Habitats, or Natural Communities.

⁴ Draft EIR, Volume I, Section 5.17.5 Police Protection - Proper Mitigation Measures

Finally, this project will employ local union skilled and trained construction workers to prepare and restore the property. Additionally, due to increased capacity to store vehicles offsite there will be more vehicles to offload thereby creating additional job opportunities for unionized longshore workers. This project creates more union jobs. These are not “low wage” jobs.

In sum, it is very clear from this Draft EIR that this project is not only safe for the community, but a community benefit, one that will last beyond the proposed use. We only ask that the positive impact to air quality and reduction of Green House Gas emissions due to the consolidation of vehicle storage sites be analyzed in the Final EIR.

Sincerely,

A handwritten signature in black ink that reads "Alex Mireles". The signature is written in a cursive, flowing style.

Alex Mireles
President
Oxnard LULAC Council #3147

Fwd: port signatures

Alex Mireles <alex.mireles@local585.org>
To: jay.dobrowalski@oxnard.org

Mon, Feb 14, 2022 at 5:19 PM

Supplemental Public Comments for Port DEIR Project

Hello Jay -Local 585's Business Manager, Anthony Mireles previously submitted a letter on behalf of Laborers, Local 585 on February 2nd. Pleasee append the following petition to his comment letter if possible.

Thank you,

Alex Mireles, Vice President
Business Representative, Development
LiUNA Local 585
21 S. Dos Caminos Ave
Ventura, CA 93003
Office Phone- (805) 643-5487
Cell phone (805) 340-8303
LiUNA Local 585

 **Community Petition in Support of Port Project_Laborers585.pdf**
559K



OXNARD WORKING FAMILIES FOR RESPONSIBLE PORT GROWTH SUPPORT THE GREEN 34 ACRE DEVELOPMENT PROJECT.

This project will:

- **CREATE JOBS**
- **HELP THE ENVIRONMENT**
- **INVEST IN LOCAL FAMILIES**

The Port of Hueneme is planning to lease a property in South Oxnard that will create hundreds of LOCAL jobs for the trades. The property needs to be restored and prepared for use. This will lead to immediate jobs for Laborers, increased tax dollars for the city, and support for our local business community.

The project is also good for the environment as the Laborers will help restore a lot that has been vacant for 25 years by planting native plants, removing trash, and carefully laying gravel. Cars (and soon electric cars) will be stored there instead of being trucked 9 miles away.

The result is a beautiful community project that's good for the environment, invests in local families and keeps families working.
OUR PEOPLE, OUR PORT!

Sign the petition below to let the City of Oxnard know that you want this project approved!

NAME	ADDRESS	LABOR ORGANIZATION
RICK MORENO	336 COLLINS ST OXNARD CA	Local 585
BERNABE ROAS	1600 Hill St OXNARD CA 93036	Local 585
Cedric Godoy	6909 Fulton Ave Apt #2 North Hollywood CA 91605	Local 585
Rubén Martinez	8395 Denver St Ventura Ca 93004	Local 585
Omar German	1101 Ventura Blvd Spc 150 93036	Local 585
Christian Lopez	1351 Hibiscus St Oxnard CA 93036	Local 585
Lupito SANCHEZ	1400 GINA DR OXNARD 93030	Local 585
Daniel DOMINGUEZ	1168 COLLINS OXNARD CA 93036	Local 585 member
David MACNICOLL	OXNARD CA 93030	Local 585 Member
Cristina Diaz	3601 Almond Dr OXNARD CA	Local 585 member

NAME	ADDRESS	LABOR ORGANIZATION
Andy Castillo	P.O. Box 2193 Ventura Ca, 93002	Local 585
Gilbert Castillo	722 W. Robert Ave. local 585	
Martha Castillo	722 W. Robert Ave Oxnard Ca 93030	non-member
Rodrigo Padilla	361 Colorado River Pl Oxnard CA 93036	member of Local 585
Jesus Angel Castañeda	1111 Briana Circle Oxnard CA 93030	member of Local 585
Juan Rosas	204 W. Juniper St Oxnard, CA 93033	member of Local 585
Jose Gonzalez	2400 South L St Oxnard CA 93033	member of Local 585
Kenny Levine	281 Hollywood Blvd Oxnard, CA, 93035	
Edgar Ventura	4611 Phoenix Dr Oxnard CA	Local 585
JOHN NEWBLE	2740 PENINSULA Road	Local 585

NAME	ADDRESS	LABOR ORGANIZATION
Rochelle Perez	1229 Stroube St. Oxnard Ca 93036	
MANUEL CERVANTES	859 SIMON WAY EL RIO CA 93036	
GREG DURAN	880 SIMON WAY OXNARD 93036	
Jose Gutierrez	862 Simon way EL RIO ca 93036	
Alberto Luna	2780 Cortez St Oxnard CA 93036	
MARIA Isabel Delgado	200 Juneau Pl. Oxnard Ca 93036	
Lilia Cabrera L	210 Juneau Pl. Oxnard Ca 93036	
Alfonso Corona	1311 Benton way Oxnard Ca, 93033	
Osvaldo Trevino	3438 Santa Clara Ave Oxnard CA 93036	
Solodad Trevino	3438 Santa Clara Oxnard CA 93036	

NAME	ADDRESS	LABOR ORGANIZATION
Isabel Serrano	1926 Mono St Oxnard, CA 93036	Local 585
Miguel Coronel	1230 Dahlia St Oxnard CA, 93036	Local 585
Leslie Lopez	1230 Dahlia St Oxnard CA, 93036	
Ignacio Coronel	1301 W. IRIS St Oxnard CA, 93033	
Ignacio Coronel Jr	2211 Bernadette St Oxnard CA. 93030	
Jessica Aldrete	2211 Bernadette St Oxnard CA 93030	
Albert Conchola 3	3304 G ST OXNARD Ca. 93033	local 585
Rose Conchola	3304 G ST OXNARD Ca. 93033	
Herb Davis	610 Janetwood Oxnard Ca	
Phillip Gaskill	610 Janetwood OXNARD Ca.	

NAME	ADDRESS	LABOR ORGANIZATION
David. Estevarria	2720 E. Vineyard Ave Oxnard CA 93036	
Fernando Morales	2499 Alvarado ST. Oxnard. CA 93036	
Daniel Magaña	2635 Colonia Ave Oxnard, C.A., 93036	
ROBERT RODRIGUEZ	2623 COLONIA AVE OXNARD CA 93036	
RAMON RODRIGUEZ	498 Lemar Ave Oxnard, CA 93036	
Apigail Luna	825 Will Ave Oxnard, CA, 93036	
John Knutson	1500 Marmier Dr. 93036 Oxnard, CA 93033	
Jared Barboza	1500 Marmier Dr Oxnard, CA 93030	
Andres Gutierrez	501 Cuesta Del Mar 9 Ppt. H	
Nathalie Gutierrez	1412 Kalmia Ct Oxnard 93030	

Jose Luis Ruiz

514 North Roosevelt Ave
Oxnard, CA 93030

NAME	ADDRESS	LABOR ORGANIZATION
STEVEN CRUZ Sr.	4621 Beaumont Ave. Oxnard, CA 93033	Labovers 585
Anibour Rios	4420 S. J St Oxnard, CA 93033	585
Juvencio Alarcon	5426 Roland way Oxnard, CA 93033	585
Aracely Avila	1841 Kennedy Pl Oxnard, CA 93033	
Arturo Avila	1841 Kennedy Place Oxnard, CA 93033	
Rosalinda Ovella	1841 Kennedy Pl Oxnard, CA 93033	
Ismael Gonzalez	1841 Kennedy Pl Oxnard, CA 93033	
Ronie Maria	1632 Gabriella Dr Oxnard CA 93030	Labovers 585
Manuel Mata	1832 Quava Ct Oxnard CA 93033	585
William Gutierrez	862 Simon Way Oxnard CA 93036	Labovers 585

NAME	ADDRESS	LABOR ORGANIZATION
Roberto Ruiz	Oxnard, CA 1021 Redwood St.	LOCAL 585
Jose Perez	4044 Encino PL Oxnard CA 93033	LOCAL 585
Francisco Enríquez	1853 - iv es. av. Spr OXNARD CA 93033	Local 805
Manuel Castellon	oxnard Cal 93036	Local 805
Jimmy [Signature]	Oxnard Cal 93035	Local 585
Tony Cisneros	2086 Mission Hills Drive Evanston	Oxnard Resident
Francisco [Signature]	2951 Albany Oxnard, CA	oxnard. Calif Local 585
Albert Canchola JR	1171 Escalon Drive Oxnard Ca 93033	Local 12
Marizta Lopez	1171 Escalon Drive Oxnard Ca 93033	Oxnard Resident
Antonio Ramirez	930 Donlon ave apt B oxnard. CA, 93030	Oxnard Resident
[Signature]	336 - E. Collins OXNARD CA	585

93036

Oxnard Working Families Say YES to Port Jobs!

Our PEOPLE, Our PORT!

NAME	ADDRESS	LABOR ORGANIZATION
Jorge Flores	501 Andrea dr OXNARD CA 93033	Local 585
Armando Graona	353 Riverpark Blvd Oxnard CA 93036	Local 585
NIKOLE BRUNO	1255 S M ST. OXNARD, CA 93033	LOCAL 585
Guillermo Ceja III	1255 S M St OXNARD, CA 93033	585
Elizabeth Ceja	501 Andrea Drive Oxnard, CA, 93033	Local 585
Hesley Tapia	353 Riverpark Blvd. Oxnard Ca 930336	Local 585
Daniel Ambriz	5577 Saviers Rd. Oxnard CA. 93033	Sharps Auto Service.
Oscar Reyes	5577 SAVIERS RD. OXNARD CA. 93033	SHARPS AUTO SERVICE.
Stefan Santiago	710 F Hueneme Rd Oxnard CA 93033	Port HUE MARRIE

NAME	ADDRESS	LABOR ORGANIZATION
Rosa Velia Moreno	336 E. Collins St	
Gerardito Moreno	Ox CA 93036	
Anthony Pulido	5221 Saviors Rd Ox CA 93033	
Manuel Cartello	Ox CA 93036	Local 585
Duke Gonzales	Oxnard CA 93033	Local 585
Gerardo Rauda	Oxnard CA 93035	Local 585
Esperanza Velasco	2110 Jackson St. Oxnard CA 93033	SEIU-UHW
Martha Hand	1061 Monet Ct Oxnard 93033	SEIU-UHW
Maydalena Martinez Perez	1016 Mika Way Oxnard CA 93030	SEIU-UHW
Smor Tapia	624 Yale Place Oxnard, CA 93032	SEIU-UHW

Oxnard Working Families Say YES to Port Jobs!
Our PEOPLE, Our PORT!

NAME	ADDRESS	LABOR ORGANIZATION
Alex Mireles - <i>Ap Mil</i>	2086 Mission Hills Drive	LIUNA, Local 585
Edward Soto	Roland Wy. 5360 OXNARD CA 93033	Laborers Local 585
Nancy Mireles <i>Nancy</i>	2086 Mission Hills Dr. Oxnard CA 93036	
Alyssa Mireles <i>Alyssa</i>	2086 Mission Hills Dr Oxnard, CA 93036	
Gillian Mireles Shelley Mireles	2080 Mission Hills Dr Oxnard, CA, 93036	
Cesar Hernandez	273 Estroube st Oxnard CA 93036	Local 300
Othon Cruz	1350 Victoria Ave Apt 214 93035	Local 585
Zane Gray	514 Nile River Dr. Oxnard, CA, 93036	Local 12
M. Vasquez	301 W. Vineyard Oxnard, CA. 93036	Local 585

NAME	ADDRESS	LABOR ORGANIZATION
Gar y Craz	3672 Belmont Lane Oxnard Ca	
manuel Gutierrez	415 McKinley Wy Oxnard	
Jose Barrena	1334 Seaport Dr Oxnard CA	
Steven Hernandez	1515 Flora Lane Oxnard, CA	
Heather Cartier	3231 Moss Landing Blvd Oxnard 93036	
Norma Ramirez	1300 Pleasant Valley Oxnard CA 93033	
Robert Leon	143 Channel Islands Blvd Port Hueneme CA 93041	Local 585 Member
Eric Romero	221 S. Marquitta Oxnard CA 93030	st. Local 585 member

NAME	ADDRESS	LABOR ORGANIZATION
Ricky Gomez	2420 IVORY WAY OXNARD CA 93036	585
Jerry Nates	1830 Cabrillo Way OXNARD C.A. 93036	585
Alberto Suarez	2651 wagon wheel rd OXNARD, CA, 93030	585
Daniel Garcia-Cruz	4621 Beaumont Ave. Oxnard, LA 93033	
Steven Cruz Jr.	4621 Beaumont Avenue OXNARD, CA 93030	
Julissa Hernandez	2201 Church Hill Drive OXNARD, CA 93033	
Salvador Montoya	1180 Otano Way OXNARD CA 93036	588

Alexander Jesus Barrera

1334 Seaport Drive

Oxnard

Lucie Carlos

1334 Seaport Drive
Oxnard

Gabriel Barrera

1334 Seaport
Dr. Oxnard

Lizbeth Hernandez

444 Wolff St.
Oxnard, CA

Oxnard Working Families Say YES to Port Jobs!
Our PEOPLE, Our PORT!

NAME	ADDRESS	LABOR ORGANIZATION
Clara Marietta Hatfield	2581 Upper Bay Dr Oxnard 93034	
Christina Montano	2581 Upper Bay Dr Oxnard CA 93034	

(no subject)

Sandra Arroyo-vargas <sarroyov@ucsd.edu>

Mon, Feb 14, 2022 at 5:24 PM

To: jay.dobrowalski@oxnard.org

Cc: bert.perello@oxnard.org, bryan.macdonald@oxnard.org, gabe.teran@oxnard.org, gabriela.basua@oxnard.org, john.zaragoza@oxnard.org, oscar.madriral@oxnard.org, vianeyforoxnard@gmail.com

Dear Jay Dobrowalski,

I'm writing to submit comments on the Draft Environmental Impact Report (DEIR) on the proposed Port of Hueneme Temporary Outdoor Vehicle Storage Facility. The city did not do everything they could have done to provide meaningful public review. A large percentage of residents who would be most impacted by this project are primarily Spanish speakers but only a 5 page summary was translated to Spanish, out of the 1,000 page report. The DEIR should be translated into Spanish, and possibly other languages to make it more accessible to impacted residents.

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Traffic directed to the 34-acre site will be near five elementary schools, one high school, two community parks, low-income housing, and a community health clinic, impacting several thousand young children who are more sensitive to air pollution. The DEIR needs to address the health impacts related to increased diesel emissions and particulate matter.

South Oxnard already faces pollution from the nearby power plant, superfund site, and nearby factories. The DEIR needs to consider environmental justice by assessing the impacts of the project in addition to the current pollution burdens faced by the South Oxnard residents

This project is right between South Oxnard neighborhoods and the Ormond Beach Wetlands which is being restored for a public green space for the community to enjoy and take their families. The DEIR does not look into the increased number of cars on Hueneme Road and the impacts it will have on surrounding neighborhoods trying to safely access the Ormond Beach Wetlands.

Finally, the DEIR doesn't properly consider all possible alternatives like keeping the port's traffic away from sensitive areas by using the site as a park instead, using storage space within the naval base or using zero-emission electric trucks to carry its cargo to existing sites.

The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,

Sandra Arroyo

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Yesenia Ponce <yessi.30019@gmail.com>

Mon, Feb 14, 2022 at 6:00 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
[Yesenia Ponce]

Sent from my iPhone

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Jasmine Martinez <jasminnnee.m@gmail.com>

Mon, Feb 14, 2022 at 6:30 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,
Jasmine

Sent from my iPhone

GLOVIS

Lucas Grandcolas <lglsurfer@gmail.com>

Mon, Feb 14, 2022 at 6:37 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,

Lucas Grandcolas

Sent from my iPhone

Parking lot for incoming cars off of Hueneme Road

Linda Daly-Calderon <lindaly21@yahoo.com>

Mon, Feb 14, 2022 at 7:00 PM

Reply-To: Linda Daly-Calderon <lindaly21@yahoo.com>

To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Dear Sir:

I fail to see how the hired "consultants" have taken the Ormond Beach Restoration Plan and a future developed world class Wetlands Sanctuary into their very faulty conclusions at all. This area close by is already home to over 150 bird species. To say that having a lot with nearly 5,000 cars parked on it, big bright lights at night and the accompany noise and pollution would not affect this area adversely is just plain false. Oxnard so often goes after the immediate dollars and does not have a world (or even local) view of what we can be. We have a gem here, a tourist attraction now and even more so in the future. Why does the City want to throw that away with this "project"? When will we believe in our City and stop being so limiting? We have a history, sad to say, of allowing some really good things to go by the wayside and then other cities pick them up and even improve upon them. One example that comes to mind is the Gull's Children's Museum (now Camarillo has one), another is the Carnegie Library being closed (that was too premature and why can it not be reopened now?). There are others on the list, but let us learn from that and not allow this to happen also to Ormond Beach Wetlands. Let us keep what may be the last wonderful area for the benefit of our present local generation as well as future generations here and even from all over the world. Let us not be short-sighted. I, and many others, am against this project which the Port desires to foist on us. I have lived in Oxnard for 45+ years now and am still waiting for something great as Ormond Beach is, and can be even more when fully developed, to put us on the map in a positive way.

Sincerely,
Linda Calderon
PO Box 2732
Oxnard, CA 93034

Linda Gray Calderon

Fwd: Comment on Draft EIR for Port of Hueneme temporary parking lot

Ron Whitehurst <ron@rinconvitova.com>
To: jay.dobrowalski@oxnard.org

Mon, Feb 14, 2022 at 7:06 PM

Dear Mr. Dobrowalski,

We commend the Port for GHG emissions reductions projects that have earned the following recognitions:

- GREEN MARINE CERTIFIED 2017 & 2018 First port in California
- COMPREHENSIVE ENVIRONMENTAL MANAGEMENT AWARD 2018 American Association of Port Authorities (AAPA) Comprehensive Environmental Program Category
- GREENEST US PORT 2017 Green US Shipping Summit
- ENVIRONMENTAL STEWARDSHIP AWARD 2017 Ventura County Board of Supervisors
- The Maker Space to encourage local start-up businesses

Having studied the reports of air monitoring data from the equipment at Haycox Elementary, it is our understanding that the EIR is correct in finding no significant negative impact on air quality. In fact, the study shows that when there are higher pollutants in South Oxnard and near the Port, it is when the wind blows from the north carrying the air pollution from Hwy 101. It appears incorrect to blame the Port as a significant source of air pollution in the community.

It is also our understanding that the only alternatives to the proposed project risk creating more air pollution during the proposed temporary development of parking on its property. We would love to see the community united in support of the Port in grant applications, so it would have more chances of obtaining grants to do a thorough climate and air pollution management plan and support to purchase more emissions reduction equipment.

We hope the South Oxnard community can work closely with the Port on win-win projects that result in increasingly clean air during this developmental phase and the ability to acquire and development the property as a park for the community in the coming years.

We encourage the Port to pursue other economic development projects for the community, such as expanding the 'maker space' and development of green jobs associated with kelp and worm farming.

Sincerely,

Ron Whitehurst
350 Ventura County Climate Hub
[108 Orchard Dr,](#)
[Ventura, CA 93001](#)
805-746-5365 cell

--
Ron Whitehurst, Pest Control Advisor
Rincon-Vitova Insectaries
800-248-2847
[rinconvitova.com](#)
Contact: Email ron@rinconvitova.com bugnet@rinconvitova.com,
Phone Office 805-643-5407 Mobile 805-746-5368
Twitter Ron Whitehurst @BugfarmerRon, Rincon-Vitova Insectaries @BugFarmRincon
Instagram @ronwhitehurst
Skype: ronwhitehurst
WeChat: Bug-Farmer
WhatsApp 805-746-5368
Facebook Ron Whitehurst, Rincon-Vitova Insectaries
Websites: [rinconvitova.com](#), [dietrickinstitute.org](#), [dietrick.org](#), [nzitrap.us](#)
Blogs: [www.bugfarm.us](#)
[www.Biocontrolproducts.com](#)
[www.conversationswithdeke.wordpress.com](#)
[www.biocontrolbeat.wordpress.com](#)

Glovis 34-acre DEIR

Erica Helson <erica.helson@gmail.com>

Mon, Feb 14, 2022 at 7:57 PM

To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Cc: "bert.perello@oxnard.org" <bert.perello@oxnard.org>, "bryan.macdonald@oxnard.org" <bryan.macdonald@oxnard.org>,

"gabe.teran@oxnard.org" <gabe.teran@oxnard.org>, "gabriela.basua@oxnard.org" <gabriela.basua@oxnard.org>,

"john.zaragoza@oxnard.org" <john.zaragoza@oxnard.org>, "oscar.madrigal@oxnard.org" <oscar.madrigal@oxnard.org>,

"vianeyforoxnard@gmail.com" <vianeyforoxnard@gmail.com>

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The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,

Erica

--

Erica Helson

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Mac Duncan <marymacduncan@gmail.com>

Mon, Feb 14, 2022 at 8:59 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
[Insert n

Sent from my iPhone

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Mac Duncan <marymacduncan@gmail.com>

Mon, Feb 14, 2022 at 9:01 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
Mary Duncan
Los Alamos, CA

Sent from my iPhone

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Liz Segura <lz_segura@yahoo.com>

Mon, Feb 14, 2022 at 9:54 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
Elizabeth Segura

EIR - Port of Hueneme - Project 34

Coastal Keepers <805coastalkeepers@gmail.com>

Mon, Feb 14, 2022 at 10:55 PM

To: jay.dobrowalski@oxnard.org

Cc: "Zaragoza, John" <john.zaragoza@oxnard.org>, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, "Basua, Gabriela" <gabriela.basua@oxnard.org>, vianeyforoxnard@gmail.com

Dear Jay Dobrowalski,

We are writing to submit our comments on the Environmental Impact Report (EIR).

We believe it is going to happen. What we don't know is what is going to happen after project 34 completes its stay. What we don't know is how this project will direct us to a zero emission port.

To be honest we love seeing our Oxnard harbor district pioneer their way into becoming a top tier zero emission port. We appreciate their commitment to the community and providing an EIR. They have leveraged their resources to create opportunities for professional development, sponsorships, and communal events.

We are all about the views here in the west coast, and we believe project 34 will be a cleaner view than we have now. This treasured land, the 34 acres, is divided among Hueneme road, a railway, new Indy, and Pantojas trucking. If we look at it together, it is a beautiful meadow filled with trash debris with our beloved Halaco superfund site in the background (literally blocking ocean views). It is expected the Port of Hueneme will be maintaining the area, using the proper gravel, and bringing in native plant species. It is also expected that the EIR carefully considers the impact it'll have on wildlife. Cheers to everyone that took the time to read through it.

Lastly, we expect the community outreach team to expand. With the amount of income and profit generated from this project, we believe there is opportunity for the Port to grow with the local community. We have seen the outreach team being greatly beneficial for the community for the past several years. Yet outreach for project 34 seemed under the radar, considering the unlimited amount of flyers that were distributed and their social media videos that directed us to become on the EIR. We would like to see more of our Port involved in the community through educational workshops, and ORMOND BEACH RESTORATION PROJECT.

Project 34 is going to happen. The real question is what's next? What is going to be the next major win for the community of Southwinds, South Oxnard, and Port Hueneme? How will the city of Oxnard leverage their resources to create a more sustainable and natural environment?

*Thank you,
Coastal Keepers*

Keeping the 805 coast clean, beautiful & rad to reflect the community, environment & ecosystem

Public Comment: DEIR

Adriana Sanchez <atej.sanc@gmail.com>

Mon, Feb 14, 2022 at 11:23 PM

To: jay.dobrowalski@oxnard.org

Cc: bert.perello@oxnard.org, bryan.macdonald@oxnard.org, gabe.teran@oxnard.org, gabriela.basua@oxnard.org, john.zaragoza@oxnard.org, oscar.madriral@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,

Adriana Sanchez

DEIR

Valerie Lavenza <valerielavenza@gmail.com>

Tue, Feb 15, 2022 at 7:05 AM

To: jay.dobrowalski@oxnard.org

Cc: bert.perello@oxnard.org, bryan.macdonald@oxnard.org, gabe.teran@oxnard.org, gabriela.basua@oxnard.org, john.zaragoza@oxnard.org, oscar.madrigal@oxnard.org, vianeyforoxnard@gmail.com

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Oxnard is a city of families. These families deserve transparency and safety. Please remember that you serve these families and not other financial interests. Please show these families the proper care they deserve.

Sincerely,

Valerie

Oxnard Resident

Letter of Support

Javier Gomez <jgomez450@aol.com>
To: jay.dobrowalski@oxnard.org

Tue, Feb 15, 2022 at 7:22 AM

Good Morning Jay,

I inadvertently sent it to the wrong person. Attached is my letter of support to the Port.

I hope it helps.

Respectfully,
Javier Gomez
Retired Educator,
Artistic Director of the Inlakech Cultural Arts Center



EPA-Port Of Hueneme Letter Support .pdf
173K



INLAKECH CULTURAL ARTS CENTER/LUCHA INC.

Mailing Address: 632 W. Guava Street

(Site Address: 250 E. Fifth Street)

Oxnard, California 93033

(805) 890-2193

Email: jgomez450@aol.com

**A non-profit
charitable organization
(F.I.D. #95-3400-870)**

February 15, 2022

Dear California Air Resource Board Members,

As a long standing resident in the City of Oxnard since 1965 I am adding my support to the Advanced Clean Truck Rule which will enhance the environmental efficiency of the logistical supply chain and help improve air quality in the port and to adjacent communities, especially in south Oxnard. Funding and resources are needed and they must be made available to South Oxnard as they are so done in the Bay Area and at The Port of San Pedro.

As a fifty five-year resident, and as a retired educator for the Oxnard School District I support The Port of Hueneme and its green initiatives which include an investment in EPA grade air quality monitors for South Oxnard. I support the Port of Hueneme's expansion as it is the only agency that is directing its resources to improve the air quality for the residents of the area. Moving the At Berth Requirements date from 2024 to 2025 will give The Port of Hueneme an opportunity to recover from the global pandemic driven depression so it can raise the necessary capital to provide the emissions reduction technology and infrastructure needed for compliance. As a long time resident of Oxnard I have seen the major economic impact The Port of Hueneme has had on families that depend on it for their survival. I respectfully submit this letter of support to your Board. Our local Port is a key partner in our community, especially during this pandemic crisis. The Port of Hueneme and all its local community partners like Feeding the Frontline have distributed over 250,000 lbs. of produce and other products to help feed our essential local farm working community during the COVID-19 Pandemic. The Port of Hueneme has always been a key driving force of economic vitality in helping our community have hope. I respectfully join other community organizations and leader in submitting these comments for your consideration.

Respectfully,

Javier Gomez, Artistic Director/Founder

Inlakech Cultural Arts Center

632 W. Guava Street

Oxnard Ca 93033

jgomez450@aol.com



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***A non-profit charitable organization
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PROPOSAL

Abstract

The Inlakech Cultural Arts Center/Lucha Inc. has been providing the youth and elderly of Oxnard an opportunity to develop and showcase their artistic talents for over 49 years. Thousands of youth have benefited from the Cultural Center. The Center is supported through volunteerism, donations and, on occasion, modest grants.

Background and Community Contribution

The Inlakech Cultural Arts Center, under the leadership of founding artistic director Javier Gomez, has provided thousands of youth in the Oxnard area with an experience and an opportunity that is not available to them in the mainstream. The Center is staffed with volunteers and has survived operationally with donations and occasionally through modest grants. There is no charge to the youth who, for the most part, emanate from low income backgrounds. It was the vision of Javier Gomez and supporters of the Center that youth, regardless of their inability to pay, would have *open access* to the wonderful world of art, music, dance and theatre. It was the intent of the center to provide a positive after-school alternate experiences. Historically, the Center fills a vital role in developing the artistic talents; of both youth and the elderly. (It serves as one of the most successful youth diversion programs in the city.) Offering cultural lessons daily and year round every Monday to Friday; from 4 pm to 8 pm.

Mission Statement

To enhance the cultural self-esteem of the Latino/a community by providing youth and the elderly an opportunity to realize their artistic potential through a rich cultural educational, enrichment literacy program; focused on, the visual and performing arts.

Goals to support our Mission

1. Providing a safe and supportive after-school environment where youth can meet to develop an appreciation of the performing fine arts where they can experience, develop and harness their artistic talents.
2. Providing a facility where youth can meet to study, rehearse, and develop their artistic interests.
3. Providing a Free after-school program that allows youth to heal through the arts by participating in a highly constructive and positive learning environment.
4. Providing youth with mentoring information, and support; by encouraging them to go beyond high school in pursuit of a university education.
5. Providing youth with an opportunity to showcase their full leadership potential, artistically; in civic and social events.
6. Providing the City of Oxnard with a positive, artistic enrichment literacy program that enhances the cultural self-esteem of citizens.

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Saraisabel Virgen <virgen.saraisabel@gmail.com>

Tue, Feb 15, 2022 at 11:26 AM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
Saraisabel Virgen

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Diane Pina <dpina22@gmail.com>

Tue, Feb 15, 2022 at 1:08 PM

To: jay.dobrowalski@oxnard.org

Cc: bert.perello@oxnard.org, bryan.macdonald@oxnard.org, gabe.teran@oxnard.org, gabriela.basua@oxnard.org, john.zaragoza@oxnard.org, oscar.madriral@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,

D. Pina

--

Sent from Gmail Mobile

(no subject)

Michael Landeros <michael.landeros7@gmail.com>

Tue, Feb 15, 2022 at 6:23 PM

To: jay.dobrowalski@oxnard.org

Cc: bert.perello@oxnard.org, bryan.macdonald@oxnard.org, gabe.teran@oxnard.org, gabriela.basua@oxnard.org, john.zaragoza@oxnard.org, oscar.madriral@oxnard.org, vianeyforoxnard@gmail.com

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The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,

Michael Landeros

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Fatima Munoz <fatimamunoz@aol.com>

Tue, Feb 15, 2022 at 6:13 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

Dear Jay Dobrowalski,

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Sincerely,
Fatima Munoz

Oxnard Pallet Co. Support

michael@oxnardpalletco.com <michael@oxnardpalletco.com>
To: jay.dobrowalski@oxnard.org
Cc: Vannessa Vasquez Doto <vvasquez@oxnardpalletco.com>

Wed, Feb 16, 2022 at 3:19 PM

Dear Mr. Dobrowalski:

The Port of Hueneme has a strong commitment to the community and creates economic opportunities, while pursuing full decarbonization and environmental sustainability and equity.

We fully support the Port in the Special Use Permit for a temporary outdoor vehicle facility and believe they have taken all steps necessary to be good environmental stewards to our area.

They need this permit in order to keep up with the highly competitive and larger global economic trends of the auto shipping logistics market. This benefits our community in many ways.

The Port has been open, responsible, and transparent in their permit application process for the 34 acres **Temporary** Outdoor Vehicle Lot and we believe you should approve the permit.

Thank You.

Sincerely,

Everyone here at Oxnard Pallet Company

Michael L. Doto II

Oxnard Pallet Company

Lead Sales Representative

Direct email: Michael@oxnardpalletco.com

PH: 805-487-8458

FX: 805-487-3832



Comments Regarding the Port of Hueneme Development of the 34 acre parcel Hueneme Road

Chuck Caulkins <CCaulkins@freshdelmonte.com>
To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>
Cc: Chuck Caulkins <CCaulkins@freshdelmonte.com>

Thu, Feb 17, 2022 at 4:49 PM

Hello Jay,

I am both a tenant of the Port and a concerned citizen of Ventura County with property in the cities of Oxnard and Ventura.

The Port of Hueneme / Oxnard Harbor District (OHD) had spent time and money, conducted out reach and followed the guidelines for the proposed project to the letter.

The complete EIR found this project to be acceptable and viable. This parcel will be beneficial to the Port and its customers competing for limited space on the current Port property. In my opinion the Port of Hueneme has gone above and beyond to ensure this project will be completed with care and respect for the local citizens on Ventura County.

I am fully in favor of the approval of this project and the efforts put forth by the OHD!

Lets get this project done for the sake of good stewardship, good neighbors, good business and good paying jobs for the community.

Let's make cargo move!

Sincerely Yours,

Chuck Caulkins

Port Manager

Del Monte Fresh Produce, N.A., Inc

Dock 1, Berth 3 / PO Box 520

Port Hueneme, CA 93044

Tel: 805-488-0881 X227

Mobile: 805-443-1088

DEIR Proposed Vehicle Storage Facility

Mazzella, Len <Len.Mazzella@walwil.com>

Wed, Feb 23, 2022 at 1:34 PM

To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Cc: "john.zaragoza@oxnard.org" <john.zaragoza@oxnard.org>, "bryan.macdonald@oxnard.org" <bryan.macdonald@oxnard.org>, "bert.perillo@oxnard.org" <bert.perillo@oxnard.org>, "gabe.teran@oxnard.org" <gabe.teran@oxnard.org>, "oscar.madrigal@oxnard.org" <oscar.madrigal@oxnard.org>, "gabriela.basua@oxnard.org" <gabriela.basua@oxnard.org>, "vianeyforoxnard@gmail.com" <vianeyforoxnard@gmail.com>

Hello,

I'm writing to submit comments on the Draft Environmental Impact Report (DEIR) on the proposed Port of Hueneme Temporary Outdoor Vehicle Storage Facility. I am a 25 year citizen of Oxnard with an interest in assuring our community grows in a responsible manner, providing

locally sourced jobs (which reduces commute related pollution) and elimination of blight. The parcel proposed in this project has been a long term source of blight and litter withing the community. The Port of Hueneme is committed to clean, responsible, sustainable growth and has well documented its business' minimal impact to the area's air quality and its commitment to a zero emission future. This project will beautify a long blighted area and offer a much needed foundation for the health of the ports future sustainability as a source of excellent, locally sourced jobs to the future generations of our community

Len Mazzella

2524 Timber Creek Trail

Oxnard

CONFIDENTIALITY, PRIVACY AND DISCLAIMER NOTICE "This message is for the sole use of the intended recipients and may contain confidential information. If you are not an intended recipient, you are requested to notify the sender by reply e-mail and destroy all copies of the original message. Any unauthorized review, use, disclosure or distribution is prohibited. While the sender has taken reasonable precautions to minimize the risk of viruses, we cannot warrant the absence of, or accept liability for, any such viruses in this message or any attachment. Any processing of personal information will be protected by the Wallenius Wilhelmsen groups' privacy policy. To read more about personal data processing and your related personal rights, [please visit our website](#). "

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Daniela Soleri <soleri@geog.ucsb.edu>

Thu, Feb 24, 2022 at 12:34 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,

Daniela Soleri

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.....

Daniela Soleri, PhD
she | her | ella
Research Scientist
Geography Department
UC Santa Barbara
<http://geog.ucsb.edu/~soleri/>

New book - FOOD GARDENS FOR A CHANGING WORLD:
Growing food for healthy people, communities and ecosystems
Soleri, Cleveland and Smith
2019 CAB International
http://geog.ucsb.edu/~soleri/FGCW_webpage.htm
.....

Steps for justice in California

California Truth and Healing Council correcting the historical record with truth about the state's treatment of Native Californians
<<https://tribalaffairs.ca.gov/cthc/>>

CA Assembly Bill 3121 investigating reparations for California's descendants of enslaved Africans <<https://tinyurl.com/CA-AB-3121>>

john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

monique sonoquie <sonoquie@hotmail.com>
To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Thu, Feb 24, 2022 at 5:48 PM

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The city needs to recirculate a new DEIR that addresses these flaws.

Sincerely,

Monique Sonoquie

Glovis 34 acre DEIR

Yudin Roa <yroa729@hotmail.com>

Fri, Feb 25, 2022 at 6:27 AM

To: "jay.dobrowalski@oxnard.org" <jay.dobrowalski@oxnard.org>

Cc: "john.zaragoza@oxnard.org" <john.zaragoza@oxnard.org>, "bert.perello@oxnard.org" <bert.perello@oxnard.org>, "gabe.teran@oxnard.org" <gabe.teran@oxnard.org>, "oscar.madrigal@oxnard.org" <oscar.madrigal@oxnard.org>, "gabriela.basua@oxnard.org" <gabriela.basua@oxnard.org>, "vianeyforoxnard@gmail.com" <vianeyforoxnard@gmail.com>

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Sincerely,

Yudin Z. Roa

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Christiane Schlumberger <c.schlumberger@me.com>

Sun, Feb 27, 2022 at 10:49 AM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
Christiane Schlumberger

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Sam Stewart <sammystew99@yahoo.com>

Sun, Feb 27, 2022 at 5:16 PM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
[Insert name]

Glovis 34-Acre Deir

Sarah Shahbazian <sarahshahbazian@gmail.com>
To: jay.dobrowalski@oxnard.org

Mon, Feb 28, 2022 at 6:11 PM

Dear Jay Dobrowalski,

I'm writing to submit comments on the Draft Environmental Impact Report (DEIR) on the proposed Port of Hueneme Temporary Outdoor Vehicle Storage Facility. The city did not do everything they could have done to provide meaningful public review. A large percentage of residents who would be most impacted by this project are primarily Spanish speakers but only a 5 page summary was translated to Spanish, out of the 1,000 page report. The DEIR should be translated into Spanish, and possibly other languages to make it more accessible to impacted residents.

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Sincerely,

Sarah Shahbazian

DEIR Port of Hueneme- Temporary Outdoor Vehicle Storage Facility

Francisco Tapia <franciscohtapia@icloud.com>

Wed, Mar 2, 2022 at 10:18 AM

To: jay.dobrowalski@oxnard.org

Cc: john.zaragoza@oxnard.org, bryan.macdonald@oxnard.org, bert.perello@oxnard.org, gabe.teran@oxnard.org, oscar.madrigal@oxnard.org, gabriela.basua@oxnard.org, vianeyforoxnard@gmail.com

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Sincerely,
Francisco Tapia

Fwd: Fw: New OBRAP Project Webpage

Mancha, Salvador <sal.mancha@oxnard.org>
To: Jay Dobrowalski <jay.dobrowalski@oxnard.org>

Tue, Mar 8, 2022 at 10:42 AM

----- Forwarded message -----

From: **Irene** <ireneraus@hotmail.com>
Date: Thu, Mar 3, 2022 at 7:46 AM
Subject: Fw: New OBRAP Project Webpage
To: sal.mancha@oxnard.org <sal.mancha@oxnard.org>

Hello Mr. Sal Mancha,

I'm a life long resident of Oxnard, and care about the City quality of life, currently very disturbing is the Port's proposal to store cars at Ormond Beach adjacent to the Advance Water Purification Facility. Please let me know City of Oxnard's position on this?

Best,
Irene Rauschenberger
Sent from Windows Mail

From: [Irene](#)
Sent: Thursday, March 3, 2022 7:40 AM
To: isidro.figueroa@oxnard.org

Good Morning,
My mistake sending you a blank message... I'm concerned and will you please let me know the City of Oxnard's position on the Port of Hueneme's proposal to park cars at Ormond for storage ?

Thank you,
Irene Rauschenberger
Resident

From: [Irene](#)
Sent: Thursday, March 3, 2022 7:36 AM
To: isidro.figueroa@oxnard.org

Sent from Windows Mail

From: isidro.figueroa@oxnard.org
Sent: Tuesday, September 29, 2020 5:55 PM

Friend-

The Ormond Beach Partners would like to inform you that the Ormond Beach Restoration and Access Plan (OBRAP) project webpage is now hosted by the City. The dedicated project webpage recently went live and will contain more information in the near future. Currently, the draft Restoration Plan and public comments are posted on the webpage. The webpage will be the home for all future documents, public outreach meetings postings, and all other documents and updates concerning the OBRAP.

The webpage can be accessed by the following link: <https://www.oxnard.org/ormond-beach-restoration-public-access-plan/>

The Ormond Beach Partners would also like to thank Friends of Ormond Beach for all the volunteer work they have invested at Ormond Beach for the past year. Friends of Ormond Beach have also started a newsletter for the purposes of informing subscribers on all the news and relevant information concerning Ormond Beach. The information identified below was provided by Friends of Ormond Beach to introduce themselves to the OBRAP community. Please feel free to contact Friends of Ormond Beach directly if you would like more information about the organization.

The Ormond Beach Partners would also like to thank all of the countless volunteers and organizations that have contributed to the preservation and conservation of Ormond Beach over the decades. Your hard work and dedication is greatly appreciated.

[Friends of Ormond Beach Organization \(All information identified below has been provided by Friends of Ormond Beach\)](#)

Introduction:

Ormond Beach and Lagoon, located in Oxnard between Port Hueneme and Point Mugu, is a unique wetlands environment that supports over 200 migratory birds, including the endangered Western Snowy Plover and the California Least Tern. Ormond Beach and Lagoon is situated next to the Halaco Superfund Site and has been blighted by decades of industrialization and pollution from homeless encampments.

The Mission of Friends of Ormond Beach:

Friends of Ormond Beach formed in 2019 and is a grassroots organization of environmentally minded volunteers seeking to protect the Ormond Beach wetlands and the species therein. We seek to raise awareness to our local and broader community about the threats to this wetlands area and partner with other environmentalist groups such as Surfrider, Paddle Out Plastic, and the Ventura Audubon Society to mitigate those threats. We also work with both city and county agencies that oversee the waterways that discharge into the Ormond Lagoon. Finally, we support the three partners of Ormond Beach, the city of Oxnard, the State Coastal Conservancy, and The Nature Conservancy in finding a proper land manager to protect the wetlands environment from further degradation. ***We welcome new volunteers.***

You can contact us and sign up to get [our monthly newsletter](#) at saveormondbeach2019@gmail.com. Follow us on [Facebook](#) at [friendsoformondbeach](#) and on [Instagram](#) @[friendsoformondbeach](#).

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Isidro Figueroa
Principal Planner
805-385-8207

Please visit us online: [oxnard.org/planning](https://www.oxnard.org/planning)

For Answers to Frequently Asked Questions visit our [FAQ](#) page

COVID 19 NOTICE:

In response

to state and federal directives,

OUR COUNTER IS CLOSED TO THE PUBLIC UNTIL FURTHER NOTICE.

Planning permit entitlement processing services will continue.

•

General inquiries should be sent via email to
Planning@oxnard.org.

•

Fwd: The "Your port is here to work for you, join us" is an enigma...

Mancha, Salvador <sal.mancha@oxnard.org>
To: Jay Dobrowalski <jay.dobrowalski@oxnard.org>

Tue, Mar 8, 2022 at 1:34 PM

----- Forwarded message -----

From: **Irene** <ireneraus@hotmail.com>
Date: Tue, Mar 8, 2022 at 1:00 PM
Subject: Fw: The "Your port is here to work for you, join us" is an enigma...
To: cityclerk@oxnard.org <cityclerk@oxnard.org>, Alexander.Nguyen@oxnard.org <Alexander.Nguyen@oxnard.org>, sal.mancha@oxnard.org <sal.mancha@oxnard.org>, ashley.golden@oxnard.org <ashley.golden@oxnard.org>

PS, Today's Star News OPINION pg.13A, "Public Health needs investment ... is preventative health, etc."

Noteworthy, Ormond Beach is a natural resource and an investment for Public Health, that residents have been advocating for decades!

Sent from Windows Mail

From: Irene
Sent: Saturday, March 5, 2022 11:23 AM
To: cityclerk@oxnard.org, Alexander.Nguyen@oxnard.org, sal.mancha@oxnard.org, ashley.golden@oxnard.org
Cc: carmen.ramirez@ventura.org, godwincl@pwc.com, Steven Nash, Aaron Greer

To: City of Oxnard Commissioners,

Here we go again, VC Star article Feb 19, **2019**, "Port eyes land to store 5,000 cars" Then again VC Star article_Feb 20, **2022**, "Your Port is here to work for you, join us".

The Port proposal for "5k vehicle storage" permit at the corner of Hueneme and Perkins road 34 acres adjacent to the Advanced Waste Water Purification Facility is not compatible with AWWPF industry, nor supportive of the adjacent community.

Vehicle storage movement and emissions is a threat to the coastal environment that supports wetlands and wildlife, and for the community preservation projects with the Nature Conservancy and the Coastal Commission restoration plans at Ormond Beach Wetlands. Noteworthy, Naval Base at Pt. Mugu, currently the second largest wetlands area in California and is designated as a protected area, no other agency is acting to protect it ! The Ormond Beach area hosts over 200 migratory bird species and more shorebird species are known to use Ormond Beach than any other site in Ventura County. Cite [CA.GOV](https://www.ca.gov)

A challenge, is the existing Superfund Site at Ormond Beach since 1965, is an enigma on our coastline...that may someday contaminate the ocean and impact the Channel Islands.
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0901242>

A remedy is Oxnard needs to acquire the AWWPF adjacent 34 ac vacant lot, so to not acquiesce to the demands for a "temporary vehicle storage" at Ormond!. The City of Oxnard is fortunate to have the Port and Hueneme Base here, economically and for security, nonetheless the Port has options for vehicle storage adjacent to existing industrial parking just south of Ormond Beach.

Noteworthy, historically Native Americans lived in the area and made use of the wetlands and lagoon, most notably the Chumash people, up until the early 1800s. Includes the Channel Islands history.

Oxnard needs to tell this story!

https://en.wikipedia.org/wiki/Ormond_Beach,_Oxnard,_California

“In other words, as Henry David Thoreau claims, a remedy we can never have enough of is a healthy dose of nature”.

Best for Oxnard,
Irene Rauschenberger
Resident

Sent from Windows Mail

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development



For
new applications,
aside from Cannabis related permits, email us at planning@oxnard.org.
Large projects can be shipped with prior authorization. Smaller projects may be submitted via email.

- For
new Cannabis applications, call (805) 385-7863 for cannabis zoning clearance/verification and appointments.
Otherwise, visit <https://www.oxnard.org/cannabis-regulations/>
or email cannabisinfo@oxnard.org
The application window has been extended to May 22, 2020.

For
existing applications, contact your assigned Case Planner by direct email.

Please check our website at
www.Oxnard.org
and City approved information on COVID19 for
updates.

--

Salvador Mancha

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805-385-7884
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Fwd: The "Your port is here to work for you, join us" is an enigma...

Mancha, Salvador <sal.mancha@oxnard.org>
To: Jay Dobrowalski <jay.dobrowalski@oxnard.org>

Tue, Mar 8, 2022 at 1:35 PM

----- Forwarded message -----

From: **Irene** <ireneraus@hotmail.com>

Date: Tue, Mar 8, 2022 at 1:34 PM

Subject: Fw: The "Your port is here to work for you, join us" is an enigma...

To: cityclerk@oxnard.org <cityclerk@oxnard.org>, Alexander.Nguyen@oxnard.org <alexander.nguyen@oxnard.org>, sal.mancha@oxnard.org <sal.mancha@oxnard.org>, ashley.golden@oxnard.org <ashley.golden@oxnard.org>

One more FYI : It's 2022 - 1983 = 39 years ago!

Efforts to save Ormond began...In 1983 the Ormond Beach Observers was founded by Jean Harris and Roma Armbrust, advocates for the environment, and unified diverse organizations interested in protecting these wetlands. They were also instrumental in Oxnard beach become a State beach.

Best,

Irene

[Quoted text hidden]

[Quoted text hidden]



EARTHJUSTICE



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

July 1, 2022

Via Email and Federal Express

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org

Re: Supplemental Comments on The Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We write on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”) to provide supplemental comments for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”).

On March 21, 2022, the City of Oxnard Planning Division (“OPD”) hosted a Virtual Community Workshop with presentations from the OHD discussing its plans for the 34-acre Vehicle Storage Site currently under review. At the conclusion of the Virtual Community Workshop, OPD invited additional written comments from the public concerning the proposed Project and the presentation by the Oxnard Harbor District (“OHD” or the “Port”). In line with this invitation, these comments supplement our previous letter submitted on February 14, 2022. We incorporate by reference all previous comments submitted raising issues regarding the Draft Environmental Impact Report (“DEIR”) and reiterate our position that the DEIR is inadequate and cannot support the Special Use Permit sought through the relevant application to the Planning Commission.

In our prior letter, we explained how the DEIR for the Project failed to comply with the California Environmental Quality Act (“CEQA”). There is new evidence that has emerged under production in response to Public Records Act (“PRA”) requests to the Port that should be part of the record such that decisionmakers and the public have all substantial relevant information to participate in the CEQA process and make an informed decision on the project, as required by CEQA.¹ The

¹ Cal. Code Regs. tit. 14, § 15151 (1992) (“An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences”); *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 394 (1988), as modified in denial of reh’g (Jan. 26, 1989) (“A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding *whether to approve a proposed project*... If post-approval environmental review were allowed, EIR’s would likely become nothing more than post hoc

released documents substantiate the serious CEQA violations described in our February 14 letter: in compiling the DEIR, the Port knowingly piecemealed other expansion projects, willfully ignored significant environmental issues and did not include adequate detail in the DEIR, and failed to translate the DEIR for meaningful public review.

Furthermore, we are concerned that the City of Oxnard is withholding additional relevant information due to their egregious delay in responding to our PRA request from June 2021 and their failure to meet with requestors to identify responsive records. We ask, once again, that the City set up a meeting with requestors as soon as possible to develop a path forward to producing records responsive to our June 2021 request.

Simply put, the current DEIR is inadequate. Given the significant flaws described further below, the DEIR should be rejected, and the special use permit must be denied. If the City wishes to move forward, it must recirculate a DEIR that contains sufficient information and detail to allow decision makers to make an informed decision on the entire Project, as required by CEQA. Should the City fail to conduct a full, thorough, and transparent environmental analysis in compliance with CEQA, the Planning Commission must decline to certify any final EIR.

rationalizations to support action already taken”); *Sierra Club v. County of Fresno*, 6 Cal. 5th 502, 510, 431 P.3d 1151, 1158 (2018) (holding that an EIR must include “sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises...”).

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PROCEDURAL BACKGROUND

Given the lack of publicly available information on expansion planned by the Port, CAUSE and NRDC submitted Public Records Act (“PRA”) requests to both the City and the Port in June 2021.

The City has almost entirely ignored the aforementioned PRA requests and has produced only 20 documents to date, despite the statutory and constitutional right under California law to public access to governmental records.² This failure by the City to fully respond to our request not only violates the PRA, but also undermines a core principle of CEQA: public participation.

Since we submitted comments on the Draft EIR in February 2022, the Port produced additional documents responsive to the PRA requests on February 22, March 18, April 22, April 29, and May 26, 2022, and continues to make documents available on a rolling basis. The produced documents provided additional information previously unavailable to commenters regarding the 34-acre site, the permanent 250-acre site, and other reasonably foreseeable development in the Port. Based on our review of these new documents, commenters have the right to supplement our earlier comments.³ Since this supplemental letter is based on new information revealed in the Port’s responses to our PRA Requests, the comments raised herein and the attached produced documents should become part of the administrative record.

CEQA requires agencies to recirculate an EIR when “significant new information” is disclosed and provide an opportunity for a renewed public notice and comment.⁴ “Significant new information” includes documents that reveal that “the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”⁵

As detailed below, the documents produced by the Port under the PRA reveal precisely how the DEIR was inadequate: (1) the DEIR improperly piecemealed the Project; (2) the DEIR’s Project Description is inaccurate and misleading; (3) the DEIR failed to incorporate critical environmental information in violation of CEQA; and (4) the City has not provided a meaningful public review of the DEIR.

I. The DEIR Improperly Piecemealed the Project.

The DEIR failed to consider the 250-acre site as a reasonably foreseeable extension and therefore improperly piecemealed the Project. CEQA prohibits the piecemealing of projects to avoid a more robust review of the potential direct or indirect physical changes to the environment caused by a

² See Cal. Gov. Code §§ 6253(b), 6253.1(a).

³ Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* 124 Cal. App. 4th 1184, 1199-1203, 22 Cal. Rptr. 3d 203, 214 (2004); see *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* 60 Cal. App. 4th 1109, 1121, 71 Cal. Rptr. 2d 1, 8 (1997).

⁴ Cal. Code Regs., tit.14, § 15088.5(d), (f); see also Cal. Pub. Res. Code § 21092.1 (West).

⁵ Cal. Code Regs., tit.14, § 15088.5(a)(4).

project.⁶ An EIR must include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.⁷

The Port produced “significant new information” which revealed that the DEIR “was so fundamentally and basically inadequate and conclusory in nature” with respect to the 250-acre site that meaningful public review was precluded—thus triggering the need for recirculation as stated in the CEQA Guidelines § 15088.5(a)(4). The record indicates that the 34-acre site is an allegedly temporary measure with the Port already discussing future action plans to move the site to the 250-acre lot; and the Port and the City are contemplating multiple projects with a singular goal: to reduce capacity constraints for vehicle storage. Because these documents reveal serious gaps in the DEIR, they must not only be made part of the record, but the agency must also revise and recirculate the DEIR giving full consideration to the 250-acre site.

The Port has repeatedly emphasized, in different contexts, that the 250-acre site would operate as a logical outgrowth, i.e., a reasonably foreseeable consequence, of the 34-acre site and that it would be a permanent structure with a larger environmental footprint. For instance, the Port has started drafting conceptual plans, pursuing financial arrangements with customers, considering the 250-acre project for grants, and designating the site as an Opportunity Zone. More egregiously, records indicate that the Port might have commenced the CEQA process for the 250-acre project as early as 2018. As such, this new evidence further demonstrates that the 250-acre site meets the CEQA test for a future project that must be considered in an EIR for the 34-acre site.⁸

In addition to the evidence and comments already raised in our February 14, 2022 letter, recent PRA productions further show that the 250-acre project is intended as a reasonable future consequence of the 34-acre site and that concrete steps have been taken to bring the project into fruition. The subsequent paragraphs detail a chronology of the Port’s various grant applications, meetings with landowners, communications with potential tenants and clients, and Community Workshop meetings with stakeholders, which together demonstrate that the Port has known for many years, and at least since 2019, that the 250-acre site would be a reasonably foreseeable consequence of 34-acre site.⁹

In August 2019, the Port began working with the 16 owners to get a non-binding commitment that the 250-acre property would be designated as an opportunity zone.¹⁰ As early as November 2019,

⁶ *Berkeley Keep Jets Over the Bay Comm. v. Bd. Of Port Comm’rs*, 91 Cal.App. 4th 1344, 1358, 111 Cal. Rptr. 2d 598, 608 (2001), as modified on denial of reh’g (Sept. 26, 2001).

⁷ *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 396, 764 P.2d 278 (1988), as modified on denial of reh’g (Jan. 26, 1989).

⁸ *Id.*

⁹ Aegir Property Advisors, *Project Update on Proposed Port of Hueneme Logistics Park* at p. 9 (Feb. 2021) (this presentation highlights a timeline wherein the CEQA process for the 250-acre site started in 2018).

¹⁰ See Email from Kristin Decas to Commissioners, Subject: Weekly Update (Aug. 5, 2019).

GLOVIS had already committed to 140 acres of the 250 site.¹¹ In these conversations, contacts at GLOVIS discussed Letters of Intent for the 250-acre and 34-acre sites together.¹² Emails from Port customers indicate that they viewed the 250-acre project, 34-acre project, and the STACKED parking structure as reaching the same goal of expanding port vehicle capacity.¹³

Thereafter in February 2020, OHD and GLOVIS began discussing arrangements for an MOU for the use of the 250-acre site as a long-term project. These email communications also reflect GLOVIS' interest in an on-dock parking structure and additional properties for use. More critically, it flags a 10-acre storage site at 6001 Arcturus, which has to go through renovations to be able to land cars.¹⁴

In March 2020, the Port signed a Memorandum of Understanding ("MOU") with the property owners for the 250-acre site.¹⁵ The MOU says that the Port and the landowners will cooperate in drafting and considering a purchase option for the 250-acre site.¹⁶ The MOU lists the following property owners:

- William Ito, Ito Farms
- Allen Camp, South Shore Land Company LLC
- Steven Murata, Plum Vista LP / Ume Properties LLC
- Ito Family Trust
- White Family Trust
- Katsuda trust(s)

The newly produced documents by the Port indicate that they were in conversation with landowners, including Allen Camp and Bill Ito, in 2020.¹⁷

Beginning in June 2020, multiple budget documents list the 34-acre site and the 250-acre site as a single line item, e.g., "34 Acre/250 Acre Project," suggesting that the projects are inextricably

¹¹ See Email from Dona T. Lacayo to GLOVIS USA at p.2 (Feb. 8, 2021).

¹² See Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019).

¹³ *Id.*

¹⁴ Email from Dona T. Lacayo to Charles Franklin Re GLOVIS real estate update at p. 2 (Feb. 21, 2020).

¹⁵ *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020).

¹⁶ *Id.* at p. 2.

¹⁷ See Email from Kristin Decas to Commissioners, Subject: Weekly Update (Oct. 16, 2020); Email from Sandra Cruz to Kristin Decas, Subject: End of Day Review (Dec. 2, 2020).

linked.¹⁸ In October 2020, the Port continued meeting with the negotiating team for the owners to determine an accurate market value for the site.¹⁹

From late 2020 to early 2021, GLOVIS and OHD continued correspondence about coordination for port vehicle storage expansion that tied the 250-acre site with an on-dock parking structure, the 34-acre site, and Naval base property.²⁰ In early 2021, OHD noted in a presentation that it has already invested \$230,000 in developing the 250-acre site, including: development structure analysis; extensive analysis on CEQA, real estate, park development, engineering, rail; and discussions with City/County officials.²¹ The same presentation also highlighted that OHD needed “firm commitments” and “fast track permitting” for the 250-acre project and the “stop gap measure”—referring to the 34-Acre site.²²

At the same time, the Port re-applied for federal funding for the 250-acre project and successfully designated the 250-acre site in census tracks as an Opportunity Zone.²³ Beginning in February 2021, OHD started to line up potential customers for the 250-acre site and began securing MOUs.²⁴ In an email, subject line: “250 Acres Development Update Call to Action,” the Port noted that “in discussions with several potential port clients, we have identified potential demand from them for approximately 160 acres.”²⁵ Although this estimate did not translate to firm commitments, the Port noted that they could not accommodate more than three to four tenants, one of which would be the Port itself. Thereafter in May, the Port sent a draft MOU with an expected deadline of “July 2nd, 2021.”²⁶ The Draft MOU provides that Port customers will put down a deposit (\$12,000 per acre) to use land on the 250-acre site, with the deposit being refundable until the Port secures legal entitlements to the 250-acre site.²⁷ An April 2021 Board Meeting also notes that the Port has engaged in “advanced discussions with auto customers on the 250 acres site.”²⁸ Thereafter, in June, the emails noted that there was a “strong indication from WWL, Del Monte and GLOVIS that they

¹⁸ The Port of Hueneme Oxnard Harbor District, *Fiscal Year 2021 Budget Schedule* at pp. 3-4 (2021); The Port of Hueneme Oxnard Harbor District, *FY 2022 Capital Outlay Plan* (2021); The Port of Hueneme, *FY2021/2022 Preliminary Budget Presentation* at p. 17 (May 17, 2021); The Port of Hueneme Oxnard Harbor District, *FY 2021 Capital Outlay Plan Draft* (2020).

¹⁹ See Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020).

²⁰ See Email from Dona T. Lacayo to Charles Franklin Re: GLOVIS real estate update (Feb. 21, 2020).

²¹ Aegir Property Advisors, *Project Update on Proposed Port of Hueneme Logistics Park* at p. 5 (February 2021).

²² *Id.* at p. 6.

²³ See OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing).

²⁴ See Email from Dona T. Lacayo to Port of Hueneme Staff and Aegir Ports at pp. 4-6 (June 2021).

²⁵ *Id.* at p. 5.

²⁶ *Id.* at p. 2.

²⁷ Memorandum of Understanding for Deposit and Right to Lease Land in a Proposed Port Related Logistics Park in the City of Oxnard (Form as of May 11, 2021).

²⁸ Board of Harbor Commissioners, Board Meeting Materials at p. 14 (Apr. 19, 2021).

are in” and an update indicating the amount of space each customer wants to be reserved via the MOU “40-50 acres for Del Monte, 100 for WWL.”²⁹

In September 2021, the OHD received an Infrastructure for Rebuilding America (“INFRA”)-Extra grant for the Hueneme Modernization Project.³⁰ The INFRA-Extra initiative provides an opportunity to apply for Transportation Infrastructure Finance and Innovation Act (“TIFIA”) credit assistance for up to 49% of eligible project costs. The 2021 request for the INFRA grants states, “[t]he Project advances a critical component of the 2020 Plan that calls for ... increased auto capacity.”³¹ The application goes on to state that the “[m]odernization Project [would] increase the Port’s ability to accommodate automobile exports” and that the “Port’s automobile customers have high demand for additional space to accommodate their cargo.”³²

Most recently, during the March 2022 virtual Community Workshop, Oxnard Planning Division officials and OHD officials stated that the 34-acre site and the 250-acre site would operate “like Legos.”³³ That is, the 250-acre site would build off of the “stop-gap” 34-acre site. The Port had already recognized the link between a more permanent solution to their capacity issues and a stop-gap measure for their clients’ space constraints.

Finally, the City of Oxnard was also aware of the Port’s plans for the 250-acre site. For example, the Port produced a document titled “Collaboration Call with City of Oxnard” with the goal of “Partnership for Economic Development.”³⁴ The document has an “ongoing deadline” and is supplemented with information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.³⁵ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that “[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail.”³⁶

As all the above information demonstrates, it was reasonably foreseeable that the 250-acre site would be a necessary component of this Project. Separating the 250-acre site as a “separate and

²⁹ Email between Dona T. Lacayo and Port of Hueneme Staff and Aegir Ports at p. 1 (June 2021).

³⁰ The Port of Hueneme, *Port of Hueneme Projects & Events* (March 2019).

³¹ The Port of Hueneme, *The Hueneme Modernization Project – Dep’t of Transportation – INFRA Grant Application FY 2021* at p. 6.

³² *Id.*

³³ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:57:19 (Mar. 21, 2022).

³⁴ OHD, *Collaboration Call with City of Oxnard* at p. 2 (Ongoing).

³⁵ *Id.* Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.

³⁶ City of Oxnard & The Port of Hueneme: *Partners in Economic Development, Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard.*

distinct” project in the EIR is not only piecemealing in violation of CEQA but also entirely disingenuous.

II. The DEIR’s Project Description is Inaccurate and Misleading.

OHD staff have repeatedly emphasized the temporary nature of the Project to downplay the project’s impacts. The Port also noted that the 34-acre project could be taken apart to make another future possible. Yet, when stakeholders asked the Port about a) where the Port would store the 5,000 cars after the 3-5 years; and b) whether workers will be laid off after 3-5 years – the Port evaded answering major questions about the expiration of the temporary permit.³⁷

The Project description in the DEIR also suffers from these fatal flaws. The Port produced “significant new information” revealing that the DEIR was “fundamentally and basically inadequate” for two key reasons. First, neither the City nor the Port explains why the Project is truly temporary. Second, assuming the Project is temporary, neither the City nor the Port explains why the benefits of the Project would be permanent. For these reasons, the new documents must not only be made part of the record, but they also demonstrate how the project description is inadequate under CEQA, and the agency must revise and recirculate the Draft EIR with a proper project description so that decisionmakers can properly assess the impacts of this project.

A. The City has not Demonstrated how the Project is Temporary in the DEIR.

Although OPD and OHD officials have repeatedly stated that the project would be “temporary,” the documents produced by the Port in response to our PRA requests have demonstrated that the project is likely to become permanent.

The Port has repeatedly raised concerns about an unsustainable “serious off port land deficit” of about 300 acres. More recently, the Port has noted that “storage is becoming an issue now not just for automobiles but containers now as well.”³⁸ While the City has highlighted these space issues, it has not provided the public with any information that would buttress the alleged temporary nature of the site. For example, OHD has not provided specifics regarding plans to transition the site post-project (e.g., into a park) or that the Port will undertake specific mitigation measures to prevent the environmental impact of that reversion. Instead, the space issues that the Port has repeatedly raised in internal documents lead us to believe that the site will be used to increase the carrying capacity of the Port. The lack of transparency on these points calls into question the temporary nature of the site as well as OHD’s long-term intentions for the site.

We reiterate that the temporary nature of the project does not align with the objectives outlined for the project, i.e., to “reduce and consolidate” reliance on off-port satellite storage locations. Unless existing off-Port sites are being kept in operation or an additional more permanent site is planned

³⁷ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> (Mar. 21, 2022) (questions regarding future of cars at 1:48:55 and temporary employment at 1:30:26 and 1:53:10. Vague answers from the Port beginning at 2:43 -3:00)

³⁸ OHD, Collaboration Call with City of Oxnard at p.4 (Ongoing).

as part of this Project, the temporary nature of the Project blurs the sincerity of the objectives—and by extension—the adequacy of the project description. The City cannot seem to reconcile the objectives in the project description with the purported temporary nature of the site.

If truly temporary, the project would fail to satisfy the stated objectives—making Alternative One: No Project/No Build by far the environmentally superior alternative that the City should adopt. As we stated in our February 14, 2022 comment letter, the City’s concern over reducing diesel truck traffic, if genuine, could be addressed with the deployment of zero-emission trucks and related technologies that are increasingly becoming available in the market. Indeed, at the March 21, 2022 Community Workshop, Port staff touted that the Project’s presumptive tenant, GLOVIS, has led the industry in producing Class-8 zero-emissions trucks.³⁹ This information serves to counter the argument that deploying zero-emission trucks to serve the Port’s vehicle storage operations is infeasible. Therefore, we reiterate our call to the City and the Port to broadly consider deploying zero-emission trucks and other technology as an alternative to building an unnecessary temporary vehicle storage parking lot next to sensitive wetlands.

B. The City has not Explained the Permanence of the Alleged Benefits of the Project.

Logically, this project cannot provide the promised permanent benefits—increasing economic activity, bringing sustainable jobs, and consolidating existing sites from Camarillo and Ventura—while also being temporary.

In its ongoing collaboration calls with the City, the Port has repeatedly emphasized that the Project will “create 40+ new jobs and add \$2.2 million in local salaries annually.”⁴⁰ However, it does not explain where these jobs and salaries will go after the allegedly temporary project expires. Indeed, when stakeholders asked the Port about potential layoffs for the new workers in the March 2022 Community Workshop, the Port responded that the jobs that the 34-acre site would create are temporary construction jobs, implying contracts that will expire.⁴¹ Simply put, the Project is not actually creating any long-term, unionized, and adequately paying jobs. Additionally, in its Project 34 FAQs, the Port has also repeatedly emphasized that the Project will create capacity for 4,944 vehicle storage spaces. The Port fails to explain where these cars will go after the allegedly temporary project expires. Again, when stakeholders asked the Port whether GLOVIS intends to cancel car shipments after the temporary storage facility expires in the March 2022 Community Workshop, the answer was murky at best – stakeholders remain unclear about the future of

³⁹ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:49:30 – 2:52:00 (Mar. 21, 2022).

⁴⁰ OHD, Collaboration Call with City of Oxnard – Partnership for Economic Development at p. 2 (Ongoing).

⁴¹ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:44:40 (Mar. 21, 2022).

imported cars and other imports.⁴² If the other projects are truly “separate and detached,” then they will not serve as sites for moving these vehicles.⁴³

These are integral components of the full project that remain unknown, and as such, the DEIR fails to disclose all the impacts of the project.

III. The DEIR Failed to Incorporate Critical Environmental Information in Violation of CEQA.

Without complete environmental reporting, as well as public commentary from an adequately informed public, officials cannot make informed decisions on projects.⁴⁴ CEQA procedure is intended to not only provide for adequate environmental assessment, but also to “demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.”⁴⁵ The integrity of the CEQA process is “dependent on the adequacy of the EIR.”⁴⁶

The “significant new information” produced by the Port reveals that the DEIR was inadequate and conclusory because it failed to incorporate and inform the public and decisionmakers about the Project’s cumulative impacts, rubberstamped an important traffic analysis, and omitted from consideration reasonable, zero-emission alternatives. The lead agency’s fundamental exclusions in its DEIR deprived the public of informed commentary. As such, the agency also failed to demonstrate how it has taken a hard look at the environmental implications of its actions with respect to the Project. Because these documents reveal serious gaps in the DEIR, they must not only be made part of the record, but the agency must revise and recirculate the DEIR giving full consideration to the environmental consequences.

C. The DEIR Failed to Incorporate an Accurate Cumulative Impact Assessment.

⁴² *Id.* at 2:44:05-2:44:55 (providing vague statements regarding “long term developments” and “future sites to help support the Port” and that such developments will be managed in an “open and transparent” way but not specifically responding to how car shipments will be managed.)

⁴³ *Id.* at 23:04 and 2:44:00 (the Port acknowledging that they are in preliminary discussions for allegedly “separate and detached” projects – such as the 250-acre site.)

⁴⁴ *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.*, 57 Cal. 4th 439, 447, 452, 304 P.3d 499 (2013) (*see also* *Save the Hill Grp. v. City of Livermore*, 76 Cal. App. 5th 1092, 1109, 292 Cal. Rptr. 3d 120, 133 (2022) and *League to Save Lake Tahoe Mountain etc. v. Cnty. of Placer*, 75 Cal. App. 5th 63, 95, 290 Cal. Rptr. 3d 218, 244 (2022), *review denied* (May 18, 2022) for recent California courts affirming this approach to prejudicial omissions in EIRs).

⁴⁵ *Laurel Heights Improvement Assn. v. Regents of Univ. of California*, 47 Cal. 3d 376, 392, 764 P.2d 278 (1988), *as modified on denial of reh’g* (Jan. 26, 1989).

⁴⁶ *California Native Plant Soc’y v. City of Santa Cruz*, 177 Cal. App. 4th 957, 979-80, 99 Cal Rptr. 3d 572 (2009), *as modified on denial of reh’g* (Oct. 14, 2009).

CEQA requires that the DEIR address cumulative impacts.⁴⁷ Cumulative impacts are those that result from “the combination of the project evaluated in the EIR together with other projects causing related impacts.”⁴⁸ Failure to include a complete list of projects that produce related or cumulative impacts is a violation of CEQA.⁴⁹ This is especially critical if the proposed 34-acre site is not, in fact, temporary and would add to the overall cumulative impacts.

In addition to the projects, the City listed in the DEIR as “reasonably foreseeable, planned and approved future projects” (which, despite being listed, were not considered in a cumulative impact assessment), our review of the recently produced documents provides further evidence that there are planned projects left out of the DEIR, resulting in a cumulative impacts analysis that is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”⁵⁰

For example, the City recently produced an application for a Special Use Permit, which shows that a project site is proposed for a large trailer truck storage facility just east of the 34-acre project site.⁵¹ This would presumably increase truck traffic in the general vicinity of the proposed project site. The City also indicated in a Market Street Landing Summary that the Port is pursuing a 2-acre site to create additional space for cargo movement. The summary notes indicate that the space is expected to “yield a 30% increase in capacity” in the long term.⁵²

The newly produced documents further indicate that the Port anticipates significant growth in the coming years, which has not been included in the DEIR nor in any cumulative impact assessment – a fact that the Port itself acknowledges in its correspondence.⁵³ For example, the Port’s deepening and dredging projects are explicitly intended to accommodate anticipated cargo growth on larger vessels and expand the Port’s capacity.⁵⁴ Yet the cumulative impacts of dredging at the Port were completely left out of the DEIR. This is especially troubling because a portion of its dredging proposal has already undergone environmental review under CEQA and the National Environmental Policy Act (“NEPA”) and received federal funding last year,⁵⁵ which further

⁴⁷ Cal. Code Regs., tit.14, § 15130; *see also* Cal. Code Regs., tit.14, § 15355

⁴⁸ Cal. Code Regs., tit.14, § 15130(a)(1).

⁴⁹ *Id.* at § 15130(b)(1).

⁵⁰ Cal. Code Regs., tit.14, § 15088.5(a)(4).

⁵¹ Port of Hueneme Draft Project Description - Temporary Storage Facility at p. 4.

⁵² The Port of Hueneme, *Market Street Landing – Essential to the Port’s Future as an Economic Engine* at p. 1.

⁵³ Email between Dona T. Lacayo and Port of Hueneme Staff at p. 1 (Feb. 2019) (Discussing that the impact of more ships and the resulting increase in new business and automotive traffic has not been part of the Project assessment).

⁵⁴ *See, e.g.,* Oxnard Harbor District, *Port Makes Another Splash - \$5M Economic Development Grant*, September 22, 2021, available at: <https://www.portofhueneme.org/eda-grant-09-22-2021>.

⁵⁵ *Id.* (the U.S. Economic Development Administration awarded the Port \$5.1 million to dredge Berth 3 to facilitate larger vessels carrying fresh produce to arrive at the Port); *See also* The D3 Project: The Dredge, Demo and Delivery Project, U.S. Economic Development Administration – EDA Grant Application PWEAA2020, June 10, 2020.

substantiates that the Port dredging projects are “reasonably foreseeable, planned and approved future projects.”

In addition to the dredging project, as commenters noted in their February letter, beginning in April 2020, the Port published a “Priority List for 2020 Grants” which lists the STACKED project, the 34-Acre Temporary Expansion, and the 250 Acre Port Enterprise Zone.

Thereafter in its April 2021 Board Meeting, the Port notes that it anticipates “[i]ncreas[ing] rail and land capacity” (i.e., 34 acres, 250 acres, parking structure).⁵⁶ The Port has also noted that it is working on securing additional property owned by Arcturus.⁵⁷ The Port hired consultants to undertake a study of a parking structure for the STACKED project to use in grant applications during summer 2021. This parking structure would be shorter and cover a larger footprint than the multilevel parking structure studied in 2016.⁵⁸ In the 2021 Comprehensive Economic Development Strategy, the Port noted that the STACKED Project would “have 7,500 bays nearly doubling the Port’s current automobile capacity.”⁵⁹ The first phase will include the base and the next two stories of the structure.⁶⁰ The second phase is set to add an additional two levels, making it a five-story tall structure.⁶¹ Additionally, the Port noted that to retain business, “it will be necessary for the Port to provide infrastructure such as an on-dock parking structure for staging automobiles [and] an off-port multi modal logistics park.”⁶²

In its Financial Year 2022 Capital Outlay Plan, the Port sets aside \$5 million in Financial Year 2022 and Financial Year 2023 (a total of \$10 million) for the Engineering of a “Parking Structure.”⁶³ Although the vague term “Parking Structure” is unclear, what is clear is that funding has already been allocated for capacity growth projects in the Port.

Inevitably, all these projects tie into the same goal – to resolve the serious space constraints the Port is facing. Clearly, OHD has already invested considerable time and resources into preparing for the development of these related projects – including applying for federal funding. Because these developments are all planned and reasonably foreseeable, the cumulative impacts of these additional projects must be considered in the DEIR.

D. The Traffic Study Incorporated into the DEIR was Rubberstamped.

As indicated by the documents produced by the City and the OHD in response to the PRA requests, the Port may not have conducted a comprehensive and independent traffic study.

⁵⁶ Board of Harbor Commissioners, Board Meeting Materials at p. 10 (Apr. 19, 2021).

⁵⁷ Email from Kristin Decas to Commissioners, Subject: Weekly Update (June 11, 2021).

⁵⁸ Oxnard Harbor District, Professional Services Agreement (May 26, 2021).

⁵⁹ Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ The Port of Hueneme Oxnard Harbor District, *FY 2022 Capital Outlay Plan* (2021).

An EIR required by CEQA must include sufficient detail to enable those who did not participate in its preparation to understand and meaningfully consider the issues raised by the proposed project.⁶⁴ An *omission* in a DEIR significant impacts analysis is deemed prejudicial if it deprives the public and decisionmakers of substantial relevant information about the project’s likely adverse impacts.⁶⁵ Here, the produced documents make clear that there was never any intention for the Port to vet the real traffic impacts of the 34-acre site. Instead, the documents demonstrate that the Port seems to willingly turn a blind eye to the full impacts.

In an email dated August 11, 2018, a land-use planning specialist asked whether an expert could “prepare a letter report for the argument against needing a traffic study.”⁶⁶ Thereafter on August 27, 2018, the same land-use planning specialist noted that “the City just needs a paper trail – this way they can cover themselves with a letter from a professional.”⁶⁷ The next day on August 28, 2018, the expert responded, noting that “[e]verything we do will be based on that [Project] description. I will just have to take the time to type up a trip generation analysis based on the trips in noted in the Jensen Design letter and charge the Port for my time.”⁶⁸ Thus, the Associated Transportation Engineers Traffic Study (“Traffic Study”) that the DEIR relies on appears to have been based solely on a Project Description and a Design letter – omitting consideration of CEQA guidelines and the Ventura County Freight Corridors Study.

Because of the shoddy traffic analysis that was performed, the numbers cited by the Port for the vehicle impacts of the 34-acre site vary across documents and are unreliable. For example, in one document, the Port notes that “32 additional vehicles would be imported/exported per day (576 vehicles per month)”⁶⁹ In another document, GLOVIS notes that they expect to “shuttle 10 - 12 vehicles at one time ... between the hours of 7:00 am and 4:00 pm Monday through Friday” which amounts to an “average of 54 vehicles a day” (or 972 vehicles per month).⁷⁰ The Associated Transportation Engineers’ Traffic Assessment notes, “76 vehicles will be transported to and from the Port to the Storage Lot for approximately 18 days of every month”⁷¹ (or a total of 1368 vehicles per month).

⁶⁴ Cal. Pub. Res. Code § 21100.

⁶⁵ See *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.*, 57 Cal. 4th 439, 304 P.3d 499 (2013) (see also *Save the Hill Grp. v. City of Livermore*, 76 Cal. App. 5th 1092, 1109, 292 Cal. Rptr. 3d 120, 133 (2022) and *League to Save Lake Tahoe Mountain etc. v. Cnty. of Placer*, 75 Cal. App. 5th 63, 95, 290 Cal. Rptr. 3d 218, 244 (2022), review denied (May 18, 2022) for recent California courts affirming this approach to prejudicial omissions in EIRs).

⁶⁶ See Emails between Dona T. Lacayo, Hollee King, and Darryl F. Nelson at p. 7 of 8 (Aug. 2018) (emphasis added).

⁶⁷ See Emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018) (emphasis added).

⁶⁸ See Emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018).

⁶⁹ See Letter from The Port of Hueneme to City of Oxnard, *Subject SUP Project Description – Temporary Outdoor Vehicle Storage* at p. 4 (Aug. 27, 2018).

⁷⁰ See Letter from Frank Cerrito (GLOVIS) to Ashley Golden Re: Oxnard Storage Lot (Aug. 9, 2018).

⁷¹ Assoc. Transportation Engineers, *Traffic Impact Study for the Port of Hueneme Temporary Vehicle Storage Special Use Permit – City of Oxnard* at p.2 (Aug. 29, 2018).

There remains confusion as to the exact number of vehicles to be transported and the extent to which additional trucks/shuttles will be needed. As such, this lack of consistency deprives the public and decisionmakers of substantial relevant information about the project's likely adverse traffic impacts as required under CEQA.

E. The Port Failed to Provide a Reasonable Explanation for not Considering a Zero-Emission Vehicle Alternative.

In our February 2022 letter, we recommended that the City should more thoroughly consider zero-emissions trucks as a reasonable and viable alternative and mitigation measure for this Project. The viability of this alternative is supported by OHD's own statements touting GLOVIS as one of the region's only makers of HD Class 8 zero-emission trucks. OHD reiterated this commitment to zero-emission technology during the Community Workshop held on March 21, 2022.⁷² Yet, OHD summarily dismisses this alternative as infeasible.

Currently, the DEIR does not offer any mitigation or alternative for driving hundreds of cars individually along public roads each day to and from the proposed Project site. As mentioned above, the ambiguity surrounding whether the 34-Acre site will truly be temporary calls into question whether this Project will meet the stated objectives. The "no-build" alternative, by far, is the environmentally superior alternative. When coupled with the deployment of zero-emission trucks for car transport, the Port and the City have an opportunity to mitigate the impact of operations and offer the community a chance for cleaner air. Despite claiming this approach would prove infeasible, the Port also acknowledges that its own client, GLOVIS, is a leader in producing zero-emissions Class 8 trucks.⁷³ In fact, GLOVIS noted that operations at the Port would transition trucks to hydrogen fuel cell technology, similar to what is being done as a pilot at the Port of Oakland.⁷⁴ Moreover, GLOVIS itself touts being a leader in driving decarbonization and is committed to being a zero-emissions company by 2040.⁷⁵ This reality belies the argument that a zero-emissions transition for the Port and GLOVIS' operations is infeasible.

Furthermore, the Port claims that the site may be used as storage for zero-emission cars. Port representatives claim that of the vehicles likely to be stored at the proposed 34-acre site, "many of these vehicles will be zero emission electric cars."⁷⁶ Yet, there is no mention of zero-emission cars in the DEIR or an estimate of the number of zero-emission cars expected in the 34-acre site. Suppose the Port intends to use the site for purposes of storing electric vehicles. In that case, this potentially raises a host of additional questions including, but not limited to, whether additional infrastructure is needed to support battery electric vehicles being stored there for long periods of time. This further shows that the information presented in the DEIR does not offer the public or

⁷² City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:57:19 (Mar. 21, 2022).

⁷³ *Id.*

⁷⁴ *Id.* at 1:03:30 – 1:04:00.

⁷⁵ *Id.* at 1:03:20 – 1:03:30; 1:05:00 – 1:05:14.

⁷⁶ *Id.* at 18:40 – 19:00.

decisionmakers sufficient facts to support an adequate analysis of the Project’s environmental impacts.

IV. The Port has not Provided a Meaningful Public Review of the DEIR.

In violation of CEQA, neither the DEIR nor the Community Workshop was properly translated into Spanish. Limiting public access in this way contravenes one of the core tenets of CEQA – that “the public holds a ‘privileged position’ in the CEQA process ‘based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.’”⁷⁷

According to the latest census data, in Oxnard as a whole, 66% of residents speak a language other than English at home, and 30% speak English less than “very well.” Indeed, the City itself has also acknowledged that a significant percentage of Oxnard residents speak Mixteco, particularly in south Oxnard. Yet, as described in the commenters’ February letter, the public does not have access to Spanish or Mixteco translations for any of the close to 1,000 pages of documents that provide the environmental review undertaken by the City and the details of the Project.

The language access issues have persisted through the March Community Workshop, which was primarily held in English. There was no simultaneous interpretation of the information presented by the Port. Instead, staff were invited to provide only a “summary” of the presentation in Spanish and Mixteco. More egregiously, the City’s presentation was entirely in English without interpretation.

Language access reports and studies show that such summaries do not provide for meaningful public review of important project development information. Over a decade ago, the Institute for Local Government published a guide for local officials on language access. In this guide, the authors highlighted how “providing language access increases the opportunities that residents have to communicate with their local leaders and public service providers and ensures the flow of information between public agencies and residents and among residents that is vital to effective community-building.”⁷⁸

Furthermore, California’s Bilingual Services Act was created with the intent to safeguard democracy and public participation in California’s diverse landscape.⁷⁹ State agencies must distribute applicable translated written materials if the State agency “serves a substantial number of non-English-speaking persons” and “[t]he information solicited, required, or furnished affects or may affect the individual’s rights, duties, or privileges with regard to that agency’s services or benefits.” Although, as local agencies, the City and Port are not directly subject to this rule, refusing to translate environmental documents restricts non-English speaking individuals’ ability

⁷⁷ Cal. Code Regs. Tit. 14, § 15201 (1992).

⁷⁸ INSTITUTE FOR LOCAL GOVERNMENT, Language Access Laws and Legal Issues: A Local Official’s Guide, (2011), http://ca-ilg.org/sites/main/files/file-attachments/language_access_guide_formatted_9-27-11_2.pdf

⁷⁹ Cal. Gov. Code § 7290 et seq. (1973)

and right to meaningfully participate in environmental decisions that impact their health and safety. As such, the City and Port should commit to equivalent language access services.

Given the high percentage of Spanish and Mixteco-speaking Oxnard residents, if the City truly aims to provide meaningful opportunities for engagement and public review of the information provided on the Project, it must translate the entirety of any written information provided into Spanish and any oral information into Spanish and Mixteco.

CONCLUSION

In light of the numerous flaws in the DEIR and the broader CEQA process, the Planning Division should not certify a final EIR at this time and must deny the requested Special Use Permit. The public deserves an opportunity to review and comment on a comprehensive EIR that discloses the full extent of the Project's environmental impacts. Additionally, the comments raised in this letter, along with the attached produced documents, should become part of the administrative record. Lastly, we ask that the City of Oxnard comply with its legal obligations under the California Public Records Act and set up a meeting with requestors as soon as possible. Should you have any questions, or would like to discuss the contents of this letter, please do not hesitate to contact us at rkannan@earthjustice.org, fgaytan@earthjustice.org, nospina@nrdc.org, hkryczka@nrdc.org, and lucia@causenow.org. Thank you for considering our supplemental comments.

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtoyo Chumash Foundation



July 1, 2022

VIA FEDERAL EXPRESS MAIL

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org

**Re: The Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project
(#2020069039) and PZ 18-500-02 (Special Use Permit)**

Enclosed please find a thumb drive of materials submitted on behalf of Central Coast Alliance United for a Sustainable Economy ("CAUSE") and partners, offered in support of the supplemental comment letter that was emailed to the City of Oxnard Planning Division on July 1, 2022

The enclosed thumb drive includes a list of key references cited in CAUSE's comment letter, along with the references themselves. These documents should be considered and included in the Division's administrative record for this matter. Some of the documents may be subject to copyright protection; the City of Oxnard Planning Division may use them fairly but should be judicious about public dissemination.

Please feel free to contact me should you have any questions or concerns.

Sincerely,

Fernando Gaytan
Senior Attorney | Earthjustice
707 Wilshire Boulevard, Suite 4300
Los Angeles, CA 90017
T: 415.217.2025
fgaytan@earthjustice.org

LIST OF REFERENCES SUBMITTED

The documents listed below are submitted on the enclosed thumb drive, in support of the July 1, 2022 supplemental comment letter offered by Central Coast Alliance United for a Sustainable Economy, Earthjustice, Natural Resources Defense Council and Wishtoyo Chumash Foundation. These materials should be considered by The City of Oxnard and included in the administrative record for the Draft Environmental Impact Report prepared for the proposed Port of Hueneme-Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039) and PX 18-500-02 (Special Use Permit). Documents are listed in the section of the Comment letter where they first appear. In addition, the comment letter also contains a specific URL for those documents that may otherwise be accessed online. To the extent they cannot be retrieved from this thumb drive, they are readily available for use by City personnel and therefore should be considered and made part of the administrative record.

Some of the documents may be subject to copyright protection; The City of Oxnard may use them fairly, but the City of Oxnard should be judicious about public dissemination.

I. THE DEIR IMPROPERLY PIECEMEALED THE PROJECT.

Aegir Property Advisors, *Project Update on Proposed Port of Hueneme Logistics Park* at p. 9 (Feb. 2021)

Email from Kristin Decas to Commissioners, Subject: Weekly Update (Aug. 5, 2019)

Email from Dona T. Lacayo to GLOVIS USA at p.2 (Feb. 8, 2021)

Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019)

Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019)

Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019)

Email from Dona T. Lacayo to Charles Franklin Re GLOVIS real estate update at p. 2 (Feb. 21, 2020)

Memorandum of Understanding, Oxnard Harbor District (March 3, 2020).

Email from Kristin Decas to Commissioners, Subject: Weekly Update (Oct. 16, 2020)

Email from Sandra Cruz to Kristin Decas, Subject: End of Day Review (Dec. 2, 2020)

The Port of Hueneme Oxnard Harbor District, *Fiscal Year 2021 Budget Schedule* at pp. 3-4 (2021)

The Port of Hueneme Oxnard Harbor District, *FY 2022 Capital Outlay Plan* (2021)

The Port of Hueneme, *FY2021/2022 Preliminary Budget Presentation* at p. 17 (May 17, 2021)

The Port of Hueneme Oxnard Harbor District, FY 2021 Capital Outlay Plan Draft (2020)

OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing)

Email from Dona T. Lacayo to Port of Hueneme Staff and Aegir Ports at pp. 4-6 (June 2021)

Memorandum of Understanding for Deposit and Right to Lease Land in a Proposed Port Related Logistics Park in the City of Oxnard (Form as of May 11, 2021)

Board of Harbor Commissioners, Board Meeting Materials at p. 14 (Apr. 19, 2021)

The Port of Hueneme, *Port of Hueneme Projects & Events* (March 2019)

The Port of Hueneme, *The Hueneme Modernization Project – Dep't of Transportation – INFRA Grant Application FY 2021* at p. 6

City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> (Mar. 21, 2022)

City of Oxnard & The Port of Hueneme: Partners in Economic Development, *Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard*

III. THE DEIR FAILED TO INCORPORATE CRITICAL ENVIRONMENTAL INFORMATION IN VIOLATION OF CEQA.

Port of Hueneme Draft Project Description - Temporary Storage Facility at p. 4

The Port of Hueneme, *Market Street Landing – Essential to the Port's Future as an Economic Engine* at p. 1

Email between Dona T. Lacayo and Port of Hueneme Staff at p. 1 (Feb. 2019)

Oxnard Harbor District, *Port Makes Another Splash - \$5M Economic Development Grant*, September 22, 2021, available at: <https://www.portofhueneme.org/eda-grant-09-22-2021>

The D3 Project: The Dredge, Demo and Delivery Project, U.S. Economic Development Administration – EDA Grant Application PWEAA2020, June 10, 2020

Email from Kristin Decas to Commissioners, Subject: Weekly Update (June 11, 2021)

Oxnard Harbor District, Professional Services Agreement (May 26, 2021).

Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021)

Fwd: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

Mancha, Salvador <sal.mancha@oxnard.org>

Wed, Aug 3, 2022 at 5:47 PM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **Esequiel Vargas** <evargas805@gmail.com>

Date: Wed, Aug 3, 2022 at 5:45 PM

Subject: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

To: <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to share my concern for the health of Oxnard residents and the environment in the South Oxnard Community. The trucks, ships, and countless other diesel-powered vehicles that operate to move the Port of Hueneme's goods through South Oxnard cause the community to face constant exposure to diesel exhaust, which is the number one air contaminant that leads to cancer.

South Oxnard already has some of the highest levels of pollution from the neighboring paper mill, industrial agriculture fields, water treatment facilities, Superfund site, and gas-fired power plant, which impacts the families of this majority low-income community. The Port of Hueneme's plan to expand to a 34-acre storage site on Hueneme Road would bring more heavy duty diesel trucks into South Oxnard, near schools, community parks, homes, and health care centers, forcing thousands of young children, families and patients who are most sensitive to air pollution to live and breathe in a diesel death zone.

The Port of Hueneme has much larger plans to expand their operations into South Oxnard with a permanent 250-acre "logistical park" which will consist of massive parking structures, warehouses, and truck parking, yet the city failed to examine the health effects related to that project in the environmental impact report. We need our local decision-makers to stand up for the health and safety of South Oxnard residents and stop the 34-acre expansion project. We cannot let South Oxnard become a diesel death zone!.

Sincerely,
Esequiel Vargas

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development

Emails between Dona T. Lacayo, Hollee King, and Darryl F. Nelson at p. 7 of 8 (Aug. 2018)

Emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018)

Emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018)

Letter from The Port of Hueneme to City of Oxnard, *Subject SUP Project Description – Temporary Outdoor Vehicle Storage* at p. 4 (Aug. 27, 2018)

Letter from Frank Cerrito (GLOVIS) to Ashley Golden Re: Oxnard Storage Lot (Aug. 9, 2018)

Assoc. Transportation Engineers, *Traffic Impact Study for the Port of Hueneme Temporary Vehicle Storage Special Use Permit – City of Oxnard* at p.2 (Aug. 29, 2018)

IV. THE PORT HAS NOT PROVIDED MEANINGFUL PUBLIC REVIEW OF THE DEIR.

INSTITUTE FOR LOCAL GOVERNMENT, *Language Access Laws and Legal Issues: A Local Official's Guide*, (2011), http://ca-ilg.org/sites/main/files/file_attachments/language_access_guide_formatted_9-27-11_2.pdf

Fwd: [Ask Planning Action] Agenda item #3, temp parking at Perkins in Oxnard

Lai, Dee <dee.lai@oxnard.org>

Mon, Mar 21, 2022 at 9:09 AM

To: "Dobrowalski, Jay" <jay.dobrowalski@oxnard.org>

Regards,

Dee Lai | Administrative Secretary III

Community Development Department, Planning Division

214 S C Street | Oxnard, CA 93030

O: 805.385.7878

www.oxnard.org

We welcome you back to the Service Center!

The Community Development service counter has reopened to the public from 8:00 a.m. to 4:00 p.m., Monday through Thursday and 9 a.m.-4 p.m. on alternating Fridays.

----- Forwarded message -----

From: **Sanaz Shirazi** <Sanaz.Shirazi@patagonia.com>

Date: Sun, Mar 20, 2022 at 7:36 PM

Subject: [Ask Planning Action] Agenda item #3, temp parking at Perkins in Oxnard

To: Planning@oxnard.org <Planning@oxnard.org>

I'm submitting my comment regarding the proposed parking site at W Hueneme/ Perkins Rd.

I sincerely hope that this will not be approved for a number of reasons.

This area is very special for a number of birds that nest there. Not only the snowy plover on the lease tern, but there are many hawks, Willits, whimbrels, blackbirds etc that call it home or use it as a migration stop as well. The construction of the parking site will scare many of these birds away. The light & noise pollution as well as foot traffic and air pollution in that area would be disastrous.

The need for a park n ride doesn't exceed the importance of the wildlife surviving in this area. A park and ride can be constructed elsewhere that's already more industrial and not near endangered habitats.

I have not seen what's in the environmental impact report. But I know that some things are pretty simple, and the wildlife and habitat that are there will be impacted in a negative way.

We have very few remaining wetlands, and Ormond Beach is a special place.

Please don't take this place away from the animals that rely on this small and important area.

Kindly,
Sanaz Shirazi
Ventura Resident

Sent from my iPhone

Fwd: [Ask Planning Action] PROJECT NAME: Port Temporary Vehicle Storage; PLANNING AND ZONING PERMIT NO. 18-500-02 (Special Use Permit); (South Winds and Cypress Neighborhoods)

Lai, Dee <dee.lai@oxnard.org>
To: "Dobrowalski, Jay" <jay.dobrowalski@oxnard.org>

Mon, Mar 21, 2022 at 1:47 PM

Regards,

Dee Lai | Administrative Secretary III
Community Development Department, Planning Division
214 S C Street | Oxnard, CA 93030
O: 805.385.7878
www.oxnard.org

We welcome you back to the Service Center!

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----- Forwarded message -----

From: **Jay Turner** <j.turner@iuoelocal12.org>
Date: Mon, Mar 21, 2022 at 1:33 PM
Subject: [Ask Planning Action] PROJECT NAME: Port Temporary Vehicle Storage; PLANNING AND ZONING PERMIT NO. 18-500-02 (Special Use Permit); (South Winds and Cypress Neighborhoods)
To: planning@oxnard.org <planning@oxnard.org>

PROJECT NAME: Port Temporary Vehicle Storage; PLANNING AND ZONING PERMIT NO. 18-500-02 (Special Use Permit); (South Winds and Cypress Neighborhoods)

Planning Commissioners,

Thank you for taking the time to read my email concerning the temporary vehicle storage. There are certain projects that come across the docket, that benefit the community, this being one of them. The Port of Hueneme is an economic driver for the county as well as the City of Oxnard. Being an Oxnard resident, and as part of my daily job duties, I'm constantly in the Port. I see how much work is provided to local residents, with goods, cargo and vehicle movement. In years past, vehicles were stored at Camarillo and Oxnard Airports, in vacant fields, and behind the Auto Center in Ventura. All receiving important additional income, that were turned into upgraded features for our local residents. The Camarillo Airport installed more public hangars and Oxnard just repaved the runway with drainage improvements. My point is that this temporary vehicle storage will benefit the city, with more tax revenue without any out of pocket expenses. And after 5 years it will be returned to the state that it currently sits. The Port of Hueneme currently has a Community Workforce Agreement, that generates additional work for us local residents and in turn we spend within the community.

The Port of Hueneme continues to move forward with all electric cranes and electric drayage trucks for moving cargo, and the majority of the vehicles coming off the cargo ships are all electric. If we want to move forward with improving our community and clean up what has been left to us, we need to make strategic partnerships with public and private stakeholders when it benefits everyone. This partnership makes so much sense in the job market and tax revenue. I appreciate the time the commissioners spend on topics like this. Thank You.

Fraternally,

Jay Turner

Proud Oxnard Resident

Fwd: Project 34? Let's use that name too.

Lai, Dee <dee.lai@oxnard.org>

Wed, Mar 23, 2022 at 8:22 AM

To: "Dobrowalski, Jay" <jay.dobrowalski@oxnard.org>

Regards,

Dee Lai | Administrative Secretary III

Community Development Department, Planning Division

214 S C Street | Oxnard, CA 93030

O: 805.385.7878

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We welcome you back to the Service Center!

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----- Forwarded message -----

From: **Chaparro, Rose** <rose.chaparro@oxnard.org>

Date: Tue, Mar 22, 2022 at 7:24 PM

Subject: Fwd: Project 34? Let's use that name too.

To: Lai, Dee <dee.lai@oxnard.org>

Hi Dee,
FYI

Rose Chaparro, City Clerk
City of Oxnard

300 West [Third Street](#)

Oxnard, CA 93030

Main Line: (805) 385-7803

rose.chaparro@oxnard.org



----- Forwarded message -----

From: **Irene** <ireneraus@hotmail.com>

Date: Sat, Mar 19, 2022 at 1:17 PM

Subject: Re: Project 34? Let's use that name too.

To: jonathan.ullman@sierraclub.org <jonathan.ullman@sierraclub.org>, lucia@causenow.org <lucia@causenow.org>, elisabeth lamar <elisabethlamar@hotmail.com>, James Hines <jhcasitas@gmail.com>

Cc: Larry Godwin <godwinc@earthlink.net>, Maricela Morales <maricela@causenow.org>, cityclerk@oxnard.org <cityclerk@oxnard.org>

Jonathan Ullman, Sierra Club, et al

EPA info:

<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0901242#Status>

What Is the Current Site Status?

"Cleanup of contaminated soils, sediments, and groundwater is likely to be needed at the smelter property, the waste management area, the Nature Conservancy property, and city-owned property. 145

As part of its evaluation of cleanup options at the site, EPA is evaluating the cost and feasibility of leaving the wastes in place (“capping”); transporting the wastes to a licensed offsite disposal facility; and “beneficially” using the wastes as a partial substitute for Portland cement in ready-mix concrete. EPA is also working with neighboring landowners to develop cleanup plans for contaminated soils and sediments in less contaminated parts of the site.

Research into the potential for beneficial use of the waste began in 2010. The next phase of specialized testing to evaluate the cost and feasibility of beneficially using the waste as a partial substitute for Portland cement in ready-mix concrete began in early 2018 and will continue into mid 2019. The testing includes the preparing concrete test cylinders made in part with Halaco waste. Materials, leaching and performance testing will be conducted to evaluate whether it would be safe to use concrete made with Halaco waste.

EPA expects to release a cleanup proposal for contaminated soils and sediments in late 2022 or early 2023.”

Therefore: This above is good news, considering the Ormond property has been listed on the Super Fund Site List for decades, finally the “**EPA expects to release a cleanup proposal ...**” This is more reason **to save the “Vacant Lot”** to lend access to the EPA cleanup processes. Should the EPA find the “Vacant Lot” inundated with cars, what message does this give the EPA? Oxnard, the “Vacant Lot” is listed by CA.Gov Ormond Beach Restoration, “Ormond Beach is considered by wetland experts to be the most important wetland restoration opportunity in southern California.” Save our Environment for the Generations!

Irene Rauschenberger
Sent from Windows Mail

From: jonathan.ullman@sierraclub.org
Sent: Friday, March 18, 2022 4:12 PM
To: lucia@causenow.org, [elisabeth lamar](#), Irene

Phillips 66: gasoline's specific gravity, car speed, and road name a test.

Mission 66. National Park visitor improvements to be completed by 1966

Airport 75. Airport 2's cool name

UB 40: UK Unemployment Form 40

Project 34: Acres of disturbed wetlands to be restored and re-connected to the adjacent Ormond Beach coastal wetlands project.

Guest column: Setting the record straight about Port of Hueneme project

by Kristin Decas

Your Turn, VCStar., March 5, 2022

You may have heard about a proposed Port of Hueneme project for a temporary 34-acre parking area in Oxnard. Some of the narratives being circulated about this project are incorrect and our community deserves to have the facts.

Trade through the Port of Hueneme is responsible for 4% of Ventura County's Gross Domestic Product (GDP) and provides employment for 6% of Ventura County's workforce with over 20,000 jobs. The Port considers projects like Project 34 to help foster economic opportunity for our community, always with an environmental ethic and commitment to our community and neighbors.

This project, consistent with the governor's mandate requiring all new passenger vehicle sales to be zero-emission by 2035, is also integral in supporting solutions to a global supply chain crisis. If approved, the project would decrease the number of diesel car carriers moving from the Port through our neighborhoods. Instead, new clean cars, including electric cars, would be driven directly to the site with no trucking, thereby₄₆

reducing diesel emissions.

The proposed project is for a temporary vehicle storage lot strategically located along the Port's designated primary corridor from the Port to the [101 — Hueneme Road](#) on privately owned land that is zoned appropriately as light industrial. The storage lot proposal is for three years with a two-year option; for a maximum of five years.

No state or local law required an Environmental Impact Report (EIR); however, as a true environmental steward, the Port supported moving forward with this longer and expensive process so that an independent third-party expert could analyze in full detail all of the project's impacts and to allow for more input.

Facts about Project 34:

The Project does not involve diesel trucking. It will not increase diesel trucking, in fact, diesel trucks will not be allowed on the project site.

The 34-acre temporary project is not connected in any way to a larger Port development project.

The Project does not involve any increases in ships entering or exiting the Port, nor increased railroad activity.

Seven out of 10 residents polled in local neighborhoods trust the Port to do the right thing environmentally.

Coastal access will not be blocked by the project. There is currently no public access through the site, nor has there been for decades.

The project will not affect Ormond Beach restoration efforts and will not cause runoff or any impact to threatened species like snowy plovers.

This temporary parking site will operate for a maximum of five years.

Sensitive plants, habitats and wetlands are not on this site.

The project includes native species landscaping and removes noxious weeds from the site that would beautify the area.

The city of Oxnard extended the comment period to accommodate extra public review and input and the Port fully supported the extension.

The project creates 30 new jobs.

Our Partner Glovis, the company slated to use this temporary site, is a proven global leader in clean energy. Glovis ranks as one of the world's top five electric vehicle manufacturers (Hyundai and Kia brands), and deployed the only commercially available, zero-emission big rig trucks in the world, here in California.

The Port website provides a well-researched fact sheet about the proposed project, and we encourage you to visit www.portofhueneme.

We provide videos in English, Spanish and Mixteco.

The Port of Hueneme is a catalyst, not only for the deployment of more clean energy infrastructure and equipment, but a catalyst for empowering the local community. We greatly appreciate your interest and support.

Kristin Decas

Kristin Decas is the Port of Hueneme's CEO and Port Director.



March 21, 2022

VIA ELECTRONIC MAIL

Jay Dobrowalski,
Senior Planner
City of Oxnard Planning Division
214 South C Street Oxnard, CA 93030
Email: Jay.Dobrowalski@oxnard.org

Re: Port of Hueneme- Vehicle Storage Site Environmental Impact Report Comment Period

Dear Mr. Dobrowalski:

Our organizations, along with Wishtoyo Chumash Foundation, submitted comments on the Draft Environmental Impact Report ("DEIR") regarding the proposed Port of Hueneme Temporary Vehicle Storage Site project ("Project"). We write to renew our request for a public hearing to facilitate public participation and transparency concerning the Project. Despite significant public interest, the City failed to provide a public hearing ahead of the close of the comment period for the DEIR, which deprived the public of an opportunity to provide input ahead of the close of the comment period.

We recently became aware of a community workshop being planned concerning the Project. We understand that the Community Workshop will include a presentation by the Oxnard Harbor Department ("OHD") but is not intended to be part of the EIR process for the Project. This will be the first opportunity since the Draft EIR was circulated, that many impacted residents will hear directly from OHD staff and learn additional details regarding the Project. While this informational session is certainly appreciated, it is unclear what the workshop's primary purpose is given that no decision will be made, it is not specifically tied to the Project's EIR and the workshop is not before the Planning Commission.

Given the tremendous interest that this project has garnered (with over 200 comments received according to a recent guest column in Ventura County Star), we are requesting that the City schedule a special meeting of the Planning Commission to hear from stakeholders and members of the public well before it decides on approval of the Project. We ask that the hearing be set at least **30 days after** the City makes its responses to comments on DEIR available, with an opportunity for written comments on those responses to be submitted up to the date of the scheduled hearing. This hearing should occur at least 30 days before the Planning Commission

takes a vote on the Project. This will ensure that the Planning Commission has an opportunity to hear from interested parties prior to voting on the EIR. Allowing such a public process would be in the spirit of Oxnard's stated commitments to good government and a fair and transparent public process.

Please respond to this letter to let us know when the City anticipates making responses to prior comments available and whether it will set a special hearing at the Planning Commission to consider comments on the Project at least 30 days after the responses to DEIR comments are made available and at least 30 days before a Commission vote.

Thank you for considering this request.

Sincerely,

Lucia Marquez
Lucas Zucker
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Council (NRDC)

Fwd: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 9:09 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **'Loan Ado' via Planning** <planning@oxnard.org>

Date: Thu, Aug 4, 2022 at 8:23 PM

Subject: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

To: <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to share my concern for the health of Oxnard residents and the environment in the South Oxnard Community. The trucks, ships, and countless other diesel-powered vehicles that operate to move the Port of Hueneme's goods through South Oxnard cause the community to face constant exposure to diesel exhaust, which is the number one air contaminant that leads to cancer.

South Oxnard already has some of the highest levels of pollution from the neighboring paper mill, industrial agriculture fields, water treatment facilities, Superfund site, and gas-fired power plant, which impacts the families of this majority low-income community. The Port of Hueneme's plan to expand to a 34-acre storage site on Hueneme Road would bring more heavy duty diesel trucks into South Oxnard, near schools, community parks, homes, and health care centers, forcing thousands of young children, families and patients who are most sensitive to air pollution to live and breathe in a diesel death zone.

The Port of Hueneme has much larger plans to expand their operations into South Oxnard with a permanent 250-acre "logistical park" which will consist of massive parking structures, warehouses, and truck parking, yet the city failed to examine the health effects related to that project in the environmental impact report. We need our local decision-makers to stand up for the health and safety of South Oxnard residents and stop the 34-acre expansion project. We cannot let South Oxnard become a diesel death zone!.

Sincerely,
[your name]

Sent from my iPhone

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development



Fwd: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 10:18 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **Rosa Calleros** <rosacalleros689@gmail.com>

Date: Fri, Aug 5, 2022 at 5:54 PM

Subject: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

To: <planning@oxnard.org>

Estimados Comisionados de Planificación de Oxnard,

Le escribo para compartir mi preocupación por la salud de los residentes de Oxnard y el medio ambiente en la comunidad del Sur de Oxnard. Los camiones, barcos y varios otros vehículos que funcionan con diésel que transportan las mercancías del Puerto de Hueneme a través del Sur de Oxnard hacen que la comunidad se enfrente a una exposición constante a los gases de escape del diésel, que es el principal contaminante del aire que provoca cáncer.

El Sur de Oxnard tiene algunos de los niveles más altos de contaminación debido a la fábrica de papel, los campos de agricultura industrial, las instalaciones de tratamiento de agua, el sitio Superfund y la planta de energía operada por gas, y esto es lo que ha estado afectando a las familias de esta comunidad que mayormente son de bajos ingresos. El plan de el Puerto de Hueneme es expandirse a un sitio de almacenamiento de 34 acres en Hueneme Road que traería más camiones de diesel al Sur de Oxnard, cerca de escuelas, parques comunitarios, hogares y centros de atención médicos, poniendo a miles de niños pequeños, familias y pacientes que son los más sensibles a la contaminación del aire expuestos a vivir y respirar en una zona de muerte debido al uso de diesel.

El Puerto de Hueneme tiene planes mucho más grandes para expandir sus operaciones en el Sur de Oxnard con un "parque logístico" de 250 acres que sería permanente y consistirá de estructuras de estacionamiento, almacenes y estacionamientos de camiones industriales, pero la ciudad ha fallado en examinar los efectos en la salud relacionados con este proyecto en el informe de impacto ambiental. Necesitamos que nuestros políticos alcen la voz y defiendan la salud y la seguridad de los residentes del Sur de Oxnard y detengan el proyecto de expansión. ¡No podemos permitir que el Sur de Oxnard se convierta en una zona de muerte de diesel!

Sinceramente,
Rosa H. Calleros

Sent from my iPhone

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development



Fwd: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 10:18 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **Yesenia Guzman** <yessie1290@gmail.com>

Date: Fri, Aug 5, 2022 at 6:52 PM

Subject: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

To: <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to share my concern for the health of Oxnard residents and the environment in the South Oxnard Community. The trucks, ships, and countless other diesel-powered vehicles that operate to move the Port of Hueneme's goods through South Oxnard cause the community to face constant exposure to diesel exhaust, which is the number one air contaminant that leads to cancer.

South Oxnard already has some of the highest levels of pollution from the neighboring paper mill, industrial agriculture fields, water treatment plant, Superfund site, and gas-fired power plant, which impacts the families of this majority low-income community. The Port of Hueneme's plan to expand their vehicle storage with a 34-acre storage site on Hueneme Road would bring more heavy duty diesel trucks into South Oxnard, near schools, community parks, homes, and health care centers, forcing thousands of young children, families and patients who are most sensitive to air pollution to live and breathe in a diesel death zone.

The Port of Hueneme has much larger plans to expand their operations in South Oxnard with a permanent 250-acre "logistical park" which will consist of massive parking structures, warehouses, and truck parking, yet the city failed to examine the health effects related to this project in the Environmental Impact Report. We need our local decision-makers to stand up for the health and safety of South Oxnard residents and stop the 34-acre expansion project. We cannot let South Oxnard become a diesel death zone!

Sincerely,

Yesenia Guzman

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development

Fwd: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 10:19 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **Daniel Torres** <dannycx47@gmail.com>

Date: Fri, Aug 5, 2022 at 9:37 PM

Subject: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

To: <planning@oxnard.org>

Estimados Comisionados de Planificación de Oxnard,

Le escribo para compartir mi preocupación por la salud de los residentes de Oxnard y el medio ambiente en la comunidad del Sur de Oxnard. Los camiones, barcos y varios otros vehículos que funcionan con diésel que transportan las mercancías del Puerto de Hueneme a través del Sur de Oxnard hacen que la comunidad se enfrente a una exposición constante a los gases de escape del diésel, que es el principal contaminante del aire que provoca cáncer.

El Sur de Oxnard tiene algunos de los niveles más altos de contaminación debido a la fábrica de papel, los campos de agricultura industrial, las instalaciones de tratamiento de agua, el sitio Superfund y la planta de energía operada por gas, y esto es lo que ha estado afectando a las familias de esta comunidad que mayormente son de bajos ingresos. El plan de el Puerto de Hueneme es expandirse a un sitio de almacenamiento de 34 acres en Hueneme Road que traería más camiones de diesel al Sur de Oxnard, cerca de escuelas, parques comunitarios, hogares y centros de atención médicos, poniendo a miles de niños pequeños, familias y pacientes que son los más sensibles a la contaminación del aire expuestos a vivir y respirar en una zona de muerte debido al uso de diesel.

El Puerto de Hueneme tiene planes mucho más grandes para expandir sus operaciones en el Sur de Oxnard con un "parque logístico" de 250 acres que sería permanente y consistirá de estructuras de estacionamiento, almacenes y estacionamientos de camiones industriales, pero la ciudad ha fallado en examinar los efectos en la salud relacionados con este proyecto en el informe de impacto ambiental. Necesitamos que nuestros políticos alcen la voz y defiendan la salud y la seguridad de los residentes del Sur de Oxnard y detengan el proyecto de expansión. ¡No podemos permitir que el Sur de Oxnard se convierta en una zona de muerte de diesel!

Sinceramente,
[Su nombre]

Sent from my iPhone

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development



Fwd: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 10:19 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **Elizabet Arellano** <eliarellano1973@gmail.com>

Date: Fri, Aug 5, 2022 at 7:20 PM

Subject: [Ask Planning Action] Comentario público: detener la expansión del puerto de 34 acres

To: <planning@oxnard.org>

Estimados Comisionados de Planificación de Oxnard,

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Sinceramente,

[Su nombre]

Enviado desde mi iPhone

--

Salvador Mancha

Department Administration Technician

Community Development Department

214 S C Street | Oxnard, CA 93030

805-385-7884

www.oxnard.org/development

Fwd: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

Mancha, Salvador <sal.mancha@oxnard.org>

Mon, Aug 8, 2022 at 10:21 AM

To: Joe Pearson II <joe.pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

----- Forwarded message -----

From: **'Loan Ado' via Planning** <planning@oxnard.org>

Date: Sat, Aug 6, 2022 at 1:29 PM

Subject: [Ask Planning Action] Public Comment: Stop the 34-Acre Port Expansion

To: <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to share my concern for the health of Oxnard residents and the environment in the South Oxnard Community. The trucks, ships, and countless other diesel-powered vehicles that operate to move the Port of Hueneme's goods through South Oxnard cause the community to face constant exposure to diesel exhaust, which is the number one air contaminant that leads to cancer.

South Oxnard already has some of the highest levels of pollution from the neighboring paper mill, industrial agriculture fields, water treatment facilities, Superfund site, and gas-fired power plant, which impacts the families of this majority low-income community. The Port of Hueneme's plan to expand to a 34-acre storage site on Hueneme Road would bring more heavy duty diesel trucks into South Oxnard, near schools, community parks, homes, and health care centers, forcing thousands of young children, families and patients who are most sensitive to air pollution to live and breathe in a diesel death zone.

The Port of Hueneme has much larger plans to expand their operations into South Oxnard with a permanent 250-acre "logistical park" which will consist of massive parking structures, warehouses, and truck parking, yet the city failed to examine the health effects related to that project in the environmental impact report. We need our local decision-makers to stand up for the health and safety of South Oxnard residents and stop the 34-acre expansion project. We cannot let South Oxnard become a diesel death zone!.

Sincerely,
[your name]

Sent from my iPhone

--

Salvador Mancha

Department Administration Technician
Community Development Department
214 S C Street | Oxnard, CA 93030
805-385-7884
www.oxnard.org/development



Attachment:

G. Draft Planning Commission Resolution Certifying

Environmental Impact Report No. 22-01

RESOLUTION NO. 2022 - XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OXNARD CERTIFYING ENVIRONMENTAL IMPACT REPORT NO. 22-01 (SCH #2020069039) AND APPROVING THE FINDINGS OF FACT AND THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE PORT OF HUENEME - TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christening Birdsey (the "Applicant" and/or "Permittee") submitted a request to approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located at the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the "Project"); and

WHEREAS, a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) was issued on June 25, 2020, soliciting public input regarding a DEIR for the Project; and

WHEREAS, the public comment period on the NOP ran for thirty (30) days commencing on June 25, 2020 and ending on July 24, 2020; and

WHEREAS, a DEIR reflecting input received in response to the NOP was prepared and released for public and agency review on December 16, 2021; and

WHEREAS, the public comment period on the DEIR ran for sixty-one (61) days commencing on December 16, 2021 and ending on February 14, 2022; and

WHEREAS, after the close of the comment period on the DEIR, the DEIR was modified as set forth in the response to comment document and Chapter 1.1 of the FEIR, Summary Of Changes To The DEIR and Appendices; and

WHEREAS, in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City has prepared Final EIR No. 22-01 containing all comments received on the DEIR, written responses to all substantive comments, and necessary changes to the text of the DEIR; and

WHEREAS, Final EIR No. 22-01 was mailed to commenting agencies, organizations and individuals and made available for public review on or before October 11, 2022.

WHEREAS, the Planning Commission of the City of Oxnard has thoroughly considered Final Environmental Impact Report No. 22-01 (State Clearinghouse No. 2020069039) (the “EIR”) for the Port of Hueneme - Temporary Outdoor Vehicle Storage Project, which has been prepared in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the Final EIR; and

WHEREAS, the comments of the Commissioners, agencies, interested groups, and members of the public have received adequate responses.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF OXNARD:

SECTION 1. Based on the entire record before the Planning Commission and all written and oral evidence presented, including the Planning Commission Staff Report and all attachments thereto, the Planning Commission:

1. Certifies that Final Environmental Impact Report No. 22-01 is adequate and was completed in compliance with CEQA and the State CEQA Guidelines and reflects the City of Oxnard’s independent judgment and analysis.
2. That the Planning Commission has been presented with all of the information described in the Recitals and Final EIR 22-01 and has considered this information prior to adopting this Resolution.
3. Approves the Findings of Fact in satisfaction of State CEQA Guidelines Section 15091, which are attached hereto as Exhibit A and incorporated herein by reference
4. Approves the Mitigation Monitoring and Reporting Program contained in the Final EIR in satisfaction of State CEQA Guidelines Section 15091(d), which is attached hereto as Exhibit B and incorporated herein by reference.

SECTION 2. The Planning Commission, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. The decision of the Planning Commission shall be final unless an appeal of the action is filed in accordance with the provisions of Section 16-545 of the Oxnard City Code.

SECTION 4. The Secretary shall certify the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED by the Planning Commission of the City of Oxnard on this 20th day of October 2022.

Daniel Chavez, Jr., Chair

I hereby certify that the foregoing is a true copy of a Resolution adopted by the Planning Commission of the City of Oxnard at a meeting held on the 20th day of October 2022, and carried by the following vote:

AYES: Commissioner(s):

NOES: Commissioner(s):

ABSENT: Commissioner(s):

ABSTAIN: Commissioner(s):

RECUSED: Commissioner(s):

Joe Pearson II, Secretary

Exhibit 1: Findings of Fact

Exhibit 2: Mitigation Monitoring and Reporting Program

FINDINGS OF FACT

PORT OF HUENEME – TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT ENVIRONMENTAL IMPACT REPORT

SCH No. 2020069039



CITY OF OXNARD
214 South C Street
Oxnard, California 93030

September 2022

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1.0 INTRODUCTION

These Findings of Fact (Findings) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (project) are made pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), specifically PRC Sections 21081, 21081.5, and 21081.6, and the CEQA Guidelines (14 CCR 15000 et seq.), specifically Sections 15091 and 15093. The Final Environmental Impact Report (EIR) examines the full range of potential effects of construction and operation of the project, identifies standard mitigation practices that could be employed to reduce, minimize, or avoid those potential effects, and evaluates alternatives to the project. The Final EIR is incorporated into these Findings by reference.

1.1 PURPOSE

PRC Section 21081, and CEQA Guidelines Section 15091 require that the lead agency, in this case the City of Oxnard (City), prepare written findings for identified significant effects, accompanied by a brief explanation of the rationale for each finding. Specifically, CEQA Guidelines Section 15091 states, in part, that:

- a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
 - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - 3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

In accordance with PRC Section 21081, and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the decision-making agency is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable.” In that case, the decision-making agency may prepare and adopt a Statement of Overriding Considerations, pursuant to the CEQA Guidelines. State CEQA Guidelines Section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. Implementation of the proposed project would not result in any impacts that are considered significant, adverse, or unavoidable. All environmental issues were determined to result in less than significant impacts or can be reduced to less-than-significant levels with the incorporation of mitigation measures. Thus, the City is not required to adopt a statement of overriding considerations.

Section 15093 of the CEQA Guidelines states the following:

- a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The Final EIR for the project identified potentially significant effects that could result from the project. The City finds that the inclusion of certain mitigation measures as part of the approval of the project would reduce these effects to less-than-significant levels.

The City also finds that the Mitigation Monitoring and Reporting Program for the project, which is incorporated by reference and made part of these Findings, meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the proposed project.

Pursuant to PRC Section 21082.1(c)(3), the City also finds that these Findings reflect the City’s independent judgment as the lead agency for the project.

1.1.1 Custodian and Location of Records

The documents and other materials that constitute the Record of Proceedings for the City’s actions related to the project are located at the City of Oxnard, 214 South C Street, Oxnard, California 93030. The City is the custodian of the Record of Proceedings for the proposed project.

1.2 PROJECT DESCRIPTION

The project would include the construction and operation of a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. The facility would include the following:

- Vehicle parking area with gravel base
- Temporary guard house
- Portable restroom
- Perimeter site lighting

- Security fencing (6-feet-high)
- Landscaping
- Site drainage
- Associated infrastructure improvements (e.g., curb cuts, apron)

The temporary outdoor vehicle storage facility includes approximately 27.5 acres to accommodate parking for up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre.

Various permits, approvals, and actions by the City of Oxnard and various public agencies may be required to execute and implement the proposed project. The permits from the lead agency that are necessary include:

- City of Oxnard approval of Special Use Permit
- City of Oxnard issuance of Grading Permit
- City of Oxnard issuance of Building and Safety Permits
- City of Oxnard Fire Department approval of proposed site improvement
- City of Oxnard – water, sewer, and storm drain connection permits

1.2.1 Project Objectives

The Applicant has identified the following objectives for the project.

1. Facilitate commercial success for Port clients to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future.
2. Reduce and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations. The consolidation of vehicle storage closer to the Port would enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement.
3. Provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

1.2.2 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The project would require consideration of the following discretionary actions by the City:

- Certification of the Final EIR and adoption of a Mitigation Monitoring and Reporting Program
- Approval of the Special Use Permit

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2.0 CEQA FINDINGS OF INDEPENDENT JUDGEMENT

2.1 INDEPENDENT REVIEW AND ANALYSIS

Under CEQA, the lead agency must (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the EIR or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (PRC Section 21082.1[c]).

These Findings reflects the City’s independent judgment. The City has exercised independent judgment in accordance with CEQA Section 21082.1(c)(3) in retaining its own environmental consultant in the preparation of the EIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Having received, reviewed, and considered the information in the EIR, as well as any and all other information in the record, the City hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

2.2 SUMMARY OF IMPACTS

The EIR identified a number of direct and indirect potentially significant environmental effects (or “impacts”) resulting from the project. These potentially significant effects can be reduced to a less than significant level through the adoption of feasible mitigation measures.

As identified in Chapters 4, 5, 6, and 7 of the EIR, significant environmental impacts would not occur with regard to the following issues: agriculture and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, parks and recreation, wildfire and fire protection, schools, water, wastewater, and solid waste. Additionally, significant environmental impacts would not occur with regard to the following issues: biological resources (federally protected wetlands, wildlife movement, consistency with an adopted habitat conservation plan; and cumulative impacts to biological resources); cultural resources (historical resources; paleontological resources; and cumulative impacts to cultural resources); geology and soils (rupture of an earthquake fault; unstable soils–landslides; expansive soil; seiches and tsunamis; dredging and other maintenance activities); noise (exceedance of established or applicable standards in the local general plan or noise ordinance or other agencies resulting in a temporary, periodic, or permanent increase in ambient noise levels; groundborne vibration or noise; excessive noise levels within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu; or cumulative noise impacts); police protection (impacts during operations); or transportation (within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu to excessive noise levels; Level of Service standards; change in air traffic patterns; hazards due to a design feature or incompatible uses; emergency access during operations; conflict with adopted policies, plans, or programs supporting alternative transportation; CEQA Guidelines Section 15064.3 Subdivision (B); and cumulative traffic impacts). State CEQA Guidelines section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. As such, these issue areas are not discussed further within this document.

As identified in Chapters 4, 5, 6, and 7 of the EIR, the project would mitigate, avoid, or substantially lessen to below a level of significance direct, indirect, and/or cumulative potentially significant environmental effects with regard to the following issues: aesthetics (visual character/quality), biological resources (nesting birds), cultural resources (archaeological resources; human remains; tribal cultural resources), geology and soils, noise (non-human species), police protection during construction, and transportation (emergency access).

2.3 IMPACTS DETERMINED TO BE LESS THAN SIGNIFICANT WITH MITIGATION

The following summarizes the potentially significant impacts of the proposed project identified in the Final EIR that would be less than significant with implementation of mitigation measures.

2.3.1 Aesthetics

2.3.1.1 AESTHETIC IMPACT TO VISUAL CHARACTER/QUALITY OF THE SITE AND ITS SURROUNDINGS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to the visual character/quality of the site and its surroundings.

MITIGATION MEASURE(S) AND STANDARD CONDITION(S)

Standard Conditions

- | | |
|----------|--|
| SC AES-1 | Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. |
| SC AES-2 | Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. |
| SC AES-3 | Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. |
| SC AES-4 | The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. |
| SC AES-5 | All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. |
| SC AES-6 | The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. |

- SC AES-7 The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.

Mitigation Measures

- MM AES-1 The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.
- MM AES-2 In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.
- MM AES-3 Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.
- MM AES-4 The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.

Findings

As discussed in Section 5.1, Aesthetics, of the EIR, the proposed project would be compatible with surrounding development, including the Hueneme Industrial Park, shopping center, and the City of Oxnard Advanced Water Purification Facility, and the proposed use is allowed in the M-1-PD (Light Manufacturing Zone with Planned Development Additive Zone) zone. While the proposed project incorporates screening and landscape measures, it is important that the proposed measures are properly installed and maintained. Thus, visual character/quality impacts are considered potentially significant. The proposed project would be subject to Standard Conditions SC AES-1 through SC AES-7 that require landscape and irrigation plans, and the proper installation and maintenance of site landscaping and irrigation systems in compliance with City Code Section 16-165, and Mitigation Measures MM AES-1 through MM AES-4, that ensure the site landscaping and the fencing provide adequate screening. Thus, implementation of Standard Conditions SC AES-1 through SC AES-7 and Mitigation Measures MM AES-1 through MM AES-4 would result in less than significant visual character/quality impacts associated with the project.

2.3.2 Biological Resources

2.3.2.1 BIOLOGICAL RESOURCES IMPACT TO NESTING BIRDS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to suitable habitat for the burrowing owl (*Athene cunicularia*) and the California horned lark (*Eremophila alpestris actia*) and to ground-nesting bird species, including the western meadow lark (*Sturnella neglecta*), burrowing owl, and the California horned lark.

Mitigation Measure(s)

- MM BIO-1 To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code

(CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.

Findings

As discussed in Section 5.4, Biological Resources, of the EIR, potential ground nesting species, such as the western meadow lark, identified on-site during the field reconnaissance survey, could nest on-site. Additionally, there is the potential for the burrowing owl, known to winter in the Oxnard Plain, and California horned lark to occur on site. Construction activities associated with the proposed project could adversely affect nesting birds if they are present on or adjacent to the site, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and California Fish and Game Code Section 3503. Thus, implementation of the proposed project would result in potentially significant impacts to the following ground-nesting bird species: western meadow lark, burrowing owl, and California horned lark. Mitigation Measure MM BIO-1 would reduce project-related impacts to less than significant by encouraging site disturbance and construction activities outside of the bird breeding season or a pre-construction nesting bird survey and application of the biologist's recommendations during the site disturbance and construction activities. Implementation of MM BIO-1 would reduce impacts to suitable habitat for the burrowing owl and the California horned lark, and impacts to ground-nesting bird species, including the western meadow lark, burrowing owl, and the California horned lark to less than significant.

2.3.3 Cultural and Tribal Cultural Resources

2.3.3.1 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO ARCHEOLOGICAL RESOURCES

DESCRIPTION OF POTENTIAL IMPACT

The project could result in impacts to potentially undiscovered archaeological resources.

Mitigation Measure(s)

MM CUL-1 Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the project. Existence and importance of adherence to this Plan shall be stated on all project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.

MM CUL-2 Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of

one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, archival research indicated that there is one known archaeological site within a 0.25-mile radius of the project site boundaries. A foot reconnaissance of the project site in 2020 indicated two clusters (Locus¹ 1 and 2) of low density weathered marine shell, one chert biface fragment, and one weathered elasmobranch fish vertebra. Subsurface testing of the areas identified as Locus 1 and Locus 2 was performed and found that no known cultural resources exist within the proposed project site and based on the presence of disturbed and/or fill soils to depths below proposed depths of disturbance for the project, no impacts to known or unknown cultural resources are expected. Nonetheless, the proposed project involves minimal on-site ground-disturbing activities (approximately 1/10th inch to 1.95 feet)² for grubbing, grading, or other activities. In addition, the installation of site drainage infrastructure could require grading of small areas to a depth of 24 inches (2 feet). On-site areas that would not be disturbed include the site's periphery that has been previously disturbed by pipelines, roads, and the Ventura County Rail Road right-of-way. These activities could result in impacts to undiscovered archaeological resources. Mitigation Measures MM CUL-1 and MM CUL-2 require archaeological and Native American monitoring during ground disturbing activities to avoid or document any artifacts or archaeological features that may be encountered. Implementation of Mitigation Measures MM CUL-1 and MM CUL-2 reduce potentially significant impacts to less than significant.

2.3.3.2 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO HUMAN REMAINS

DESCRIPTION OF POTENTIAL IMPACT

The project could disturb human remains, including those interred outside of dedicated cemeteries.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

¹ "Locus" is defined as the place where something is situated or occurs: site, location a center of activity, attention, or concentration. Source: Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/locus>, accessed March 1, 2021.

² Source: Jensen Design & Survey, Inc., Cut & Fill Depths Analysis | Grading Plan, August 2019.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no human remains or cemeteries are known to exist in or near the project site. However, there is always the possibility that subsurface construction activities associated with the proposed project improvements, such as trenching and grading, would potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; *Health and Safety Code* Section 7050.5; *Public Resources Code* Section 5097.94 and Section 5097.98 must be followed. Implementation of Mitigation Measure MM CUL-2 would reduce potentially significant impacts associated with the discovery of human remains to less than significant.

2.3.3.3 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN THE LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K)

DESCRIPTION OF POTENTIAL IMPACT

The project would cause a substantial adverse change in the significance of previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no Native American Tribes have requested formal notification from the City pursuant to AB 52. The City also reviewed the results of the archaeological study that included a records search, archival and background research as well as a pedestrian survey and subsurface testing of the project site to further inform and consider the potential of tribal cultural resources to exist within the project site. All efforts to determine whether tribal cultural resources originating from the project site exist and may be impacted by proposed project implementation returned negative. Given the presence of the Ventureño Chumash in and around the City of Oxnard over millennia, and the proximity of a known site within 0.25 miles of the project site, there is the potential for construction of the project to impact unidentified tribal cultural resources. Thus, ground-disturbing activities, such as grading or excavation, could disturb previously unidentified subsurface resources. Implementation of Mitigation Measure MM CUL-2 would reduce any potentially significant impacts to previously undiscovered tribal cultural resources to less than significant.

2.3.3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO

THE CRITERIA SET FORTH IN SUBDIVISION (C) OF PUBLIC RESOURCES CODE SECTION 5024.1

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potentially significant impacts to previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

Refer to Section 2.3.3.4, above.

2.3.4 Geology and Soils

2.3.4.1 GEOLOGICAL IMPACT TO SEISMIC GROUND SHAKING

DESCRIPTION OF POTENTIAL IMPACT

The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Mitigation Measure(s)

MM GEO-1 Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, there are a number of potentially active/active faults in the region including the Oak Ridge, Pitas Point-Ventura, Anacapa, and Malibu Coast faults; however, these faults are located approximately 1.5 miles to 10 miles from the City. Although some structural damage is typically not avoidable during a large earthquake, the proposed project would be constructed to meet existing construction ordinances and the California Building Code in order to protect against building collapse and major injury during a seismic event. The California Building Code includes specific design measures, which are based on the determination of Site Classification and Seismic Design Categories specific to the project site. These design measures are intended to maximize structural stability in the event of an earthquake. Thus, adherence to the California Building Code requirements, as well as Mitigation Measure MM GEO-1 would reduce impacts related to strong seismic shaking to less than significant.

2.3.4.2 GEOLOGICAL IMPACT RESULTING FROM UNSTABLE SOILS AND LIQUEFACTION

DESCRIPTION OF POTENTIAL IMPACT

The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and result in unstable soils and on- or off-site liquefaction.

Mitigation Measure(s)

MM GEO-1 (see Section 2.3.4.1, above)

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, a majority of the City of Oxnard is susceptible to liquefaction as a result of underlying thick alluvial deposits and high groundwater levels. In addition, the City of Oxnard is located in a Seismic Hazard Area for liquefaction according to seismic hazard mapping conducted by the California Geological Survey. To ensure that the temporary on-site structures do not experience structural damage due to liquefaction, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

In addition, the on-site soils are characterized as unstable soils. To ensure that the temporary on-site structures do not experience structural damage due to unstable soils, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure MM GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

2.3.5 Noise

2.3.5.1 NOISE IMPACT TO NON-HUMAN SPECIES

DESCRIPTION OF POTENTIAL IMPACT

The project would result in noise impacts to special-status species, including the western meadow lark, burrowing owl, and the California horned lark, as well as suitable habitat for the burrowing owl and the California horned lark.

Mitigation Measure(s)

MM BIO-1 (see Section 2.3.2.1, above)

Findings

The proposed project would result in a potentially significant impact to suitable habitat for the burrowing owl and the California horned lark, as well as a potentially significant impact to ground-nesting bird species: western meadow lark, burrowing owl, and the California horned lark. With the implementation of Mitigation Measure MM BIO-1, project-related impacts to these special-status species or habitat are reduced to less than significant.

2.3.6 Police Protection

2.3.6.1 POLICE PROTECTION IMPACTS DURING CONSTRUCTION

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts on the California Highway Patrol, which regulates traffic in the City.

Mitigation Measure(s)

MM PP-1 Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:

- At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
- At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
- If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.

Findings

Construction-related traffic on the project site also is not expected to result in impacts on the California Highway Patrol, which regulates traffic in the City. Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. However, this would not result in a significant impact on traffic flows because construction-related traffic would only occur during short periods of time during the day and would cease upon completion. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and would reduce potentially significant impacts to less than significant.

2.3.7 Transportation

2.3.7.1 TRANSPORTATION IMPACTS ASSOCIATED WITH INADEQUATE EMERGENCY ACCESS

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts.

Mitigation Measure(s)

MM PP-1 (see Section 2.3.6.1, above)

Findings

Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and reduce potentially significant impacts to less than significant.

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3.0 FINDINGS ON PROJECT ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of the project, that could feasibly attain the basic objectives of that project, and to evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by “a rule of reason” (14 CCR 15126.6[a], [f]). CEQA directs that the scope of alternatives considered shall be limited to ones that would avoid or substantially lessen the significant effects of the project (14 CCR 15126.6[f]). Notably, this project does not result in any significant and unavoidable impacts.

3.1 ALTERNATIVES CONSIDERED AND ELIMINATED DURING THE SCOPING/ PROJECT PLANNING PROCESS

The CEQA Guidelines provide that an EIR should “identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency’s determination” (14 CCR 15126.6[c]). The following is a discussion of the project alternatives proposed during the scoping and planning process and the reasons they were not selected for detailed analysis in the EIR.

With respect to the feasibility of potential alternatives to the proposed project, CEQA Guidelines Section 15126.6(t)(l) states, “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.”

In determining an appropriate range of proposed project alternatives to be evaluated in the EIR, a number of possible alternatives were initially considered and then rejected. Proposed project alternatives were rejected because they could not accomplish the basic objectives of the proposed project, or they would not have resulted in a reduction of significant adverse environmental impacts.

REDUCED PROJECT ALTERNATIVE

The City considered a Reduced Project Alternative that would reduce the site acreage and would not utilize more than 50% of the approximately 34-acre site. The reduction in total acres would also reduce the acreage for temporary outdoor vehicle storage capacity from approximately 27.5 acres under the proposed project to approximately 14 acres. This would reduce the vehicle storage capacity from 4,944 to 2,472 vehicle spaces.

This Alternative does not fulfill a key project objective to reduce and consolidate Port vehicle customer reliance on Off-Port storage locations, nor would this Alternative eliminate the need for car carrier truck movement to distribute vehicles to those Off-Port storage locations.

In addition, fewer new jobs would be created under this Alternative, thus not fulfilling a second key project objective regarding employment in the region.

Finding

The City rejects the Reduced Project Alternative on the following grounds, which provides sufficient justification for rejection of this alternative: the Reduced Project Alternative fails to meet most of the project objectives. Thus, the Reduced Project Alternative was rejected from further consideration in the EIR.

ELECTRIC CAR CARRIER TRUCKS ALTERNATIVE

The City considered an alternative that assumes that electric car carrier trucks would be used by the Port Customer to transport vehicles to existing Off-Port storage locations.

An electric truck is an electric vehicle powered by batteries designed to deliver cargo. The recent development of lithium batteries has broadened the applicability of electric trucks due to the increased range of several hundred miles. Battery powered electric vehicles have no exhaust emissions, but emissions are created from the production and distribution of the energy used to charge them.

At this time, the Port Customer is not using electric car carrier trucks to transport vehicles to existing Off-Port storage locations, nor would car carrier trucks be used for the proposed project. While the use of electric trucks would reduce greenhouse gas emissions, the financial implications to the Port Customer to rent or purchase such equipment is unknown at this time, and as such, this Alternative is infeasible. Additionally, to the knowledge of the Port Customer, there are no commercially available electric car carrier trucks. Therefore, it would not be financially possible for the Port or City to procure electric car carrier trucks for use in the proposed project, and electric car carrier trucks are not anticipated to be feasible for the Port or City to acquire during the five-year life of the proposed project. Therefore, under this alternative without the use of traditional car carrier trucks, vehicle transport would not be able to occur.

Because electric car carrier trucks are not a feasible option for vehicle transport at this time, this Alternative does not fulfill a key project objective to reduce and consolidate Port Customer reliance on Off-Port storage locations and thus, reduce the need for car carrier truck (diesel or electric) movement to distribute vehicles to those locations. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

Finding

The City rejects the Electric Car Carrier Trucks Alternative on the following grounds which provides sufficient justification for rejection of this alternative: this alternative is infeasible given that there are no commercially available electric car carrier trucks and no such trucks are likely to become available within the next 5 years. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

ALTERNATIVE LOCATIONS

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. The City is mostly developed, with the exception of some undeveloped land to the south of the project site, where the Ormond Lagoon and various undeveloped parcels are located. Therefore, there are very limited areas of approximately equivalent size to the project site that could be used for the project. In addition, the project applicant does not control another site within the City of comparable land area that is available for development of the proposed project. One of the factors for

feasibility of an alternative is “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.” Because the City is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development to the east, north, and west. As such, an alternative location was ultimately rejected from further analysis in the EIR.

Finding

The City rejects the Alternative Locations, on the following ground, which provides sufficient justification for rejection of this alternative: the alternative is infeasible given that the project applicant does not own or control any other property within the City that would be suitable for development of the proposed project. Therefore, this alternative is eliminated from further consideration.

3.2 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

This section discusses a reasonable range of alternatives to the proposed project, including a No Project Alternative, in compliance with CEQA Guidelines Section 15126.6(e). These alternatives are as follows:

- Alternative One: No Project Alternative
- Alternative Two: Two Existing Off-Port Vehicle Storage Locations
- Alternative Three: Existing Zoning

These alternatives are evaluated for their ability to avoid or substantially lessen the impacts of the proposed project identified in the Final EIR, and in consideration of their ability to meet the basic objectives of the proposed project as described in the Final EIR.

3.2.1 Alternative One: No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of a No Project Alternative. The “purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project” (14 CCR 15126.6[e][1]). When defining the No Project Alternative, the analysis must be informed by “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (14 CCR 15126.6[e][2]).

Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the No Project Alternative, which reflects the “circumstances under which the project does not proceed.” Under the No Project Alternative, no development would occur on the project site. Accordingly, the site characteristics of this alternate would be equivalent to the existing conditions and would remain as vacant and undeveloped land.

Impacts

Under Alternative 1, the No Project/ No Build Alternative, all environmental impacts would be reduced further below the project’s less- than-significant impacts.

Finding

The City rejects the No Project Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the No Project Alternative fails to meet any of the project objectives; (2) the No Project Alternative does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.2 Alternative Two: Two Existing Off-Port Vehicle Storage Locations

Description

Alternative Two assumes the existing vehicle storage operations of GLOVIS (Customer) at the Port of Hueneme (Port) and Off-Port locations for vehicle storage within the local area, including within Oxnard, Ventura, Camarillo, and Ventura County would continue.

As such, imported vehicles would be transported by Customer car carrier trucks from the Port to two Off-Port storage locations:

1. Camarillo Airport (555 Airport Way, Camarillo)
2. Tuff Shed (3355 Ventura Road, Ventura)

The locations are approximately 10.6 miles and 9 miles, respectively, from the Port.

Impacts

Under Alternative Two, Two Existing Off-Port Vehicle Storage Locations, environmental impacts related to agriculture and forestry resources, hazards and hazardous materials, population and housing, parks and recreation, schools, and wastewater would be the same as compared to the project, or neither environmentally superior nor inferior to the project.

Alternative Two would result in reduced impacts to aesthetics, biological resources, cultural and tribal cultural resources, geology and soils, wildfire and fire protection, police protection, water, and solid waste, as Alternative Two would not result in development of an undeveloped site. Therefore, Alternative Two would be environmentally superior to the proposed project in regard to these environmental issue areas.

Alternative Two would result in increased impacts to air quality, energy, greenhouse gases, noise, and transportation due to the increased distances to the two locations (Camarillo Airport 10.6 miles, Tuff Shed 9 miles) from the Port. In addition, because the proposed project allows for the consolidation of multiple Off-Port storage locations to a single site within one jurisdiction in a zoning district that allows the proposed use, Alternative Two would result in increased impacts to land use. The Camarillo Airport site and proposed project site are located within MRZ-1, and thus does not contain mineral resources. However, the Tuff Shed site in Ventura is located within MRZ-2 zone, which does contain mineral resources of regional and statewide significance, resulting in an increased impacts to mineral resources under Alternative Two. Lastly, while hydrology and drainage impacts would remain less than significant under both Alternative Two and the proposed project, the proposed project provides more pervious

surface and infrastructure to improve hydrology and water quality impacts, both on-site and off-site. Therefore, Alternative Two is considered environmentally inferior to the proposed project in regard to these environmental issue areas.

Objectives

Alternative Two would partially meet Objective 1, as the project would facilitate commercial success for Port clients to ensure they keep their business in the region, and keep 167 local citizens employed. However, Alternative Two does not provide for new jobs. In addition, Alternative Two would not meet Objective 2, as Alternative Two would not reduce and consolidate Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations, to enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement. Lastly, the project would meet Objective 3, as it would provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative 2 on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative 2 would result in greater impacts to some environmental resource areas; and (2) Alternative 2 does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.3 Alternative Three: Existing Zoning

Description

Alternative Three, Existing Zoning, assumes the approximately 34-acre project site would be developed with a light manufacturing use consistent with the M-1-PD zone (Light Manufacturing Zone with Planned Development Additive) and in accordance with applicable use and development standards required per Oxnard City Code Chapter 16, Zoning.

The M-1-PD zone permits the following: maximum building height of 55 feet and a maximum floor area ratio of 70%. For this Alternative, the maximum development assumes a 40% floor area ratio and 587,189 square feet.

Impacts

Under Alternative Three, Existing Zoning, environmental impacts relative to agriculture and forestry resources, biological resources, cultural and tribal cultural resources, geology and soils, mineral resources, population and housing, and schools would be similar compared to the project.

Alternative Three would result in greater impacts relative to aesthetics, as the site would be developed with light manufacturing uses with buildings up to 55 feet in height, thus changing the visual character of the site. In addition, Alternative Three would result in greater impacts relative to air quality, energy, greenhouse gas emissions, and noise, as the duration of both construction and operations associated with Alternative Three would be increased compared to the project. Light manufacturing uses have the

potential to manufacture, transport, use, or dispose of hazardous materials and thus impacts to hazards and hazardous materials would be increased under Alternative Three. Alternative Three would result in less pervious area and more impervious area compared to the project. Thus, impacts to hydrology and water quality would be increased compared to the project. Although Alternative Three would be consistent with the City's Zoning Code and compatible with surrounding uses, similar to the proposed project, Alternative Three would be subject to the Ventura County Airport Comprehensive Land Use Plan (ACLUP) land use or compatibility guidelines, and Federal Aviation Regulations Part 77 height limitations and would be required to be consistent with the ACLUP and Federal Aviation Regulations Part 77. Therefore, Alternative Three would result in greater impacts to land use.

In addition, the number of employees associated with Alternative Three would increase, resulting in an increase in demand for parks and recreation, wildfire and fire protection, and police protection. Regarding transportation, the vehicle trips generated by a 587,189 square foot light manufacturing uses could result in significantly more peak daily, A.M. peak hour, and P.M. peak hour trips that affect a larger traffic impact area and would increase vehicle miles traveled. As Alternative Three would require water and wastewater infrastructure to be installed, impacts associated with water and wastewater would be increased compared to the project. Lastly, the quantity of solid waste generated is dependent upon the light manufacturing use but would be greater than the proposed project. Therefore, Alternative Three is considered environmentally inferior to the proposed project in regard to aesthetics, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, noise, parks and recreation, wildfire and fire protection, police protection, transportation, water, wastewater, and solid waste.

Objectives

Alternative Three would not meet any of the project objectives. Alternative Three would not facilitate commercial success for Port client to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future; reduce and consolidate, where feasible, Port vehicle customer reliance on Off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicle to those locations; or provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative Three on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Three fails to meet most of the project objectives; (2) Alternative Three would result in greater impacts to some environmental resource areas; and (3) Alternative Three does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.4 Environmentally Superior Alternative

Alternative One, the No Project Alternative, would result in the least environmental impacts and would be the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is Alternative Two, Two Existing Off-Port Vehicle Storage Locations.

Alternative Two would partially meet Objective 1, would not meet Objective 2, and would meet Objective 3. As set forth above, the City rejects Alternative Two on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Two would result in greater impacts to some environmental resource areas; and (2) Alternative Two does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

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4.0 GENERAL CEQA FINDINGS

Based on the foregoing Findings and the information contained in the administrative record, and as conditioned by the foregoing, the City has determined the following:

1. The plans for the proposed project have been prepared and analyzed so as to provide for public involvement in the planning and the CEQA processes.
2. To the degree that any impacts described in the Draft EIR are perceived to have a significant effect on the environment, or such impacts appear ambiguous as to their effect on the environment, any significant effect of such impacts has been substantially lessened or avoided by the mitigation measures set forth in the Draft and Final EIR.
3. Comments regarding the Draft EIR received during the public review period have been adequately addressed in the Final EIR. Any significant effects described in such comments were avoided or substantially lessened by the mitigation measures described in the Draft and Final EIR.

4.1 FINDINGS REGARDING RECIRCULATION

The City finds that the Draft EIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5). CEQA Guidelines Section 15088.5 requires recirculation of an EIR prior to certification of the Final EIR when “significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review.” As described in CEQA Guidelines Section 15088.5:

New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it;
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

In addition, CEQA Guidelines Section 15088.5(b) provides that “recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR.” Recirculation also is not required simply because new information is added to an EIR;

indeed, new information is oftentimes added given CEQA’s public/agency comment and response process and CEQA’s post-Draft EIR circulation requirement of proposed responses to comments submitted by public agencies. In short, recirculation is “intended to be an exception rather than the general rule” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132).

As such, the City makes the following Findings:

- None of the public comments submitted to the City regarding the Draft EIR present any significant new information that would require the Draft EIR to be recirculated for public review.
- No new or modified mitigation measures are proposed that would have the potential to create new significant environmental impacts.
- The Draft EIR adequately analyzed project alternatives and there are no feasible alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project.
- The Draft EIR was not fundamentally and basically inadequate and conclusory in nature and did not preclude meaningful public review and comment.

In this legal context, the City finds that recirculation of the Draft EIR prior to certification is not required. In addition to providing responses to comments, the Final EIR includes revisions to expand upon information already presented in the Draft EIR; explain or enhance the evidentiary basis for the Draft EIR’s findings; update information; and to make clarifications, amplifications, updates, or helpful revisions to the Draft EIR. The Final EIR’s revisions, clarifications, and/or updates do not result in any new significant impacts or increase the severity of a previously identified significant impact. In sum, the Final EIR demonstrates that the proposed project would not result in any new significant impacts or increase the severity of a significant impact compared to the analysis presented in the Draft EIR. The changes reflected in the Final EIR also do not indicate that meaningful public review of the Draft EIR was precluded in the first instance. Accordingly, recirculation of the EIR is not required because revisions to the EIR are not significant as defined in Section 15088.5 of the CEQA Guidelines.

11.0 MITIGATION MONITORING AND REPORTING PROGRAM

11.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) Guidelines requires that, whenever a public agency approves a project based on a Mitigated Negative Declaration or an Environmental Impact Report (EIR), the public agency shall establish a mitigation monitoring or reporting program to ensure that all adopted mitigation measures are implemented.

The mitigation monitoring and reporting program (MMRP) contained herein is intended to satisfy this requirement of the CEQA Guidelines as it relates to the Temporary Outdoor Vehicle Storage Facility Project (project). This MMRP is intended to be used by City of Oxnard (City) staff to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the Draft EIR and finalized in the Final EIR prepared for the proposed project.

The Final EIR for the proposed project presents a detailed set of mitigation measures required for implementation. As noted above, the intent of the MMRP is to ensure the effective implementation and enforcement of all adopted mitigation measures. The MMRP will also provide for monitoring of construction activities, as necessary, and in the field identification and resolution of environmental concerns.

11.2 PURPOSE OF THE MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a sufficient manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements. The MMRP table has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies each mitigation measure or standard condition; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring conditions; and the agency or party responsible for ensuring that the monitoring is performed. The numbering of mitigation measures and standard conditions follows the numbering sequence found in the Final EIR.

11.3 ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City,

at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. The City would be responsible for overall administration of the MMRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure.

Section 21081.6 of the Public Resources Code requires the lead agency to identify the “custodian of documents and other material” which constitutes the “record of proceedings” upon which the action on the project was based. Inquiries should be directed to:

City of Oxnard Community Development Department
Planning & Environmental Services Division
214 South C Street
Oxnard, California, 93030

11.4 REPORTING

Upon completion of the project, the City’s Planning Manager shall prepare a monitoring report on the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall also be compiled and explained in monthly or annual reports, as relevant. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TEMPORARY OUTDOOR VEHICLE STORAGE
FACILITY PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT**

Impact	Mitigation Measure/Standard Condition	Implementation Timing	Monitoring Frequency	Responsible Party	Compliance Verification (Date/Initials/ Comments)
5.1 AESTHETICS					
Implementation of the proposed project could substantially degrade the visual character/quality of the site and its surroundings (Threshold AES-3).	SC AES-1: Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans.	Prior to the issuance of building permits.	One time prior to issuance of building permits.	Applicant	
	SC AES-2: Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems.	Prior to the issuance of a certificate of occupancy.	Installation occurs one time prior to the issuance of a certificate of occupancy.	Applicant	
	SC AES-3: Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods.	Prior to the issuance of a certificate of occupancy.	Provision of water schedule occurs one time prior to the issuance of a certificate of occupancy. Recommendations of the watering schedule must be implemented throughout project implementation.	Applicant	
	SC AES-4: The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure.	During project construction and prior to project operation.	Installation occurs one time during project construction. Ongoing maintenance should occur when necessary during project implementation to ensure sufficiency of irrigation system.	Applicant	

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	SC AES-5: All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	SC AES-6: The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	SC AES-7: The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	MM AES-1: The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-2: In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-3: Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.	Prior to vegetation maturation that effectively buffers views onto the project site.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Applicant	

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			Applicant should regularly assess vegetation to determine whether screening fabric or other alternative temporary measures are necessary. Once vegetation has matured to effectively buffered views to the project site, the Applicant should remove fabric screening in those areas.		
	MM AES-4: The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.	During project construction and prior to project operation.	Installation occurs during project construction. Visual screening methods should complement the screening established for the project. Applicant should regularly assess screening to ensure it is sufficient and address any degradation.	Applicant	
Implementation of the proposed project could create a source of substantial light or glare, which could affect daytime and/or nighttime views in the area (Threshold AES-5).	SC AES-8: The project must comply with the Outdoor Lighting Code & Guideline: a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:	Ongoing during project construction and operation.	Lighting installation occurs during project construction. Ongoing compliance with the Outdoor Lighting Code & Guideline is required for the life of the project during the 5-year Special Use Permit, consistent	Applicant	

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	i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up. ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to on 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up. c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected.		with the Oxnard City Code.		

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	SC-AES-9: Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature).	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
	SC AES-10: Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians.	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
5.4 Biological Resources					
The proposed project could have a substantial adverse effect on sensitive or special status biological resources, or riparian habitats, or natural communities (Threshold BIO-1, Threshold BIO-2).	MM BIO-1: To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.	Conduct survey during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative, or if habitat can be avoided.	Initial survey and reporting. Conduct monitoring if required to comply with Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act.	Applicant	

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	If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities. The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.	Comply with Fish and Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act if surveys are positive and habitat cannot be avoided. Incorporate measures into construction contracts, as relevant.			

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	In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.				
5.5 CULTURAL AND TRIBAL CULTURAL RESOURCES					
The proposed project could result in a substantial adverse change in the significance of a unique archaeological resource pursuant to state CEQA Guidelines Section 15064.5 (Threshold CTC-2).	MM CUL-1: Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal)	A Principal Investigator/Archaeologist shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground				

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	disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.				
	MM-CUL-2: Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to	A Native American/Tribal Monitor shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.				
5.7 GEOLOGY AND SOILS					
Implementation of the proposed project could result in the risk of loss, injury, or death due to strong seismic ground shaking (Threshold GEO-1b).	MM GEO-1: Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.	Prior to issuance of grading permits	Report must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during site grading and construction on an ongoing basis during construction activities.	Applicant Review by City of Oxnard Building and Engineering Division.	
5.9 HAZARDOUS MATERIALS USE, GENERATION, TRANSPORT, OR DISPOSAL					
The proposed project could result in an increased risk of upset associated with the routine use, generation, transport, or disposal of hazardous materials (Threshold HAZ-1).	SC HAZ-1: Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments.	Prior to issuance of grading permits	Safety Plan must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during project operation on an ongoing basis.	Applicant Review by City of Oxnard Fire and Planning Departments	
5.10 HYDROLOGY AND WATER QUALITY					
The proposed project could cause a violation	SC HYD-1: The Applicant shall design project to minimize degradation of stormwater quality by	During project design.	Stormwater quality calculations and	Applicant	

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of any adopted water quality standards or waste discharge requirements (Threshold HYD-1).	complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM).	Stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first).	associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first). Ongoing compliance with the MS4 permit is required during the life of the project.		
	SC HYD-2: The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations.	Stormwater quality calculations and infiltration plans must be determined during project design. Engineering and architectural recommendations shall be implemented throughout the life of the project.	Stormwater issues will be addressed during project design. Ongoing compliance with the 2011 Technical Guidance Manual for Stormwater Control Measures is required throughout the life of the project.	Applicant Recommendations required from a geotechnical engineer, and if applicable, a landscape architect	

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	SC HYD-3: Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City.	During project design and prior to issuance of grading and building permits (whichever comes first).	Ongoing long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations.	Applicant The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design.	
	SC HYD-4: The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM).	Installation occurs once during project construction.	Ongoing maintenance as needed to ensure the system is sufficient.	Applicant	

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5.17 POLICE PROTECTION					
The proposed project could increase the demand for police protection service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects (Threshold PP-1) .	MM PP-1: Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others: - At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road. - At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions. - If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.	Traffic Control Plan must be developed prior to construction, and must be implemented during project construction.	Ongoing implementation during project construction. No action required during project operation.	Applicant Review by City Traffic Engineer required.	

Attachment:

H. Draft Planning Commission Resolution Approving Planning and Zoning
Permit No. 18-500-02 (Special Use Permit)

RESOLUTION NO. 2022 - XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OXNARD APPROVING PLANNING AND ZONING PERMIT NO. 18-500-02 (SPECIAL USE PERMIT) TO ALLOW FOR THE CONSTRUCTION OF A TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY WITH A MOBILE GUARDHOUSE/OFFICE, PORTABLE RESTROOM, PORTABLE LIGHT FIXTURES, DRAINAGE IMPROVEMENTS, CAPACITY FOR 4,944 VEHICLES ON A GRAVEL SURFACE, LANDSCAPING AND FENCING ON TWO LOTS (FOR A TOTAL OF APPROXIMATELY 34 ACRES), LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christening Birdsey (the **“Applicant”** and/or **“Permittee”**) submitted a request to approve Planning and Zoning Permit No. 18–500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located a the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the **“Project”**); and

WHEREAS, the the City of Oxnard as the Lead Agency, has prepared an EIR (State Clearinghouse No. 2020069039) in accordance with the requirements of the California Environmental Quality Act (CEQA, Public resources Code § 21000, et seq.), the regulations promulgated thereunder (14 California Code of Regulations, §15000, et seq., CEQA Guidelines), and the City’s Environmental Review Guidelines; and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard (**“Planning Commission”**) conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the proposed Project, in accordance with Sections 16-536 and 16-651 of the Oxnard City Code (OCC) and considered the Certification of Final Environmental Impact Report (Final EIR) No. 22-01 pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, on October 20, 2022, the Planning Commission certified Final EIR No. 22-01 pursuant to the CEQA for approval of the Project and found that the Final EIR was completed in compliance with CEQA and reflects the independent judgment of the City; and

WHEREAS, Sections 16-536 and 16-651 of the OCC authorize the Planning Commission to approve a Special Use Permit; and

WHEREAS, the Planning Commission finds, after due study, deliberation and public hearing, that the project meets the criteria set out in Sections 16-536 and 16-651 of the OCC; and

WHEREAS, the Project has been reviewed by the Development Advisory Committee (DAC) and the DAC has prepared conditions of approval that are incorporated within the recommended permits; and

WHEREAS, the Planning Commission finds that the Project conforms to the City of Oxnard 2030 General Plan elements thereof and the Oxnard City Code for the reasons set forth in the Planning Commission Staff Report; and

WHEREAS, the Planning Commission finds after due study and deliberation that the applicant agrees with the necessity of and accepts all elements, requirements, and conditions of this Resolution as being a reasonable manner of preserving, protecting, providing for, and fostering the health, safety, and welfare of the citizenry in general and the persons who work, visit or live in this development in particular.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF OXNARD:

SECTION 1. Based on the entire record before the Planning Commission and all written and oral evidence presented, including the Special Use Permit Staff Report and all attachments thereto, the Planning Commission finds:

1. The proposed use is in conformance with the General Plan and other adopted policies of the City of Oxnard.

The Project site has 2030 General Plan land use designations of Industrial Limited (ILT) and Park (PRK) and a zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD). The proposed project includes the development of temporary structures for temporary vehicle storage. Given the temporary use of the site for outdoor vehicle storage for a maximum of five years and that the proposed project does not include permanent structures, the proposed project does not preclude future development for park land or other industrial land uses. As discussed in detail in the Planning Commission Staff Report (Sections 6 b, c, Attachment D, and Attachment E) the Project, as designed and conditioned, meets all applicable development standards. Therefore, the proposed project is in compliance with the 2030 General Plan and other adopted policies of the City of Oxnard and meets this Finding.

2. The nature, condition and development of adjacent uses, buildings and structures shall be considered, and no proposed Special Use Permit shall be granted if the approval body finds such use will adversely affect or be materially

detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

As described in the Staff Report, pursuant to the 2030 General Plan land use designation of Industrial Limited (ILT) and Park (PRK) and the zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD), the proposed use of the project site as a temporary vehicle storage facility, is an allowed use, subject to a Special Use Permit (OCC §16-163). The surrounding uses are characterized by light industrial, commercial, and residential uses, which are predominantly light industrial facilities (commercial trucking facility, Advanced Water Purification Facility), commercial shopping centers, a four lane road (Hueneme Road), single-family residences, railroad tracks and open space. Construction activities, anticipated uses, and development design will be subject to standard construction requirements of the Building, Fire, and Traffic Codes. Therefore, the proposed use and improvements, as conditioned, will not adversely affect or be materially detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

- 3. The site that is subject to the Special Use Permit shall be adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and items which may be required by Section 16-532 (Conditions).**

As described in the Staff Report, the project as designed and conditioned meets the development standards of the Light Manufacturing with Planned Development Additive Zone (M-1-PD) zone as described above in Finding Section 1(1). Pursuant to the Zoning Code, the Project has been designed to be consistent with the maximum building height, front, side and rear setbacks, and lot coverage. As detailed in the Staff report, the project site is approximately 34 acres which is adequate to accommodate the required 12 employee parking spaces and the required 30-foot landscape buffer along Hueneme Road. As such, the subject site is adequate in terms of size and as developed the development meets or exceeds City's design standards.

- 4. The site that is subject to the Special Use Permit shall be served by highways adequate in width and improved as necessary to carry the kind and quantity of traffic such use will generate.**

As described in the Staff Report, the project site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed driveway access would provide sufficient access to the site and would allow for adequate circulation around the site. As described in the EIR, the project will have less than significant impacts to the City roadway network and roadway improvements are not required as a result of the project. Therefore, the site has sufficient access to streets and highways that are adequate in size and existing intersections adjacent to the project site will operate at acceptable levels of service.

5. The site that is subject to the Special Use Permit shall be provided with adequate sewerage, water, fire protection and storm drainage facilities.

As described in the Staff Report, the project includes a portable restroom that will be serviced as needed by a waste-services provider. The project also includes a temporary guardhouse/office building that does not require water. The site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed Project includes drainage improvements along the southeastern side of the site. Furthermore, the Project was reviewed by the Development Advisory Committee for adequate utilities and services. In accordance with the Stormwater Quality Conditions of this Resolution, the Project's design will comply with stormwater control measures as required by the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system ("MS4") permit. The Project is consistent with the level of development identified under the General Plan and Oxnard City Code, and therefore is within the anticipated level of development. The project is not anticipated to result in any significant impacts to utilities and public services. Therefore, the site for the proposed use will be provided with adequate sewage, water, fire protection and storm drainage facilities.

SECTION 2. The Planning Commission, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. Based on the findings set forth herein and the Staff Report and all attachments thereto, the Planning Commission hereby approves Planning and Zoning Permit No. 18-500-02 (Special Use Permit), subject to the attached conditions of approval.

SECTION 4. The decision of the Planning Commission shall be final unless an appeal of the action is filed in accordance with the provisions of Section 16-545 of the Oxnard City Code.

SECTION 5. The Secretary shall certify the adoption of this Resolution.

CONDITIONS OF APPROVAL

Note: The abbreviations below identify the City department or division responsible for determining compliance with these standard conditions. The first department or division listed has responsibility for compliance at plan check, the second during inspection and the third at final inspection, prior to issuance of a certificate of occupancy, or at a later date, as specified in the condition. If more than one department or division is listed, the first will check the plans or inspect the project

before the second confirms compliance with the condition. The italicized code at the end of each condition provides internal information on the source of each condition: Some are standard permit conditions (e.g. *G-1*) while some are taken from environmental documents (e.g. *MND-S2*).

DEPARTMENTS AND DIVISIONS			
CA	City Attorney	PL	Planning
DS	Dev Services/Eng Dev/Inspectors	TR	Traffic
PD	Police	B	Building Plan Checker
SC	Source Control	FD	Fire
PK	Landscape Design	CE	Code Enforcement

GENERAL PROJECT CONDITIONS

1. This permit is granted for the property described in the application on file with the Planning Division, and may not be transferred from one property to another. (PL, *G-1*).
2. This permit is granted for the plans dated October 20, 2022, (“the plans”) on file with the Planning Division. The project shall conform to the plans, except as otherwise specified in these conditions, or unless a minor modification to the plans is approved by the Planning and Environmental Services Manager (“Planning Manager”) or a major modification to the plans is approved by the Planning Commission. A minor modification may be granted for minimal changes or increases in the extent of use or size of structures or of the design, materials or colors of structures or masonry walls. A major modification shall be required for substantial changes or increases in such items. (PL, *G-2*)
3. This permit shall automatically become null and void 36 months from the date of its issuance, unless Developer has diligently developed the proposed project, as shown by the issuance of a grading, foundation, or building permit and the construction of substantial improvements. (PL, *G-3*)
4. All required off-site and on-site improvements for the project, including structures, paving, and landscaping, shall be completed prior to occupancy unless the Development Services Manager allows the Developer to provide security or an executed agreement approved by the City Attorney to ensure completion of such improvements. (DS, *G-4*)
5. By commencing any activity related to the project or using any structure authorized by this permit, Developer accepts all of the conditions and obligations imposed by this permit and waives any challenge to the validity of the conditions and obligations stated therein. (CA, *G-5*)

6. Developer agrees, as a condition of adoption of this resolution, at Developer's own expense, to indemnify, defend and hold harmless the City and its agents, officers and employees from and against any claim, action or proceeding to attack, review, set aside, void or annul the approval of the resolution or any condition attached thereto or any proceedings, acts or determinations taken, done or made prior to the approval of such resolution that were part of the approval process. (CA, G-6)
7. Any covenants, conditions, and restrictions (CC&Rs) applicable to the project property shall be consistent with the terms of this permit and the City Code. If there is a conflict between the CC&Rs and the City Code or this permit, the City Code or this permit shall prevail. (CA, G-7)
8. Developer shall complete the "Notice of Land Use Restrictions and Conditions" form, using the form provided by the City, for recording with the Ventura County Recorder. Before the City issues building permits, Developer shall submit the original completed, signed and notarized document, together with the required fees to the Planning Manager. (PL, G-8)
9. Developer shall provide off-street parking for the project, including the number of spaces, stall size, paving, striping, location, and access, as required by the City Code. (PL/B, G-9)
10. Before placing or constructing any signs on the project property, Developer shall obtain a sign permit from the City. Except as provided in the sign permit, Developer may not change any signs on the project property. (PL/B, G-10)
11. Developer shall obtain a building permit for any new construction or modifications to structures, including interior modifications, authorized by this permit. (B, G-11)
12. Developer shall not permit any combustible refuse or other flammable materials to be burned on the project property. (FD, G-12)
13. Developer shall not permit any materials classified as flammable, combustible, radioactive, carcinogenic or otherwise potentially hazardous to human health to be handled, stored or used on the project property, except as provided in a permit issued by the Fire Chief. (FD, G-13)
14. If Developer, owner or tenant fails to comply with any of the conditions of this permit, the Developer, owner or tenant shall be subject to a civil fine pursuant to the City Code. (CA, G-14)
15. Prior to issuance of building permits, Developer shall correct all violations of the City Code existing on the project property for which the Code Compliance Division has open cases. (PL, G-15).

LANDSCAPE CONDITIONS

16. Prior to submittal of landscape and irrigation plans, Developer shall obtain approval of the Planning Manager or designee of a plan showing on the project property all existing trees and identifying the trees to be saved, transplanted or removed. (PK, PK-1)
17. Prior to issuance of building permits or the proposed use is initiated, whichever comes first, Developer shall submit two copies of landscape and irrigation plans, along with the appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (PK/DS, PK-2)
18. Prior to issuance of a certificate of occupancy, Developer shall install landscape and automatic irrigation systems that have been approved by the Parks and Facilities Superintendent. (PK, PK-3)
19. Developer shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by this permit. Failure of Developer to do so may result in the revocation of this permit and initiation of legal proceedings against Developer to ensue compliance (PK, PK-4)
20. Prior to the issuance of City issues a certificate of occupancy, Developer shall provide a watering schedule to the building owner or manager and to Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. (PK, PK-5)
21. All trees planted or placed on the property by Developer shall be at least 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by this permit. (PK, PK-6)
22. At the time of landscape plan check submittal, the landscape planting and irrigation plans shall comply with the current title 23 Model Water Efficient Landscape Ordinance (MWELO). (PK, PK-7.1)
23. Developer shall install an irrigation system that includes a water sensor shut off device as a water conservation measure. (PK, PK-22)
24. At time of submittal to the Building and Engineering Division for plan check, Developer's Landscape Architect or Architect shall provide the City with written confirmation that they have reviewed the civil engineering construction drawings and that the NPDES requirements are not in conflict with meeting the City's landscape requirements. (PK, PK-23)
25. Developer shall include a note on the Landscape Plans submitted to the Building and Engineering Division for a building permit that "all landscaping and irrigation comply with Ordinance No. 2822, which adopted the City of Oxnard Landscape Water Conservation Standards, and applicable water conservation requirements of the State of California". (PK, PK-24)

26. At the time of Plan Check submittal, the landscape plans shall contain an exhibit titled “Tree Tabulation Chart”. The Tree Tabulation Chart shall contain a listing of all existing trees on site and shall refer to them by number as identified in the Arborist’s Tree Report. The Tree Tabulation Chart shall clearly list all trees to remain, be removed or transplanted. The Chart shall contain the Arborist’s economic appraisal value of each tree(s) removed as well as computations and calculations showing how the value of the removed tree(s) was put back into new tree sizes for the project that are in addition to meeting the City’s minimum tree size of 24” box. (PK)
27. Consistent with the City Council Resolution 15,569 which declared a continuance of the Stage 2 water shortage condition within the City of Oxnard, the project is required to implement and maintain the mandatory water conservation requirements for as long as City Council Resolution 15,569 is in effect or is amended/replaced by the City of Oxnard.

PLANNING DIVISION CONDITIONS

28. Plans submitted by Developer with building permit applications shall show on the building elevation sheets all exterior building materials and colors, including product and finish manufacturer name, color name and number, and surface finish type (such as: stucco with sand finish, plaster with smooth finish) to be used in construction. (PL/B, PL-1)
29. Any application for a minor modification to the project shall be accompanied by four copies of plans reflecting the requested modification, together with applicable processing fees. (PL, PL-2)
30. Before the City issues building permits, Developer shall include a reproduction of all conditions of this permit as adopted by resolution of the Planning Commission and/or the City Council in all sets of construction documents and specifications for the project. (PL, PL-3)
31. Before the City issues building permits, Developer shall provide to the Planning Division Manager color photographic reductions (8 1/2” by 11”) of full-size colored elevations and any other colored exhibit approved by the Planning Commission. Developer may retain the full-size colored elevations after the reductions are so provided. (PL, PL-4)
32. Developer may not modify any use approved by this permit unless the Planning Division Manager determines that Developer has provided the parking required by the City Code for the modified use. (PL, PL-7)
33. During the plan check review process, the Developer shall provide a lighting plan that provides design details (light standards, bollards, wall mounted packs, etc.) and illumination site information within alleyways, pathways, streetscapes, and open spaces proposed throughout the development. An electrical engineer shall prepare the site lighting plan demonstrating that adequate lighting ranges will be provided throughout the development without creating light spillover, light pollution, or conflicts with surrounding factors such as tree locations, off-site or adjacent lighting. (PL)

34. Prior to issuance of building permits, Developer shall demonstrate that light standards illustrated on conceptual lighting plan do not conflict with tree locations. Developer shall submit a plan showing both the lighting and landscape on the same sheet.
35. Project on-site lighting shall be of a type and in a location that does not constitute a hazard to vehicular traffic, either on private property or on adjoining streets. To prevent damage from vehicles, standards in parking areas shall be mounted on reinforced concrete pedestals or otherwise protected. Developer shall recess or conceal under-canopy lighting elements so as not to be directly visible from a public street. Developer shall submit a lighting plan showing standard heights and light materials for design review and approval of the Planning Division Manager. (PL/B, *PL-8*)
36. In order to minimize light and glare on the project property, all parking lot and exterior structure light fixtures shall be high cut-off type that divert lighting downward onto the property and shall not cast light on any adjacent property or roadway. (PL, *PL-9*)
37. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (B/DS, *PL-11*)
38. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code section 23114, with special attention to sub sections 23114(b)(2)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
 - b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (B/DS, *PL-12*)
39. Developer shall provide for dust control at all times during project property preparation and construction activities. (B/DS, *PL-13*)
40. Developer agrees to participate in a water conservation program that includes refitting water fixtures existing on the project property with water conserving devices within residences or businesses in the City's water service area, if such a program is in effect when building permits are issued for this project. Among the requirements of such a program might be refitting existing toilets, faucets, shower heads, landscaping irrigation or other fixtures and items that consume water within the structure. (PL, *PL-14*)
41. Because of water limitations placed upon the City by its water providers, approval of this permit does not guarantee that the City will issue building permits. Issuance of building

permits may be delayed as a result of implementation of a water conservation or allocation plan. (PL, *PL-15*)

42. Prior to issuance of building permits, Developer shall pay a document imaging fee for the planning files in an amount calculated by planning staff at the time of building permit review based on fees then in effect. (PL/B, *PL-16*)
43. Developer shall participate in the City's Public Art Program by paying the Public Art fee prior to issuance of building permits, in accordance with City Council Resolution No. 14,124. (PL, *PL-50*)
44. For any exterior utility meter panels, Developer shall paint such panels to match the structure upon which it is located. Such panels shall be located to take advantage of screening (e.g. landscaping or other building elements) from public right-of-ways, to the maximum extent feasible. (PL, *PL-43*)
45. Prior to issuance of a certificate of occupancy, Developer shall remove all construction materials and vehicles from the subject property. (PL/B, *PL-47*)
46. Developer shall remove any and all graffiti from the project premises, within 24 hours of its appearance. The surface of such affected areas shall be matched to blend in with the underlying colors and/or design, and shall not look like a paint patch. (PL)
47. Before the City issues building permits, Developer shall provide a Graffiti Deterrent Plan, subject to approval of the Planning Division Manager. The plan shall include such elements as clear film on windows and/or mirrors, as well as washable paint and sealers on the building and perimeter walls. (PL)
48. Developer shall ensure that all construction equipment is maintained and tuned to recommended manufacturer's specifications. (MND, C-1)
49. At all times during construction activities, Developer shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust. (MND, C-2)
50. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (MND, C-3)
51. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code §23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

- b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (MND, C-4)
- 52. During construction, Developer shall post and maintain onsite signs, in highly visible areas, restricting all vehicular traffic to 15 miles per hour or less. (MND, C-5)
- 53. During periods of high winds (i.e. wind speed sufficient to cause fugitive dust to impact adjacent properties), Developer shall cease all clearing, grading, earth moving, and excavation operations to prevent fugitive dust from being a nuisance or creating a hazard, either onsite or offsite. (MND, C-6)
- 54. The Permittee shall comply with the provisions of applicable VCAPCD Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance), Rule 55 (Fugitive Dust), and Rule 55.1 (Removal of Visible Roadway Accumulations). (MND, C-7)
- 55. Developer shall mitigate air quality emissions associated with development of the subject site through a contribution to the City's Transportation Demand Management (TDM) program. Such fee shall be calculated at the time of building permit issuance in accordance with the Ventura County Air Quality Assessment Guidelines, as amended. Such fee shall be collected in full prior to building permit issuance. (MND, C-9)
- 56. Prior to grading permit approval, Developer shall include on the grading plans a reproduction of all conditions of this permit pertaining to dust control requirements. (PL)
- 57. The proposed vehicle storage use shall be granted for a time period not to exceed five years from the date of Final Inspection and commencement of the approved use. Upon the expiration of the five (5) year period the site shall be returned to its existing condition within ninety (90) days as follows:
 - a. The facility may be used to store vehicles only after final Building Permit approval. All vehicles shall be removed from the site no later than five years from the Final Building Permit Inspection.
 - b. The site shall be returned to its existing condition (the condition prior to development) subject to the required City permits and a plan to be reviewed and approved by the Community Development Director with the following conditions: the drainage improvements, landscaping, and fencing shall remain on the site and be maintained by the property owner. The ninety (90) day period may be extended by the Community Development Director for good cause for a period not to exceed an additional ninety (90) days.

58. Applicant shall submit payment for all outstanding discretionary permit and environmental processing fees associated with the development project. Funds shall be deposited prior to issuance of a grading permit. (PL).
59. Applicant shall deposit \$5,000.00 for mitigation monitoring and reporting associated with the development project, PZ 18-500-02. Such funds shall be deposited prior to issuance of a grading permit. Additional funds may be required throughout the life of the permit as needed for cost recovery related to environmental monitoring. Any additional required funds shall be requested in writing by the Community Development Director and shall be deposited within 10 days of written notification. (PL)

PLANNING ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURES AND CONDITIONS

60. Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (SC AES-1)
61. Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. (SC AES-2)
62. Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. (SC AES-3)
63. The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. (SC AES-4)
64. All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. (SC AES-5)
65. The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. (SC AES-6)
66. The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts. (SC AES-7)
67. The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants. (MM AES-1)

68. In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site. (MM AES-2)
69. Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chainlink fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation. (MM AES-3)
70. The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project. (MM AES-4)
71. The project must comply with the Outdoor Lighting Code & Guideline:
 - a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings.
 - b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:
 - i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up.
 - ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to one 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up.
 - c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected. (SC AES-8)
72. Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature). (SC AES-9)
73. Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians. (SC AES-10)
74. To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), activities related to the project including, but not limited to, vegetation removal,

ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided. (MM BIO-1)

75. Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan

shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center. (MM CUL-1)

76. Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities. (MM CUL-2)
77. Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction. (MM GEO-1)
78. Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management

practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments. (SC HAZ-1)

79. The Applicant shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM). (SC HYD-1)
80. The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of sitespecific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (SC HYD-2)
81. Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (SC HYD-3)
82. The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM). (SC HYD-4)

83. Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:
- a. At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
 - b. At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
 - c. If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes. (MM PP-1)

POLICE DEPARTMENT CONDITIONS

84. Light poles shall be no taller than 26-feet tall. Gas, propane or other hydrocarbon powered generators are not allowed to power the lighting instruments.
85. Lighting on the site shall follow the perimeter fencing but shall not create “light trespass” off the project area or glare to traffic on adjacent streets. The lighting instruments shall illuminate a corridor that follows the fence-line on the interior perimeter between 1 and 7-foot candles and shall be in operation from dusk to dawn. It is not the intent of this condition to illuminate the whole parking field, but merely that area adjacent to and including the fence line.
86. Lighting instruments shall be LED flat lens with cut-off shields where “light trespass” may be an issue. The flat lens shall be directed toward the ground and shall not be canted to expand the lighting area of coverage.
87. Wall packs are not permitted.
88. A berm, 24-inches above grade, shall run parallel between the fence and the Public-Right-of-Way along Hueneme Road and Perkins Road sides of the project as well as the eastern fence which runs south from Hueneme Road. This berm is intended to supplement the fencing as a security measure. A break in the berm shall exist for gated exit driveways. The berm shall be sufficiently landscaped to deter erosion. Landscape shall be sufficiently irrigated to maintain plantings through the life of the project.
89. Landscape plans shall be submitted to, and approved by, the Planning and Police Departments prior to the issuance of building permits. Landscape plans shall include a table of species to be planted, and include a map of where various species will be located on the site, and call-outs identifying locations of berms, gates and fences.
90. Keys shall not be left in any vehicle on the premises without a responsible party in the vehicle. If the keys to vehicles stored at the site are maintained in the security facility, then the keys must be secured in a locked cabinet securely affixed to the interior wall of the facility or other means to ensure the keys are not easily removed from the premises.

91. A “Knox Box” shall be installed at each gate of the facility to facilitate Fire Department access.
92. No trespass, and no loitering signs shall be placed on each gate to the site. Signs shall be worded: No Trespassing – No Loitering, Forbidden by Law, No Drinking of Alcoholic Beverages, Violators will be subject to arrest or citation pursuant to 602 PC & 7-125 OXO.
93. Prior to the issuance of building permits, the design of all gates shall be approved by Planning and Police Departments. Gate design shall be developed so that vehicle ramming will not collapse the gate.
94. Security cameras shall be installed to monitor the facility. The camera system shall comply with these minimum standards:
 - a) Cameras and supporting equipment shall supply digital color images under normal lighting conditions. Greyscale images are required for infra-red lighting.
 - b) Cameras shall be made by a reputable manufacturer and maintained to current industry standards.
 - c) Cameras shall have low light capability to capture identifiable images.
 - d) The video system shall utilize a Digital Video Recorder (DVR). VHS and other formats are prohibited.
 - e) The video system shall allow recording, live viewing and playback of recorded video for a period of at least 30 days.
 - f) Recorded images shall bear a date and time stamp that cannot be altered.
 - g) Prior to the installation of a security camera system, applicant shall submit a plan showing location of cameras and the scope of their capture area. The plan shall include a list of components.
 - h) Signage shall be posted at each entrance which states in 2 inch letters: “These premises are monitored by a security camera system”.
 - i) Cameras in domed casings are required as their area of focus is not easily determined by a casual observer.
 - j) All exterior cameras shall have the capability of capturing identifiable images in minimum lighting or during hours of darkness.
 - k) The DVR shall be stored in a locked secure cabinet at the site.
 - l) Security personnel shall be authorized to transfer images from the security camera system to any member of the Oxnard Police Department conducting a criminal investigation at or near the premises.
95. Security cameras shall be placed at these locations at a minimum:
 - a) At each gate a pole mounted camera shall be placed on the inside of the security fence capturing the entire opening of the gate threshold.
 - b) Camera(s) shall be mounted near the security shack to capture images of all persons entering and exiting the shack.
96. The address for the facility shall be 5600 Perkins Road. A sign shall be posted on the fence on the Perkins Road side of the facility stating in 4-inch tall letters: “5600 Perkins Road”.

97. An authorized member of the Oxnard Police Department or Code Compliance Division may inspect the site for compliance with these conditions anytime vehicles are stored at the site pursuant to this permit.

FIRE DEPARTMENT CONDITIONS

98. Developer shall construct all vehicle access driveways on the project property to be at least 26 feet wide, exclusive of shoulders. Developer shall mark curbs adjacent to designated fire lanes in parking lots to prohibit stopping and parking in the fire lanes. Developer shall mark all designated fire lanes in accordance with the California Vehicle Code. (FD/B, *F-1*)
99. The project shall meet the minimum requirements of the “Fire Protection Planning Guide” published by the Fire Department. (FD, *F-6*)
100. At all times during construction, Developer shall maintain surfaces capable of handling loads of 76,000 pounds which will provide access for firefighting apparatus to all parts of the project property. (FD/DS, *F-7*)
101. Developer shall identify all hydrants and fire protection equipment on the project property as required by the Fire Chief. (FD, *F-8*)
102. Developer shall install security devices and measures, including walkway and vehicle control gates, entrance telephones, intercoms and similar features, subject to approval of the Police Chief and the Fire Chief. Vehicle control gates shall be operable by City approved radio equipment. (FD/PD, *F-9*)
103. The turning radius of all project property driveways and turnaround areas used for emergency access shall be approved by the City Traffic Engineering Department. (FD, *F-11*)
104. Areas designated by the Fire Marshal as Fire Lanes shall be identified by a red curb and signage per the California Department of Motor Vehicles.
105. Fire hydrants shall be operational and accessible at all times. No parking, storage or staging of equipment/supplies shall be located within 15 feet on either side of fire hydrants. Prior to final inspection, blue reflective hydrant location markers shall be placed on the access roads in accordance with Fire Department standards.
106. Before the city issues a certificate of occupancy, the developer shall install a Knox key vault at a location to be determined by the Fire Department.
107. Vegetation clearance shall be maintained at all times.
108. A minimum 20-foot clear width and 13-foot, 6-inch (13’ 6”) clear height emergency access lane shall be maintained free of obstructions at all times within the project site once construction starts.

109. An on-site Life safety Inspection shall be conducted by Fire Department staff to approve final configuration of the site.

DEVELOPMENT SERVICES DIVISION CONDITIONS

110. Developer shall pay plan check and processing fees in effect at the time of construction plan submittal and shall pay development fees, encroachment permit fees, and other applicable fees in effect at permit issuance. (DS-1)
111. Developer shall have the site improvement plans prepared using standard Building and Engineering Division format(s) by a civil engineer licensed in the State of California. The plans shall incorporate recommendations from soil engineering and geology reports. Prior to issuance of a grading permit, improvement plans must be approved by the City Engineer and ink-on-mylar plans filed with the Building and Engineering Division. (DS-3)
112. Developer shall submit improvement plans and drainage calculations demonstrating that storm drain runoff from the project property and all upstream areas will be safely conveyed to an approved drainage facility. The design and conveyance route shall be compatible with the City's Master Plan of Drainage and shall be approved by the City Engineer prior to approval of improvement plans. (DS-4)
113. Curb cut widths and design shall conform to City ordinances, standards, and policies in effect at the time City issues an encroachment permit. (DS-9)
114. A California licensed civil engineer shall prepare the public improvement plans and documents for this project in accordance with City standards and shall submit all such plans to the City Engineer. Submittal shall include, but not necessarily be limited to, grading, street, drainage, sewer, water and other appurtenant improvement plans, construction cost estimates, soils reports, and all pertinent engineering design calculations. City will not approve a parcel map or final map nor issue a grading, site improvement or building permit until the City Engineer has approved all improvement plans. (DS-15)
115. Prior to issuance of a site improvement permit, Developer shall provide to the Building and Engineering Division a compact Disc (CD) containing digital copies of all project maps, address map, and/or civil improvements drawings in DWG format. Prior to improvement bond release, Developer shall provide an updated CD containing all changes that occur during construction. (DS-16)
116. The conditions of this resolution shall prevail over all omissions, conflicting notations, specifications, dimensions, typical sections, and the like, that may or may not be shown on the improvement plans. (DS-21)
117. Developer shall pay the cost of all inspections of on site and off site improvements. (DS-22)

118. Developer shall be responsible for all project related actions of Developer's employees, contractors, subcontractors, and agents until City accepts the improvements. (DS-23)
119. Prior to beginning construction, Developer shall designate in writing an authorized agent who shall have complete authority to represent and to act for Developer. The authorized agent shall be present at the work site whenever work is in progress. Developer or the authorized agent shall make arrangements acceptable to City for any emergency work. When City gives orders to the authorized agent to do work required for the convenience and safety of the general public because of inclement weather or any other cause, and the orders are not immediately acted upon by the authorized agent, City may do or have such work done by others at Developer's expense. (DS-24)
120. "Standard Specifications for Public Works Construction" latest edition (including modifications thereto by City) and applicable City Standard Plates and Design Criteria shall be the project specifications, except as noted otherwise on the approved improvement plans. City reserves the right to upgrade, add to, or revise these specifications and plans and all other City ordinances, policies, and standards. If the improvements required of this project are not completed within 12 months from the date of City's approval of the improvement plans, Developer shall comply with and conform to any and all upgraded, additional or revised specifications, plans, ordinances, policies and standards. (DS-27)
121. Prior to issuance of a grading/site improvement permit, developer shall obtain Development Services Director approval for any proposed construction phasing. The improvement plans (and associated phasing plans) shall clearly indicate any interim or off site improvements required by City. (DS-28)
122. Developer shall retain a California licensed Civil Engineer to ensure that the construction work conforms to the approved improvement plans and specifications and to provide certified "as built" plans after project completion. Developer's submittal of certified "as built" plans is a condition of City's final acceptance of the project and release of any associated security. (DS-29)
123. All grading shall conform to City's standard grading notes, City Code, and recommendations of Developer's soils engineer as approved by the City Engineer. (DS-30)
124. Developer shall construct sufficient drainage facilities concurrent with rough grading operations to mitigate any potential flooding or erosion affecting adjacent properties and public rights-of-way. (DS-31)
125. Developer shall design all slopes steeper than 5 (horizontal) to 1 (vertical) with a minimum 18 inch wide level area (at both top and bottom of slope) where it adjoins a wall, fence, sidewalk, trail, curb or similar improvement. (DS-32)
126. Prior to issuance of a site improvement permit, Developer shall provide to the City Engineer easements or written consent (as determined appropriate by the Development Services

Director) from all affected landowners for any diversion of historical flows or change in drainage conditions caused by the project. (DS-36)

127. Developer shall submit a landscape irrigation plan prepared by a licensed professional, showing proper water meter size, backflow prevention devices, and cross connection control. (DS-59)
128. Developer shall provide adequate vehicle sight distance as specified by CalTrans specifications at all driveways and intersections. (TR-71)
129. Using forms provided by the Building and Engineering Division, Developer shall submit a stormwater quality control measures maintenance and operations plan ("the Plan") for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, Developer shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the City Engineer approves the Plan and Developer provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (DS-82)
130. Developer's stormwater quality control measures maintenance and operations plan shall include: 1) Requirement to clean on-site storm drains at least twice a year; once immediately before the first of October (the beginning of the rainy season) and once in January. The City Engineer may require additional cleaning; 2) Requirement to maintain parking lots free of litter and debris. Developer shall sweep sidewalks, drive aisles, and parking lots regularly to prevent the accumulation of litter and debris. When swept or cleaned, debris must be trapped and collected to prevent entry into the storm drain system. Developer may not discharge any cleaning agent into the storm drain system; 3) Requirement to label all on-site storm drain inlets with the message "Don't Dump - Drains to Ocean" in accordance with City standards. (DS-83)
131. Developer's engineer shall submit written confirmation that the project landscape drawings comply with the landscape requirements of the Technical Guidance Manual for Stormwater Quality Control Measures for all landscape based stormwater quality best management practices. (DS-84)
132. Developer shall provide pre-treatment for all infiltration based stormwater quality Best Management Practices ("BMPs"). Pre-treatment devices must effectively reduce sediment load entering infiltration BMPs to minimize occlusion of underlying soils and reduce long term maintenance requirements and thereby maintain the infiltration capacity of the BMP. 2011 TGM compliant pre-treatment such as vegetated swales are an approved form of pre-treatment. Proprietary pre-treatment devices must be capable of removing 80% of 50 micron particles to be considered adequate pre-treatment. Typical catch basin inserts do not provide the sufficient sediment storage to provide pre-treatment. (DS-85)

133. Prior to issuance of a grading, building or demolition permit and prior to commencement of any clearing, grading or excavation, Developer shall provide evidence of assignment of a permit identification number by the California State Water Resources Control Board indicating submittal of a Notice of Intent (NOI) by the Developer in accordance with the NPDES Construction General Permit. Developer shall comply with all requirements of the General Permit and the Ventura Countywide MS4 Permit, including preparation of a Stormwater Pollution Prevention Plan (SWPPP). Developer shall keep the SWPPP updated to reflect current site conditions and a copy of the SWPPP shall be kept onsite and available for City or designated representative to review upon request. (DS-86)
134. Developer shall install ‘Full Capture System Devices’ (“Devices”) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (“Amendments”) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of ‘Priority Land Use’ as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (“TGM”). (DS-88)
135. Developer shall design all points of vehicular access (driveways) such that all vehicles exiting the site traverse a minimum of 25-feet of solid pavement (e.g., asphalt or concrete) on the private side of the property line. The solid pavement shall extend into the public right-of-way until it joins the existing road paving and includes appropriate turning transitions. This pavement requirement is intended to minimize the conveyance of soil or gravel into the public right-of-way by vehicles exiting the site. (DS)
136. The project meets the definition of “Parking Lot” as defined by the Ventura Countywide MS4 Permit Order No. R4-2010-0108 and the 2011 Technical Guidance Manual for Stormwater Quality Control Measures (“TGM”) as a land area or facility for parking or storage of vehicles used for businesses, commerce, commercial, and industry use. The MS4 Permit and the TGM require projects that meet the definition of a Parking Lot with 25 or more spaces, regardless of the amount of impervious area proposed, shall design and implement post-construction stormwater management control measures. Developer shall update the drainage report and design the post-construction stormwater management control measures in accordance with the MS4 Permit to the satisfaction of the City Engineer. (DS)
137. Developer shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board’s municipal separate storm sewer system (“MS4”) permit (Order R4-2010-0108 including all revisions) as a new development project. Developer shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (“2011 TGM”). (DS)
138. Developer shall submit stormwater quality calculations to include site-specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for

the design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (DS)

139. Gravel and packed earthen surfaces used for parking lots and storage areas that are anticipated to receive vehicular loading shall be treated as impervious in the stormwater quality calculations. (DS)
140. If permeable pavement design is proposed, Developer shall demonstrate to the satisfaction of the City Engineer that the soil surface will not be compacted during the construction of the project and regular use during the temporary use permit. The City Engineer shall consider all soil surfaces receiving compaction, regardless of the compaction level, to be impervious. Developer may submit to the City Engineer the project-specific soil compaction and infiltration testing data for review and consideration for any compaction proposed. The testing data shall demonstrate how the soils will maintain permeability with the compaction level proposed, similar to the pre-development undisturbed soil conditions. The data is subject to review and approval by the City Engineer. (DS)
141. Developer shall provide evidence that the pipes conveying stormwater from this site under the adjacent railroad tracks are free of obstruction to provide the required discharge capacity. In addition, Developer shall provide evidence that the pipes currently have the sufficient structural integrity to perform their intended purpose for the life of the project. (DS)
142. Developer shall provide a drainage report demonstrating that the site drainage facilities are capable of safely conveying project stormwater (up to and including a 1% chance storm) to a safe point of discharge without negatively affecting the neighboring properties. (DS)
143. Developer shall comply with the drainage requirements imposed by Ventura County Watershed Protection District. (DS)
144. This project is subject to the “Special Projects” provision of the City’s Traffic Impact Fee resolution. The proposed use of the property is not adequately represented by a rate previously adopted by the City Council and the Institute of Transportation Engineers Trip Generation Manual as it does not provide appropriate trip generation statistics. Therefore, the Traffic Impact Fee will be based on a site specific traffic study, acceptable to the City Engineer, which calculates the average daily vehicular trips generated by the project. The fee will be based on the current rate per trip times the average daily vehicular trips. Currently, that rate is \$1,035/ADT. (DS)

TRAFFIC DIVISION CONDITIONS

145. Developer shall design and construct the proposed emergency vehicle entrance/exit driveway along Hueneme Road. Final design, location and width of the driveway shall be reviewed and approved by the City Traffic Engineer in accordance with the Fire Department. (TR)
146. Developer shall install a sign “For Emergency Vehicle Use Only” on the proposed gate for the proposed emergency vehicle entrance/exit driveway along Hueneme Road. (TR)
147. Developer shall prohibit parking between the project’s property line and the proposed fencing along Hueneme Road along Perkins Road. Developer shall be responsible in enforcing the no parking restrictions. (TR)

ENVIRONMENTAL RESOURCES DIVISION

148. Developer shall arrange for materials collection during construction, demolition, and occupancy with the City's Environmental Resources Division or Developer shall arrange for self-hauling.
149. Any landscaping maintenance resulting in organic material needing disposal, if performed in-house or via third party, must not be placed in the trash. All organic materials are required to be diverted from landfill disposal. Any third-party contract/service agreement must stipulate this requirement and be verified through the Environmental Resources Division.
150. Developer shall dispose of sewage and solid waste from the project by City’s wastewater and solid waste systems in a matter approved by the City Engineer.

PASSED, APPROVED, AND ADOPTED by the Planning Commission of the City of Oxnard on this 20th day of October 2022.

Daniel Chavez, Jr., Chair

I hereby certify that the foregoing is a true copy of a Resolution adopted by the Planning Commission of the City of Oxnard at a meeting held on the 20th day of October 2022, and carried by the following vote:

AYES: Commissioner(s):

NOES: Commissioner(s):

ABSENT: Commissioner(s):

ABSTAIN: Commissioner(s):

RECUSED: Commissioner(s):

Joe Pearson II, Secretary

Attachment:

I. Staff Presentation

Port of Hueneme - Temporary Vehicle Storage Facility

Planning & Zoning Permit No. 18-500-02 (Special Use Permit)

Applicant: Christina Birdsey, Port of Hueneme

Jay Dobrowalski, Planning Supervisor

Joe Pearson II, Planning and Environmental Services Manager

Planning Commission
October 20, 2022

Project Description

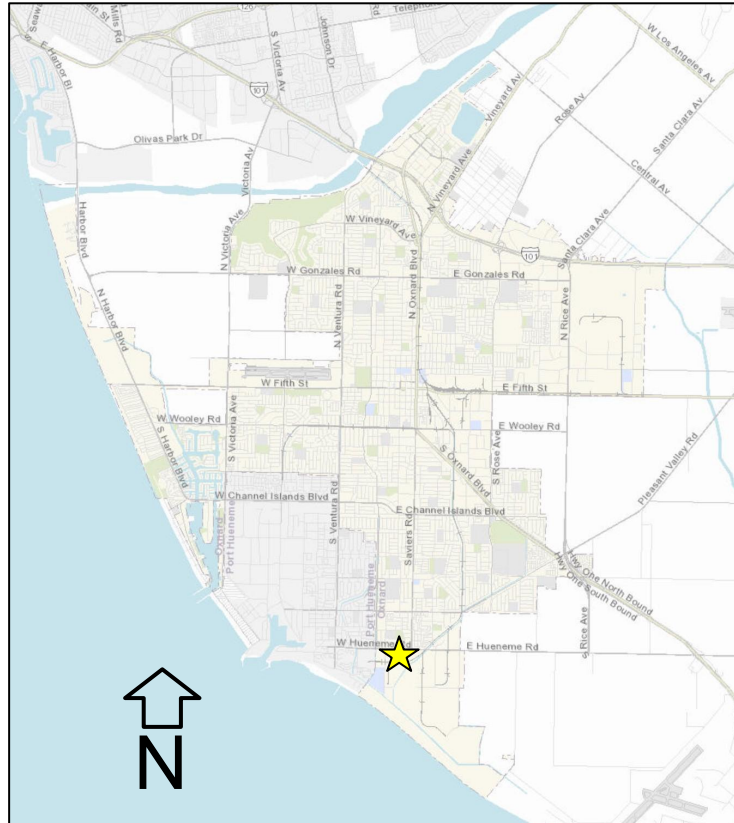
A request to construct a **temporary vehicle storage facility with a 5-year limitation** on a 33.7-acre site that is currently vacant and undeveloped located at the southeastern corner of the intersection of West Hueneme Road and Perkins Road (Assessor's Parcel Numbers: 231-0-092-245 and -105) within the Light Manufacturing, Planned Development (M-1-PD) zone.

Proposed development includes a 240 square-foot guard house, portable restroom, perimeter site lighting with 6-foot fencing for security purposes, landscaping, drainage improvements, and grading for a vehicle parking area on one to two inches of gravel.

Upon expiration of the permit, the office trailer, portable restroom, perimeter lighting and gravel surface would be removed; the 6-foot fencing, landscaping, and drainage improvements would remain on-site.

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the City has evaluated potential project-related environmental impacts through the preparation of an Environmental Impact Report.

Project Location - South Oxnard



Project Location and Surrounding Uses



Street View



View from Hueneme Rd and Perkins Rd looking southeast

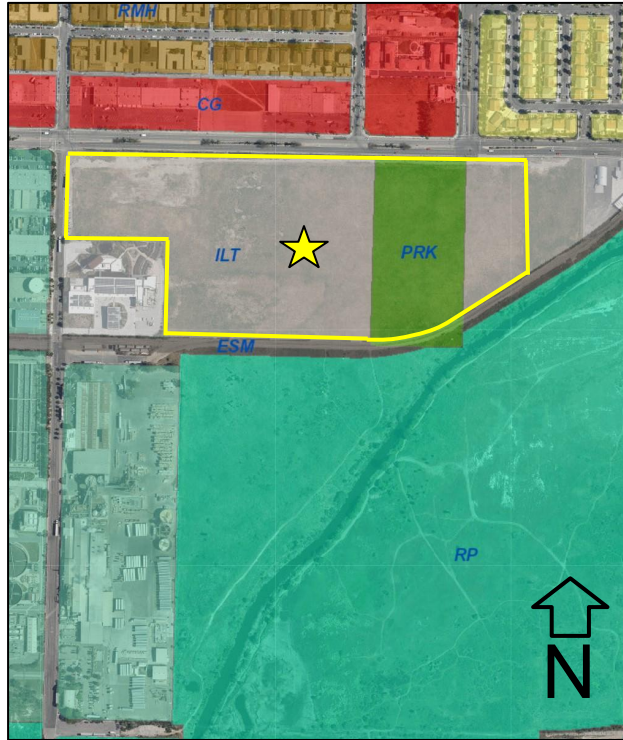
Street View



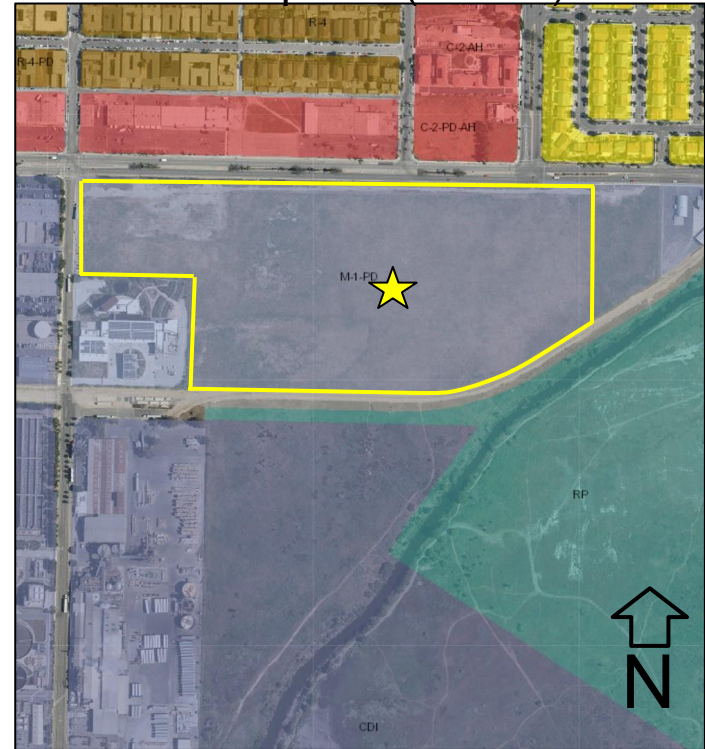
View from Hueneme Rd and Saviers Rd looking southwest

General Plan and Zoning

2030 General Plan: Industrial Light (ILT) and Park (PRK)



Zoning Designation: Light Manufacturing, Planned Development (M-I-PD)



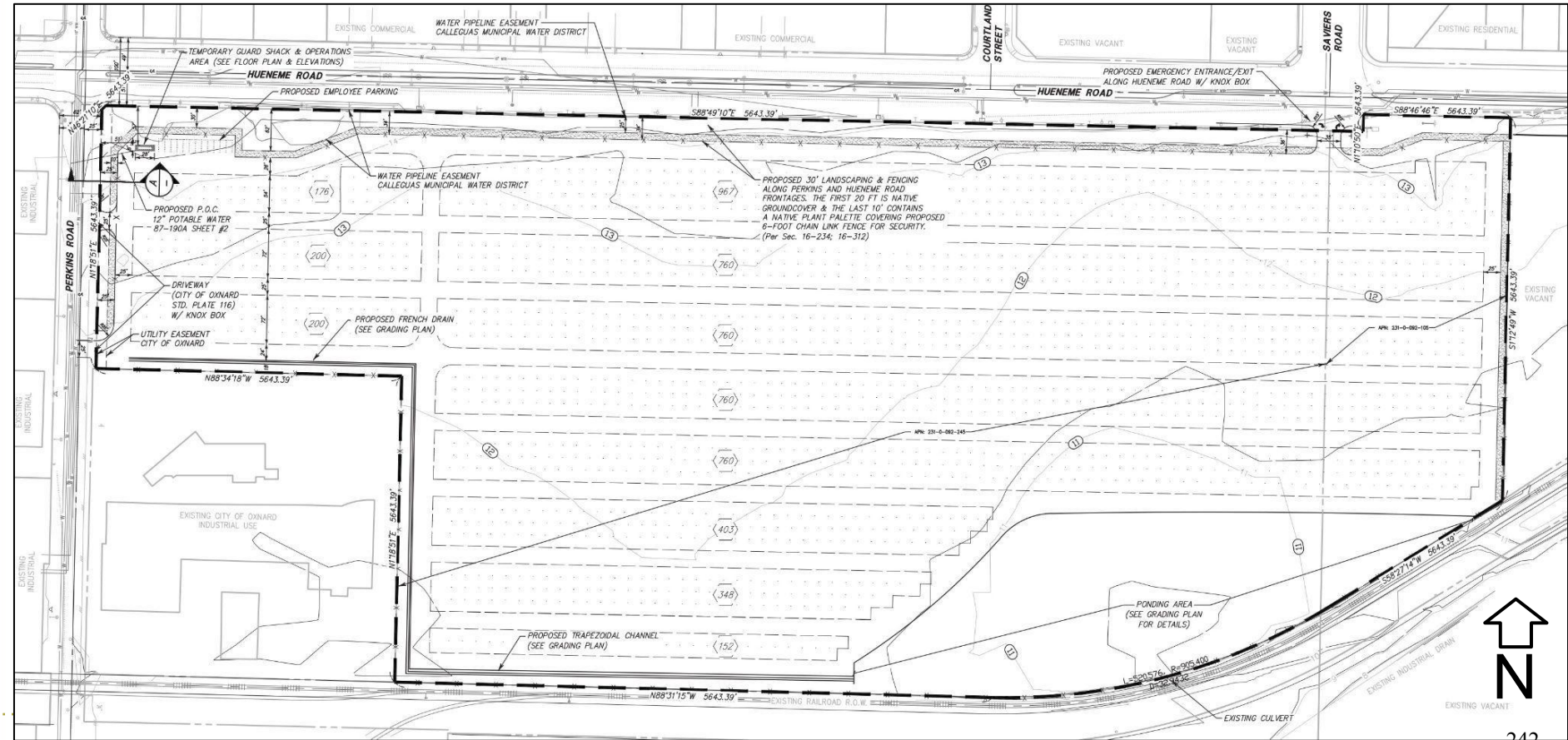
Background - Project Site

- **1995:** Land Use Advisors recommended that City Council approve a zone change, tentative tract map, and Special Use Permit for a residential development. Prior to the CC hearing, the application was withdrawn.
- **2002:** City Council reviewed a Pre-Application submittal to develop the site with a vehicle preparation facility that included several structures (total of 95,000 square-feet).
- **2002:** Planning Commission granted a Special Use Permit for a vehicle processing and distribution facility (total of 100,000 square-feet), adopted an MND, and recommended that City Council approve a change to the General Plan designation of the site to Light Industrial.
- **2002:** City Council granted an appeal of the MND and SUP and directed staff to prepare an EIR. The application was withdrawn.

Background - continued

- **2008:** Planning Commission granted a Special Use Permit for development of the Advanced Water Purification Facility (AWPF) and recommended CC approve a change to the General Plan designation of the site to Light Industrial.
- **2008:** City Council upheld the PC decision to grant the SUP and change the General Plan designation. The AWPF is currently in operation.
- **2018:** Application submitted for the subject Special Use Permit.

Site Plan



General Plan & Zoning Code Consistency

Project found to be consistent with:

- General Plan (Industrial Limited and Park)
 - Project is temporary and does not preclude future development
- Zoning Code (Light Manufacturing)
 - Project is consistent with M-I development standards

Environmental Review

- Proposed development is subject to the California Environmental Quality Act
- City prepared a Mitigated Negative Declaration (MND):
 - MND review period for 49 days (20 days required)
 - City received over 220 comment letters
 - City elected to prepare Environmental Impact Report (EIR)
- City prepared an EIR (No. 22-01):
 - EIR identifies potential impacts, mitigation measures, monitoring requirements, and residual impacts
 - Draft EIR review period for 61 days (45 days required)
 - City received 218 comment letters
 - Comments and responses included in EIR
 - Changes made to Draft EIR for Final EIR based on comments

Environmental Review

- Final EIR identified the following:
 - Class 1 impacts (significant and unavoidable)
 - None identified
 - Class 2 impacts (potentially significant by mitigable, mitigation required)
 - Aesthetics
 - Biological Resources
 - Cultural and Tribal Cultural Resources
 - Geology and Soils
 - Hazardous Materials Use, Generation, Transport, or Disposal
 - Hydrology and Water Quality
 - Police Protection (Transportation)
 - Class 3 impacts (less than significant, no mitigation required)
 - All other impact area were identified as Class 3

EIR Findings

- Final EIR includes a Mitigation Monitoring and Reporting Program:
 - Details process to implement required mitigation measures
 - After implementation of standard conditions and mitigation measures, all potentially significant impacts reduced to less than significant levels
- Staff determined that there is no substantial evidence that the Project will have a significant effect on the environment and recommends that the PC certify the EIR

Conditions of Approval

The Special Use Permit will be subject to conditions of approval including:

- Vehicle storage for 5 years and site returned to existing condition (COA #57)
- Landscape screening required (COA #60-73)
- Pre-construction survey by a biologist required (SUP COA #74)
- Archaeological monitoring required (COA #75)
- Native American/Tribal monitoring required (COA #76)

Community Workshop

- Project presented during November 19, 2018 and March 21, 2022 meetings.
- Site is not within a General Plan Neighborhood
- Notice of meeting was provided:
 - Two on-site postings; and
 - Mailed to residents in Southwinds and Cypress Neighborhoods; and
 - Emailed to Interested Parties
- Comments generally related to: air quality impacts, biology impacts, land use incompatibility, traffic impacts, inadequate public participation opportunities, environmental justice and inadequate environmental review.
- These comments are the same as those addressed in the EIR.

Public Notice

- Notice of PC hearing was provided:
 - Newspaper,
 - On-site posting; and
 - Mailed to property owners within 300 feet.
- To date, no public comment has been submitted regarding the project.

Staff Recommendation

That the Planning Commission:

- a) Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and
- b) Adopt a Resolution approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a temporary vehicle storage facility, subject to certain findings and conditions.



Questions

MEMORANDUM

Agenda Item No.: F.1

Date: October 19, 2022

To: Planning Commission

From: Joe Pearson II, Planning Manager, (805) 385-8272

Subject: Transmittal Memo No. 1 – Port of Hueneme - Temporary Outdoor Vehicle Storage Facility - PLANNING AND ZONING PERMIT No. 18-500-02 (Special Use Permit); Located at southeast corner of Hueneme Road and Perkins Road (APNs: 231-0-092-105 and 231-0-092-245). A request for a Special Use Permit to construct and operate a temporary outdoor vehicle storage facility for a maximum of five years on the approximately 34-acre project site. Upon expiration of the Special Use Permit, the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface would be removed. The fencing, landscaping, and drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner. The project site is located within the Light Manufacturing with Planned Development Additive Zone (M-1-PD). The request includes certification of the proposed Final Environmental Impact Report (EIR) (State Clearinghouse No. 2020069039) and adoption of the Mitigation Monitoring and Reporting Program (MMRP) which has been prepared pursuant to the California Environmental Quality Act (CEQA). As mandated by the CEQA Guidelines, the EIR has been subject to the City's internal review process and reflects the Lead Agency's independent review and judgment and objectivity with regard to the scope, content, and adequacy of analysis. Filed by Christina Birdsey, 333 Ponomo Street, Port Hueneme, California 93044-0608, designated agent (the "Applicant") on behalf of A&J Oxnard LLC, 18980 Ventura Boulevard, Unit 200, Tarzana, California 91356 (the "Property Owner").

Subsequent to the release of the staff report, staff received additional comment letters from members of the public concerning the proposed project (attached). Staff has reviewed the letters and will provide responses as necessary.

Attachment

A. Public Comment Letters



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 public hearing public comment VOTE NO

1 message

Krista Nordstrom <kristanordstrom3@gmail.com>

Mon, Oct 17, 2022 at 10:36 AM

To: planning@oxnard.org

Cc: "sofi@causenow.org" <sofi@causenow.org>

*To: planning@oxnard.org**BCC: Sofi@causenow.org**Subject: 10/20 Public Hearing-Public comment to [Vote NO on the](#) The Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project***Dear Oxnard Planning Commissioners,**

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Krista Nordstrom

--

Krista Nordstrom
Independent cabi Stylist
Mobile: 805-559-0069
Email: KristaNordstrom3@gmail.com

view the current Collection at [KristaNordstrom.cabionline.com](https://www.cabionline.com)
for the latest styling tips, trends, and outfit ideas, visit the cabi blog at [KristaNordstrom.cabionline.com/blog](https://www.cabionline.com/blog)

Inline image



Solis, Rogelio <rogerio.solis@oxnard.org>

[Ask Planning Action] Question: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility - PLANNING AND ZONING PERMIT No. 18-500-02

1 message

Daniel Carawan <carawandr@alumni.vcu.edu>
To: Planning@oxnard.org

Fri, Oct 14, 2022 at 7:46 PM

Sir/Ma'am,

With respect to Project: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility - PLANNING AND ZONING PERMIT No. 18-500-02:

1) How is the relatively smooth flow of traffic going to be ensured at the intersection of Perkins Rd and Hueneme Rd? In other words, when can we expect the Traffic Control Plan? I am fully in favor of economic development, done in a sensible way that balances the interests of the surrounding community and business partners.

- The traffic lights at the intersections of Edison Dr and Acturus Ave have increasingly reduced the smooth flow of traffic on Hueneme Rd, increased tailpipe air emissions from engine idling at the traffic light and reduced public safety from vehicles running red lights. While it is an estimate on my part, the east to west vehicle ratio far exceeds the number of vehicles using the lights on Edison Dr. and Acturus Ave.
- The above mentioned traffic lights used to be on a timer but have transitioned to sensors. What this has meant in practice is one car coming up to a traffic light from Edison Dr. or Acturus Ave. quickly causes the traffic light on Hueneme Rd to change to red. That is, one vehicle stops around ten vehicles driving on Hueneme Rd., give or take.
- In essence, business interests are overriding those of the surrounding community and commuters working in the area.
- We do not need greater police presence in this area. We do not need traffic cameras. We need the City of Oxnard and Southern California Edison to ensure that the traffic lights on Hueneme Rd. continue on a timer-basis, not a sensor basis, ensuring traffic flows on Hueneme Rd. continue smoothly, environmental justice and public health are maintained.

Let me respectfully remind the Council how close this Industrial Zone is to the Residential Zone I and thousands of others live in.

--

Daniel Carawan



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Dain Lopez <dain.c.lopez@gmail.com>
To: planning@oxnard.org

Thu, Oct 13, 2022 at 9:04 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

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Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice! As someone who has family in Oxnard and lives near the diesel death zone of the Port of Long Beach, this project is extremely concerning when it comes to health, safety and the improved quality of life that you should be looking out for.

Sincerely,
Dain Lopez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Diana Bautista <dianaebau.18@gmail.com>
To: planning@oxnard.org

Thu, Oct 13, 2022 at 9:23 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Diana Bautista



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

lynn n <itslynnanguyen@gmail.com>
To: planning@oxnard.org

Thu, Oct 13, 2022 at 9:44 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Lynna Nguyen



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Jelitza Gutierrez' via Planning <planning@oxnard.org>
Reply-To: Jelitza Gutierrez <jelitza.gutierrez@icloud.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 1:39 AM

Dear Oxnard Planning Commissioners,

VOTE NOOOOOO

I understand you've been receiving a bunch of these and we hope you read through them. When I drove down from Thousand Oaks to Oxnard back in the day, I would catch a beautiful view of part of Ventura county. Now, a lot of the time you see SO MUCH smog. It's ridiculous that such a tiny county can emit so many tons of CO2 into our atmosphere. We haven't even seen the impact this new Amazon warehouse will create. This county is so diverse and unfortunately a lot of low income families live here. That does not mean you get to come into this beautiful place we call home and capitalize it. We don't want to have dirty beaches and put up with unfair environmental destruction. As a Gen Z-er I demand that you protect our community/environment!!! The Channel Islands harbor is home to many unique wildlife as well as dolphin and whale breeding grounds. By expanding this harbor you will be affecting the wonderful ecosystem we have off our coast. We have already miserably failed them by fracking off shore causing several oil spills and poisoning the precious wildlife. We are TIRED of capitalists doing things that will benefit their pockets rather than help us advance as a society in a green way. We truly hope you don't pass this. If not I will loose even more hope in humanity. Please!!

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Jelitza Gutierrez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Tasi Meyer <tasimeyer@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 10:20 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and

environmental justice!

Sincerely,

Tasi Meyer



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Elizabeth Sarabia <sarabiaeizabeth05@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 9:24 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Elizabeth Santos



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Marissa Arellano' via Planning <planning@oxnard.org>
Reply-To: Marissa Arellano <marissa_arellano3@yahoo.com>
To: planning@oxnard.org, Sofi@causenow.org

Fri, Oct 14, 2022 at 10:32 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Marissa Arellano

Sent from Yahoo Mail for iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Moises Almaguer <moises.almaguer@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 10:47 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Moises Almaguer



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Donna Marie Domingo <donna.marie.almaguer@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 10:48 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Donna Almaguer



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

tatum becker <tatumbecker3@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 11:01 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Tatum Becker



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

dorismogalesmiguel@umail.ucsb.edu <dorismogalesmiguel@umail.ucsb.edu>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 11:09 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit.Oxnard deserves clean air and environmental justice!

Sincerely,

Doris Nogales Miguel



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Sandra Arroyo' via Planning <planning@oxnard.org>
Reply-To: Sandra Arroyo <arroyo_sandries@me.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 11:13 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sandra Arroyo



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Alexandra Guerrero <guerrero.alexandra15@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 12:16 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Alexandra Guerrero



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Ruby Fletcher <rubyfletcher4@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 12:22 PM

Dear Oxnard Planning Commissioners,

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Sincerely,
Ruby Fletcher



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

kmiyashiro@roadrunner.com <kmiyashiro@roadrunner.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 1:29 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Kai Miyashiro



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Alex M <alex597gmartinez@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 1:55 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Alejandro Gutierrez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

ARMY 875 <805rachelr39@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 2:49 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Rachel Rivera



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'saidi garcia' via Planning <planning@oxnard.org>
Reply-To: saidi garcia <saidigarcia@icloud.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 3:52 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Saidi Garcia

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Beatriz Basurto <bassurtobeatriz@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 4:46 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Beatriz Basurto



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Christina Zubko <czubko@roadrunner.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 5:01 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Christina Zubko
Friends of Ormond Beach

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Alicia Meyer <alicialmeyer@gmail.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 5:23 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Alicia Meyer

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Hanna Dangiapo <hannadangiapo@gmail.com>
To: planning@oxnard.org
Cc: sofi@causenow.org

Fri, Oct 14, 2022 at 5:45 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Hanna Dangiapo



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

2 messages

'Eileen Castro' via Planning <planning@oxnard.org>
Reply-To: Eileen Castro <eileen_c357@yahoo.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 5:50 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Eileen Castro

'Abishai Ramirez' via Planning <planning@oxnard.org>
Reply-To: Abishai Ramirez <thechoosen98@icloud.com>
To: planning@oxnard.org

Fri, Oct 14, 2022 at 6:34 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

2 messages

'David Caskey' via Planning <planning@oxnard.org>
Reply-To: David Caskey <dlcaskey@icloud.com>
To: planning@oxnard.org

Sat, Oct 15, 2022 at 9:11 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely

David Caskey, Port Hueneme

'Deborah Morales' via Planning <planning@oxnard.org>
Reply-To: Deborah Morales <debbielol.dm@icloud.com>
To: planning@oxnard.org

Sat, Oct 15, 2022 at 11:06 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard

residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Deborah Morales

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Marie Martin <marierm68@gmail.com>
To: planning@oxnard.org

Sun, Oct 16, 2022 at 10:45 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Most importantly this area is adjacent to an important marine mammal and threatened bird species sanctuary. The air and light pollution that would be created by this would be detrimental to the birds population and reduce their breeding and hunting grounds. This is not the place to store a bunch of cars.

Sincerely,
Marie Martin

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote YES on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Rick Kehoe <rickkehoe@sbcglobal.net>
To: planning@oxnard.org

Sun, Oct 16, 2022 at 11:55 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to accept the Final EIR (FEIR) and vote YES on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings and you have.

It has been submitted to the record to the Port of Hueneme and We want these long-term good paying jobs in our community.

Sincerely,

Patrick "Rick" Kehoe
576 Island View Circle
Port Hueneme, 93041



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Amanda <amandaekay@gmail.com>
To: planning@oxnard.org

Sun, Oct 16, 2022 at 5:31 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Amanda



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Luis Morales Jr <morales.ljr@gmail.com>
To: planning@oxnard.org

Sun, Oct 16, 2022 at 8:10 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Luis Morales Jr.

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Meghan M <megmyday23@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 10:24 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Meghan



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Madeline Oliver <madeline.c.oliver@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 10:26 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Madeline Oliver



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Adam Kaiserman <adamkaiserman@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 10:30 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Adam Kaiserman



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Kristen Klitgaard <kristenklitgaard@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 10:50 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Kristen Klitgaard, Ventura county resident



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Darian Rubow <darianrrubow@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 11:00 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Darian Rubow
She/Her
darianrrubow@gmail.com
949-975-9629



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

K <katelnornakelly@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 11:09 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

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The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Kate Kelly



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme %20Temporary Outdoor Vehicle Storage Facility Project

1 message

'tim.katz@yahoo.com' via Planning <planning@oxnard.org>

Mon, Oct 17, 2022 at 11:23 AM

Reply-To: "tim.katz@yahoo.com" <tim.katz@yahoo.com>

To: "planning@oxnard.org" <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Tim Katz



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme -Temporary Outdoor Vehicle Storage Facility Project

1 message

Ched Myers <chedmyers@bcm-net.org>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 12:03 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Ched Myers & Elaine Enns

[Bartimaeus Cooperative Ministries](#) (on [Facebook](#))

PO Box 328, Oak View, CA 93022 805-836-1227

[ChedMyers.org](#)

[watersheddiscipleship.org](#) (on [Facebook](#))

[radicaldiscipleship.net](#)

[Center and Library for the Bible and Social Justice](#) (on [Facebook](#))

10/18/22, 5:54 PM

City of Oxnard Mail - [Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme -Tem...

For *Healing Haunted Histories: A Settler Discipleship of Decolonization* go [here](#).

Find resources at our [Bartcast](#) and [YouTube](#) pages.

We live and work on unceded Chumash territory in the Ventura River Watershed.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Molly Foytek <molly.foyttek@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 12:25 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

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The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice! Please do the right thing for the earth, Oxnard, and all those who live in it.

Sincerely,
Molly Foytek



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 PUBLIC COMMENT: Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Karen Rice <karen@waycollective.org>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 12:28 PM

Dear Oxnard Planning Commissioners,

As a pastor, local resident, and someone working toward racial justice, I urge you to **reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion**. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

This project is not truly temporary, since the FEIR fails to say what the **long term plans** are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. Unacceptable.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks.

This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

This FEIR fails to accurately examine the negative impacts of this project. **I'm asking that you do not certify the FEIR and deny the Special Use Permit.** Oxnard deserves clean air and environmental justice!

Sincerely,
Karen Rice

--

Dr. Karen Rice
Way Collective Co-Curator
[Pronouns](#): she/her/hers



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Mari Rose Taruc <mrtaruc@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 12:48 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Mari Rose Taruc



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Roberto Gonzalez <roberto.gonzalez@mixteco.org>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 1:28 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Roberto Gonzalez

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Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Alisann Tolosa' via Planning <planning@oxnard.org>

Mon, Oct 17, 2022 at 2:28 PM

Reply-To: Alisann Tolosa <alisannt@icloud.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners, I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Jennifer Martinez <jennifermartinez040@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 4:03 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Jennifer Martinez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Mariana <mparedes15@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 6:30 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Mariana Harms



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Agle Rosales <aglerosales1@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 6:36 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Agle Rosales

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Hedy <juarezhedy@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 6:39 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

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Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Hedy Juarez

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project1 message

Yoana Ibanez <yoana_ibanez1@my.vcccd.edu>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 6:40 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

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Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Kyle De La Torre' via Planning <planning@oxnard.org>
Reply-To: Kyle De La Torre <kyle_delatorre2@yahoo.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 6:47 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Kyle Emmanuel De La Torre



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

John Sarley <john@biggbusiness.com>

Mon, Oct 17, 2022 at 7:00 PM

To: "planning@oxnard.org" <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

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Sincerely,

Get [Outlook for Android](#)



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

chiarra <chiarra.limos@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 7:21 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Chiarra Limos



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Ignacio Benitez <nachobenitez76@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 7:50 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Ignacio



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Maria Navarro <maria.navarro0805@gmail.com>
To: planning@oxnard.org

Mon, Oct 17, 2022 at 9:09 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Maria Navarro



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Kari Aist <mom4mykids@gmail.com>
To: planning@oxnard.org

Tue, Oct 18, 2022 at 3:47 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and must prioritize transitioning their cargo fleet to zero emission trucks ASAP.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and that you deny the Special Use Permit.

Oxnard deserves clean air and environmental justice!

Sincerely,

Kari Aist

8892 Tacoma Street, Ventura, 93004

805-323-6063

--

Pronouns: she, her

805-323-6063

8892 Tacoma Street, Ventura 93004

"Believe with all your heart that how you live your life makes a difference" - Colin Beavan



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

LIZ CAMPOS <lizcamposventura@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 11:50 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city.

It is beyond unethical to bill this as a "temporary outdoor vehicle storage project", particularly when the State, the CPUC and CARB are working on an electric truck transfer stste for the port region which is designed to protect the wild life, insect and lower species which this project will exterminate. Extinction is permanent, not temporary. Said project as described will also likely destroy the local air quality and cause rapid changes in the marshland/brackish water filtration sysyem, dry the underlying and border soils, and never be removed.

The same project was proposed on County land approximately 4 years ago. That proposal fail because the serious environmental consequences far outweigh any benefit to the City. Even the port environmental services officers attended commission meetings to argue against the idea.

The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Because the FEIR fails to accurately examine the negative impacts of this project I'm write, demanding that you do not certify the FEIR and deny the Special Use Permit.

Oxnard deserves clean air and environmental justice!

Sincerely,

Liz Campos



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project1 message

Anne Lamar <annelamar592@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 1:26 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Anne Lamar



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Gene Rubin <generubinaudio@earthlink.net>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 1:32 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Gene Rubin

805-340-2270

All the really good stuff is at: <https://generubinaudio.com/>



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Shellie Rothstein' via Planning <planning@oxnard.org>
Reply-To: Shellie Rothstein <shellier@me.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 1:57 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Shellie Rothstein

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Ivan Corona' via Planning <planning@oxnard.org>

Wed, Oct 19, 2022 at 2:21 PM

Reply-To: Ivan Corona <ic891@aol.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Ivan C



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Phil Chandler <philipbchandler@earthlink.net>
To: planning@oxnard.org
Cc: sofi@causenow.org

Wed, Oct 19, 2022 at 3:52 PM

Dear Oxnard Planning Commissioners,

This is written to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR inaccurately describes the CEQA project used as the basis for the FEIR. CEQA requires an accurate project description. Impacts to air quality and sub-PM10 pollution from diesel transport trucks were not properly evaluated. Accumulation of multi-year deposition of the emitted particulates on greenscape and hardscape surfaces of neighboring properties and in nearby coastal sensitive wildlife areas is neglected. Both direct inhalation and depositional impacts of emissions requires adequate evaluation in human health and eco-risk still assessments as part of the FEIR. The surface water impacts of the project are not adequately evaluated. Capture and recycle scarce water resources that the project requires is not adequately addressed. The FEIR does not consider alternatives to mitigate the project's pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to address long term plans are for Port Storage after the 3-5 years that are known to be under consideration. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to construct a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road. The FEIR does not honestly address this nor the additional resources that will ultimately be required. Approval of this project without inclusion of the existing long-term plans for Port storage that appear to be concealed from consideration is inappropriate under CEQA..

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be simultaneously true. It appears that this project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. This is quite insubstantial and is not a satisfactory basis for approval of the FEIR.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is demonstrably the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime. An adequate Human Health Risk Assessment (HHRA) must be completed before the FEIR is approved.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. In order to satisfy CEQA requirements, project alternatives that need serious consideration in a proper FEIR should include options like using existing space in the navy base and the use of zero emission trucks to mitigate the diesel exhaust impacts to human health and the environment. If the Port of Los Angeles can make clean air commitments to its harbor area why can't this Port do the same?

This FEIR fails to adequately examine the negative impacts of this project. I'm asking that you do not certify this FEIR and deny the Special Use Permit until all of the impacts are considered and properly addressed. Residents of Oxnard deserve clean air

Sincerely,
Philip Chandler



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Nancy Ortega' via Planning <planning@oxnard.org>

Wed, Oct 19, 2022 at 3:57 PM

Reply-To: Nancy Ortega <emailortega@icloud.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Ms. Ortega



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Lisa Wade Devine <lwadedevine@gmail.com>
To: planning@oxnard.org

Thu, Oct 13, 2022 at 7:59 PM

Dear Oxnard Planning Commissioners,

I am an Oxnard resident writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit.

Oxnard deserves clean air and environmental justice!

Sincerely,

Lisa Devine

Oxnard resident



Solis, Rogelio <rogelio.solis@oxnard.org>

Fwd: Port of Hueneme Temporary Vehicle Storage Project Public Hearing

1 message

Dobrowalski, Jay <jay.dobrowalski@oxnard.org>

Tue, Oct 18, 2022 at 11:54 AM

To: "Loera, Miriam" <miriam.loera@oxnard.org>, Rogelio Solis <rogelio.solis@oxnard.org>

Hi Miriam and Roy,
 Please include this letter with the other PC comments regarding the Port Project.
 This letter should be the first of the bunch.
 Thanks,

Jay Dobrowalski | Planning Supervisor
Community Development Department
 214 S C Street | Oxnard, CA 93030
 O: 805.385.3948 | F: 805.385.7417
www.oxnard.org

Effective February 14, 2022, the Service Center and all public-interfacing City buildings will be open to the public.

Online services remain available through our online portal at www.oxnard.org/planning

- General inquiries should be sent via email to Planning@oxnard.org.
- For [new applications](#), email us at planning@oxnard.org. Large projects can be shipped with prior authorization. Smaller projects may be submitted via email.
- For existing applications, contact your assigned Case Planner by direct email.

For the most up to date information on COVID-19 please visit <https://www.venturacountyrecovers.org/>

----- Forwarded message -----

From: **Linda Daly-Calderon** <lindaly21@yahoo.com>

Date: Tue, Oct 11, 2022 at 4:09 PM

Subject: Re: Port of Hueneme Temporary Vehicle Storage Project Public Hearing

To: Dobrowalski, Jay <jay.dobrowalski@oxnard.org>

Thank you for sending this notice. I am not sure I can make it as I mostly do not drive at night now due to cataracts on both eyes. I can see but don't feel as comfortable with the night driving so try to avoid. We'll see. Keep me in the loop anyway please. Wish we could have some of these meetings with a daytime part also for us seniors.

Linda Gray Calderon

On Monday, October 10, 2022 at 04:59:57 PM PDT, Dobrowalski, Jay <jay.dobrowalski@oxnard.org> wrote:

Dear Interested Party:

You are receiving this notice because you registered to receive notice regarding public hearings or you submitted comments regarding the environmental document for the Port of Hueneme Temporary Vehicle Storage Project.

The project has been scheduled for a Planning Commission hearing on October 20, 2022 at 6:00pm.

The Final Environmental Impact Report (EIR), which includes written responses to comments received regarding the draft document, is available from the Planning Division website:

<https://www.oxnard.org/city-department/community-development/planning/environmental-documents/>

Copies of the Final EIR are available for review at the following City locations:

City of Oxnard Planning Division offices at [214 South C Street](#), Oxnard, CA 93030;

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The Planning Commission hearing documents will be available from the City website one week prior to the hearing:

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I hope you find this information helpful.

Thank you for your participation in the planning process.

Sincerely,

Jay Dobrowalski | Planning Supervisor

Community Development Department

[214 S C Street](#) | Oxnard, CA 93030

O: 805.385.3948 | F: 805.385.7417

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Solis, Rogelio <rogerio.solis@oxnard.org>

Fwd: Port of Hueneme Temporary Vehicle Storage Project Public Hearing

1 message

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<https://www.oxnard.org/city-meetings/>

I hope you find this information helpful.

Thank you for your participation in the planning process.

Sincerely,

Jay Dobrowalski | Planning Supervisor

Community Development Department

[214 S C Street](#) | Oxnard, CA 93030

O: 805.385.3948 | F: 805.385.7417

www.oxnard.org

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Solis, Rogelio <rogelio.solis@oxnard.org>

Fwd: VCTA Supports Project 34

1 message

Pearson II, Joe <joe.pearson@oxnard.org>

Wed, Oct 19, 2022 at 1:16 PM

To: Rogelio Solis <rogelio.solis@oxnard.org>, "Dobrowalski, Jay" <jay.dobrowalski@oxnard.org>

Port Project Comment.

Best,

Joe Pearson II, AICP | Planning and Environmental Services Manager**Community Development Department**

214 S C Street | Oxnard, CA 93030

O: 805-385-8272

Joe.Pearson@Oxnard.orgwww.oxnard.org

----- Forwarded message -----

From: **Lai, Dee** <dee.lai@oxnard.org>

Date: Wed, Oct 19, 2022 at 10:42 AM

Subject: Fwd: VCTA Supports Project 34

To: Joe Pearson II <Joe.Pearson@oxnard.org>Cc: City Clerk <cityclerk@oxnard.org>

Hi Joe,

Please see the below email below pertaining to Jay's project.

Regards,

Dee Lai, Assistant City Clerk

City of Oxnard

300 West Third Street, 4th Floor

Oxnard, CA 93030

Office: (805) 385-8200

dee.lai@oxnard.org

----- Forwarded message -----

From: **Ventura County Taxpayers Association** <info@vcta.org>

Date: Tue, Oct 18, 2022 at 6:03 AM

Subject: VCTA Supports Project 34

To: <cityclerk@oxnard.org>

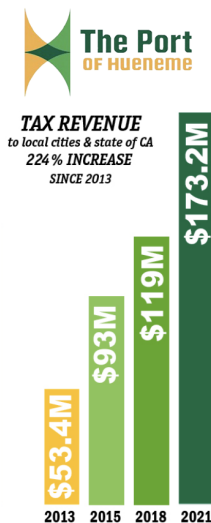


Investigate, Advocate, and Inform Citizens on Critical Issues Facing Ventura County

VCTA Supports The Port of Hueneme's Project 34



The Port of Hueneme is an often-forgotten contributor to Ventura County's tax revenue. Last year, the Port of Hueneme contributed \$173.2 million to local cities and the state of California.



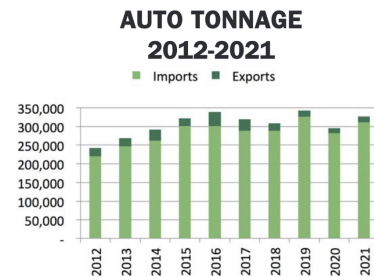
The Port of Hueneme is the fourth largest in California and the only deep-water port between Los Angeles and San Francisco. It is the "greenest" port in the United States. And during the COVID-19 pandemic, the Port of Hueneme had a unique market position as the uncongested port on the West Coast.

The Ventura County Taxpayers Association applauds the Port because it is completely self-supporting. It uses no tax dollars to maintain its operations.

The Port specializes in the niche markets of fresh fruit, project cargo, automotive and liquid bulk cargoes. Over 46% of the Port's annual cargo value comes from the automotive trade.

Because of the high reliance on the auto trade, the Port of Hueneme's Emissions Reduction and Job Creation Project should appeal to Ventura County residents.

The project aims to use privately owned land zoned for light industry as a temporary outdoor overflow parking lot. The goal is to reduce and consolidate reliance on off-port storage locations for automobiles shipped into the port. The proposed project will take three to five years to complete.



To achieve their goal, the Port of Hueneme needs a Special Use Permit from the City of Oxnard. The Oxnard Planning Commission will hold a meeting on October 20, 2022, to discuss the matter.

The project will benefit Ventura County in a variety of ways. Project 34, as the Port refers to it, will create port-related new jobs for the life of the project. Also, it will add \$2.2 million in local salaries per year.



Did you know?

» The Port of Hueneme is California's 4th largest container port.

» The Port of Hueneme is the greenest port in the United States.

» The Port of Hueneme is the backbone of Ventura County's economy.

The Port ensured the project was consistent with the city's General Plan. The project will improve the vacant lots proposed for temporary parking in keeping with the local environment. And once the project is over, the site will be a gateway park for the City of Port Hueneme.

We see no reason the City of Oxnard should deny a Special Use Permit to the Port of Hueneme. To do so would harm the local economy and degrade the local environment.

To learn more about the project, visit [GreenProject34](#)

To learn more about the VCTA, visit our website at www.vcta.org, and subscribe to our [newsletter](#).



BECOME A MEMBER

The Gene Haas Foundation is supporting the Ventura County Taxpayer Foundation's mission to grow its membership base through the



end of 2022. Specifically, they have committed to match, dollar-for-dollar, on every new membership to VCTF!

By choosing to support our Educational Mission through VCTF, Business & Founding Members gain access to resources, as well as opportunities to increase brand awareness through member recognition, events, and sponsorship opportunities.

VCTF Members will also enjoy benefits such as free or discounted tickets to our special events and discounts on sponsorship fees.

JOIN VCTF

SPECIAL EVENTS

SAVE THE DATE

★ ★ ★ ★ ★

NOVEMBER 30, 2022
5:00 - 7:30 PM

VENTURA COUNTY
OFFICE OF EDUCATION
5100 ADOLFO RD, CAMARILLO

IN PERSON & LIVE ONLINE

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STATEOFTHECOUNTY.VENTURA.ORG

2022

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a Project of Californians for Energy Independence

WSPA

REGISTER

VCTA, We are your eyes on Government!

VCTA debuted our 2021/2022 Commercial at the Ventura State of the County on September 30, 2021.



Please check it out by clicking on the image or this link: [VIDEO HERE](#)

About the Ventura County Taxpayers Association (VCTA)

The Ventura County Taxpayer's Association (VCTA) is a non-partisan 501(C)(4) organization emphasizing issues that affect Ventura County.

We inform taxpayers, promote the wise use of public funds, oppose waste, advise public officials regarding issues of concern to taxpayers and recommend positions that will best serve the taxpayers' interests.

VCTA has been looking out for the interests of taxpayers in Ventura County since 1954. VCTA believes in efficient, effective and transparent government.

Ventura County Taxpayers Association
PO Box 3878
Ventura, CA 93006
info@vcta.org | www.vcta.org

VCTA | vcta.org



Ventura County Taxpayers Association | PO Box 3878, Ventura, CA 93006

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Sent by info@vcta.org powered by



Try email marketing for free today!

October 19, 2022

Via Email and Federal Express

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org
planning@oxnard.org
cityclerk@oxnard.org

Re: Comments on The Final Environmental Impact Report for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We are in receipt of the Planning Department's Final Environmental Report, and respond here with comments submitted by Central Coast Alliance United for a Sustainable Economy (CAUSE), Natural Resources Defense Council, Earthjustice and the Wishtooyo Chumash Foundation. We submit the documents listed below on the enclosed thumb drive via FedEx, and available through this OneDrive link [4527 - Port of Hueneme Comments - Sources Shared on October 19 2022*](#) via email. These documents contain key references cited in our comments, which we ask you to consider in conducting your review and include in the administrative record associated with this matter.

1. Attachment 1: Dobrowalski July 13th Email

This email is from Mr. Jay Dobrowalski, the Senior Planner for the City of Oxnard Planning Division, acknowledging receipt of our February comment letter, and noting that the letter and all supporting documents would be entered into the record.

2. Attachment 2: Commenters' October 11, 2022 Errata Request

This email is from Commenters requesting an erratum after realizing the supporting documents had not been entered into the record as part of the FEIR documentation.

3. Attachment 3: Previous Comment Letters and Attachments

February 14, 2022 Initial Comment Letter (and attachments) and July 1, 2022 Supplemental Comment Letter (and attachments).

* The following email addresses have access to this folder: jay.dobrowalski@oxnard.org, planning@oxnard.org, cityclerk@oxnard.org. Please email Radhika Kannan at rkannan@earthjustice.org or Fernando Gaytan at fgaytan@earthjustice.org if there are any access issues.

- 4. Attachment 4: SWAPE Reply Report and Supportive Document**
- 5. Attachment 5: Dr. Smallwood Reply Letter and Supportive Documents**
- 6. Attachment 6: 2022 Automotive Logistics News Article on Electric Car-Carrier Trucks**

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtooyo Chumash Foundation

October 19, 2022

Via Email and Federal Express

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org
planning@oxnard.org
cityclerk@oxnard.org

Re: Comments on The Final Environmental Impact Report for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We submit these comments on the Final Environmental Impact Report (“FEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”).

The FEIR fails to address several fundamental deficiencies in the Draft Environmental Impact Report (“DEIR”) that commenters had previously identified. Despite the submission of over 200 comments on the DEIR, the City of Oxnard Planning Division (“OPD” or “City”) has only made minor revisions to its analysis in finalizing the FEIR.¹ Even when confronted with new knowledge, facts, and expertise, including record evidence from the Oxnard Harbor District’s (“OHD” or the “Port”) internal documents, the City has refused to reevaluate its mistaken analysis. Consequently, the FEIR is legally deficient and unfit for certification under the California Environmental Quality Act (“CEQA”).

I. The Record Must Include Commenters’ Submitted Evidence on July 1, 2022

Following the close of the public comment period for the DEIR in February 2022, commenters became aware of new evidence through documents produced in response to a Public Records Act request to the OHD. These documents contained substantial relevant information for decisionmakers to be aware of ahead of deciding whether to approve this proposal. Furthermore, on March 21, 2022, the City hosted a Virtual Community Workshop with presentations from the OHD discussing its plans for the 34-acre Vehicle Storage Site currently under review. At the conclusion of the Virtual Community Workshop, OPD invited additional

¹ Final Environmental Impact Report, Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project, SCH No. 2020069039 (Sept. 2022) (hereinafter “FEIR”).

written comments from the public concerning the proposed Project and the presentation by the Port. In line with this invitation, and to ensure that the Commissioners and other decisionmakers were provided with information necessary to make an informed decision, commenters submitted supplemental comments on July 1, 2022, in addition to the comments submitted on February 14, 2022.

The City of Oxnard Planning Division has acknowledged receipt and noted that the letter and all supporting documents would be entered into the record. The confirmation email is attached hereto as Attachment 1, Dobrowalski July 13, 2022 Email. Although the July 1 letter appears in Attachment F of the Staff Report (along with other letters submitted after February 14, 2022), the supporting evidence does not. When commenters realized that the supporting documents had not been entered into the record as part of the FEIR documentation, commenters sent an email to Mr. Dobrowalski requesting an erratum. This request is attached hereto as Attachment 2, Commenters' October 11, 2022 Errata Request. This erratum has not been filed. As Planning Commissioners are tasked with deciding whether to approve this controversial project, they should have access to the entire record. In an abundance of caution, we are attaching the July 1, 2022 letter, as well as the February 14th letter, and all supporting documents to each of these comments as Attachment 3, Previous Comment Letters and Attachments.

Commenters request that the Commissioners strongly consider both the July 1, 2022, supplemental letter, and all supporting evidence in deciding this permit. We realize that this is a significant amount of information to review in a short amount of time which is also why we previously asked for the Commission's decision to be delayed for 30 days until the Commissioners have had an opportunity to hear from the public and have full access to the entire record in this considerable matter.

II. The FEIR Fails to Adequately Respond to Comments

When comments raise significant environmental issues through expert declarations or evidence-based assertions, the FEIR's response must provide a reasoned, good-faith analysis and "describe the disposition of significant environmental issues raised."² Comments must be "addressed in detail giving reasons why specific comments and suggestions were not accepted."³ Detailed responses are required to "ensure that the lead agency will fully consider the environmental consequences of a decision before it is made."⁴ Generally, the level of detail in the response must match the level of detail in the comment.⁵

"[C]onclusory statements unsupported by factual information" are never an adequate response.⁶ Yet, such conclusory statements are precisely what the City has proffered in its FEIR. Firstly, other than the Vehicle Miles Traveled ("VMT") analysis, the City has not made any substantive changes to the DEIR. Mere editorial changes do not rise to the level of fully engaging with public comments. Secondly, and more egregiously, while commenters have

² Cal.Code Regs., tit.14, §15088(c).

³ *Id.*

⁴ *City of Long Beach v. Los Angeles Unified Sch. Dist.* (2009) 176 Cal.App.4th 889, 904.

⁵ *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.

⁶ Cal.Code Regs., tit.14, §15088(c); *City of Maywood v. Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 391.

provided detailed explanations including several citations to documents produced by the OHD, the City's response to these detailed and well-supported objections has been to overwhelmingly refer commenters to "Global Responses." *See e.g.*, FEIR Comment Response 206-15; 206-24 (the response containing nothing more than "Please refer to Global Response GR-3, Relation of Project to the Multimodal Logistics Park and Global Response GR-8, Cumulative Projects.") At the same time, no additional details can be found in these Global Responses. These Global Responses do not grapple with OHD's emails, grant applications, internal memos and other logical inconsistencies pointed out by the commenters. This failure to engage extends to most responses to the comments.

As such, the City has failed in its CEQA obligation to provide detailed reasoning for why commenters' suggestions were not accepted. Overall, the City has not shown a good faith effort to consider public input.

III. The FEIR Improperly Piecemeals the Analysis of the Whole Project and Fails to Analyze the Impacts of Important Project Components

The FEIR's flawed Project Description violates the fundamental goal of CEQA, which is to provide complete and accurate information about the environmental impacts of a proposed project before it is approved. The City claims that the design of the Project is meant to "[r]educe and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations."⁷ The FEIR also notes in the Project Description that the 34-acre outdoor vehicle storage facility is meant to be temporary – for a maximum of 5 years.⁸ Yet, the FEIR misstates the true scope of the 34-acre site, leading to an incorrect analysis regarding the design of the Project.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements

The FEIR attempts to re-write the CEQA process for what must be considered in the Project Description.

The law requires that an EIR must include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.⁹

“[T]he environmental review accompanying the first discretionary approval must evaluate the impacts of the ultimate development authorized by that approval. ... Even though further discretionary approvals may be required before development can occur, the agency's environmental review must extend to the development envisioned by the initial approvals. It is irrelevant that the

⁷ FEIR, Section 3.5, p. 3-15.

⁸ FEIR, Section 3.6, p. 3-15.

⁹ *Laurel Heights Improvement Ass'n v. Regents of Univ. of California* 47 Cal. 3d 367, 396 (1988), as modified on denial of reh'g (Jan. 26, 1989).

development may not receive all necessary entitlements or may not be built. Piecemeal environmental review that ignores the environmental impacts of the end result will not be permitted.”¹⁰

CEQA mandates “that environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences.”¹¹

The FEIR’s failure to recognize the 250-acre site stems from its erroneous interpretation of CEQA requirements. The FEIR claims that the 250-site does not need to be integrated in this project description and no environmental analysis needs to be conducted because: (1) “the City of Oxnard has not received an application for proposed development of a 250-acre site”¹²; and (2) a 250-acre parcel would require annexation which would be subject to future environmental review.¹³

Whether a project is a “reasonably foreseeable consequence of the initial project” does not depend upon whether the City has received an application for it or whether that project might trigger additional CEQA review. Indeed, such a requirement is nowhere to be found in the City’s or the State’s CEQA Guidelines. The City cites to no authority for these “requirements” for which projects need to be included in its project description.¹⁴ These additional elements are created out of whole cloth by the City to avoid re-writing the project description to include what is *clearly* a foreseeable project. As described above, the City cannot use the fact that the entitlement will be subject to further environmental review as an excuse to avoid integrating the extension in its analysis currently.

B. The FEIR’s Conclusions Regarding the 250-Acre Site Are Not Supported By Substantial Evidence.

The City concludes that because “the future development of a 250-acre site is unspecified and uncertain, the City has determined that potential future development of a 250-acre site is not reasonably foreseeable and is speculative.”¹⁵ However, this conclusion flies in the face of the wealth of documents presented to the City demonstrating how the City was well aware of the depth of the planning for the 250-acre site.

As commenters have highlighted in their previous letters, several documents from the Port (including new documents released in response to commenters’ Public Records Act request) indicate that beginning in 2018, the Port has started drafting conceptual plans, pursuing financial arrangements with customers, hiring consultants related to the project, considering the 250-acre project for grants, and designating the site as an Opportunity Zone.¹⁶ Yet, in response, the FEIR

¹⁰ See Kostka, et al., *Practice Under the California Environmental Quality Act*, § 6.52, p. 298.

¹¹ *Bozung v. LAFCO*, 13 Cal.3d 263, 283-84 (1975); *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1452 (1989).

¹² FEIR, Section 12.4.2, p. 12-9.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Attachment 3, February Comment letter, pp. 9-11 (hereinafter “Commenters’ February Letter”); *see also* Attachment 3, July Comment Letter, pp. 4-5 (hereinafter “Commenters’ July Letter”).

Global Responses makes no effort to address these documents. The City's response is entirely inadequate.

First, the FEIR selectively ignores evidence that the Port has coordinated with the City a more permanent solution to the auto storage issue through the 250-acre site. The Port produced a document titled "Collaboration Call with City of Oxnard" with the goal of "Partnership for Economic Development."¹⁷ The document has an "ongoing deadline" and is supplemented with information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.¹⁸ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that "[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail."¹⁹ Thus, the City was well aware that the 250-acre site was a reasonably foreseeable extension of the 34-acre site.

Second, the Global Response to Comments regarding piecemealing the 250-acre site, is primarily devoted to explaining how the 250-acre Multimodal Logistics Park site "was *conceptual* at the time of the Notice of Preparation and is *one possible concept* for potential future development" (emphasis added).²⁰ But the Port's communications to landowners, the Memoranda of Understanding ("MOU") and Letters of Intent ("LOI") between GLOVIS and the Port, and the funding applications demonstrate that concrete steps have indeed been taken to bring the project into fruition and render the 250-acre site very far from merely "conceptual."²¹

Third, the FEIR's Project Description fails to consider the timescale of the Project. It makes no sense to assume, as the FEIR does, that given the serious land deficits (over 300-acres) the Port is facing, that there will be no further land use planned for automobile storage once the five-year temporary site expires.²² The FEIR summarily dismisses these land deficits by referring commenters to its superficial Global Responses.²³ This is not substantial evidence to support a conclusion that the 250-acre site is speculative. By postponing review of this component, the FEIR improperly bifurcates the project in violation of CEQA, and in doing so, severely underestimates the impact on human health and the environment.

¹⁷ Commenters' July Letter, p. 8 (citing OHD, Collaboration Call with City of Oxnard at p. 2).

¹⁸ *Id.* (Commenters also noted that "Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.")

¹⁹ Commenters' July Letter, p. 8 (citing City of Oxnard & The Port of Hueneme: Partners in Economic Development, *Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard.*)

²⁰ FEIR, Section 12.4.2, Global Response 3, p. 493.

²¹ Commenters' July Letter, pp. 6-8 (citing Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019); *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020); Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020); OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing)).

²² Commenters' February Letter, p. 9; Commenters' July Letter, p. 9 (citing Oxnard & POH Commercial Viability Report, p.1. PROD-PHCN0000828).

²³ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-15, p. 12-1162.

IV. The FEIR's Project Description is Inaccurate and Misleading and Impedes Meaningful Public Review

As stated in prior comments, the City has disingenuously omitted analysis of the broader Port logistics expansion that this Project represents. The City has strained to create a project description that artificially limits the scope of the Project to the 34-acre site, despite substantial evidence demonstrating a much broader plan to increase storage capacity in the region, including at the 250-acre Multimodal Logistics Center. In doing so, the City has produced a FEIR with a flawed project description under CEQA that contradicts its own objectives and fails to offer the Planning Commission the information necessary to properly assess the impacts of this project. This is discussed further in Section V.

The City simply ignores the multiple comments submitted concerning the inadequacy of the project description itself—more specifically, the incompatibility of the Project's objectives with the alleged "temporary" nature of the storage site.²⁴ One of the key objectives listed for this Project is to "reduce and consolidate" reliance on off-port satellite storage locations.²⁵ Yet, the City maintains that the project will be temporary, stating: "[t]he project proposes a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. Future expansion of Port facilities based on the project is speculative at this time."²⁶ The FEIR fails to reconcile this inherent conflict nor explain how the Project, allegedly limited to a maximum of 5 years, will actually result in the consolidation of existing sites to meet the Project's objectives.

As we stated in our July 1, 2022 comment letter, the City has failed to explain how the Project will be both "temporary" and fulfill its objectives to consolidate off-port storage.²⁷ There are no details, for example, for how the site will be transitioned post-Project but continue to serve the consolidation objective and meet the Port's known need for more land to accommodate its expansion.²⁸ Moreover, if this project is truly temporary, it would fail to satisfy the stated objectives—making Alternative One: No Project/No Build by far the environmentally superior alternative²⁹ that the City should adopt. The rejection of this alternative in the FEIR is based on deficient and incomplete analysis.

The inadequacy of the project description means that the Planning Commission is being called to make a decision "in the dark"—without the necessary information to fully appreciate the full scope of this Project or its impact. The approval actions before the Commission, therefore, involve much more than a straightforward EIR approval. Here, Planning

²⁴ See Commenters' July Letter

²⁵ FEIR, Section 3.5, p. 3-15.

²⁶ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-20, p. 12-1163.

²⁷ Commenters' July Letter, pp. 9-10.

²⁸ *Id.*

²⁹ The FEIR also identified Alternative Two: Two Existing Off-Port Vehicle Storage Locations as the environmentally superior option among the Project alternatives. FEIR, Section 6.9.4, pp. 6-16. This conclusion is as flawed as the rejection of the No Project/No Build alternative, as the analysis of this alternative is not only incomplete, but also fails to incorporate feasible mitigation measures to address air quality impacts, such as the implementation of zero-emission technology. See Commenters' February Letter, p 69; FEIR, Section 6.7, pp. 6-5 to 6-10.

Commissioners are not simply being asked whether to certify the FEIR and approve a Special Use Permit for a single project. Despite how the Planning Division has decided to reframe this project as a “Temporary” Vehicle Storage Facility to make it seem benign, this Project sets the stage for an unprecedented expansion of Port activities into the very neighborhoods that have already borne the brunt of air pollution, traffic, noise, and lack of greenspace and coastal access. This is not simply a storage lot; it will hasten the expansion of commercial and industrial activity in the region—an expansion for which we do not know the true extent of environmental impact. Because of these flaws in the project description, the FEIR remains inadequate as an informational document and precludes meaningful public review. It should therefore be rejected in its current form and recirculated for further public review if revised to fix these discrepancies.

V. The FEIR Fails to Consider a Reasonable Range of Alternatives and Improperly Rejects Existing Alternatives

A major function of an EIR is the lead agency’s full assessment of a reasonable range of alternatives stemming from a well-prepared project description and statement of objectives.³⁰ However, where a project description is inadequate or overly narrow—as in the case here—the alternatives analysis risks being equally flawed. As discussed at more length in commenters’ February and July letters,³¹ the project objectives are narrowly tailored in a way that facilitates the City’s improper rejection of alternatives that could offer substantial environmental advantages and avoid worsening air quality and further concentrating industrial uses and harms adjacent to an over-burdened residential neighborhood, while still meeting most project objectives. As a result, the FEIR contains a flawed and incomplete analysis of feasible alternatives and fails as an informational document that facilitates meaningful public engagement. It, therefore, cannot be certified.

The FEIR fails to address the deficiencies in the DEIR’s alternatives analysis. First, the lack of detail provided in the EIR prevents a meaningful public review and a reasonable choice of alternatives.³² For instance, it is impossible to know based on the limited discussion and lack of detailed information provided in the EIR whether there are no feasible alternative sites for car storage that would meet most of the stated objectives.³³ Lead agencies are required to disclose in their EIR their reasons for concluding that no feasible alternative locations exist.³⁴ However, the City’s failure to consider the Navy Base Ventura County (“Navy”) property as an alternative site

³⁰ Cal. Pub. Resources Code, § 21002; Cal.Code Regs., tit.14, § 15124(b); *Laurel Heights Improvement Ass’n v. Regents of the Univ. of California* (1988) 47 Cal.3d 376, 400; *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1163, citing Cal.Code Regs., tit.14, § 15124(b).

³¹ Commenters’ February Letter, pp. 68-83; Commenters’ July Letter, p. 15.

³² See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287 (“Absolute perfection is not required; what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”)

³³ FEIR, Section 1.5, pp. 1-11 to 1-12.

³⁴ Cal.Code Regs., tit.14, § 15126.6(f)(2)(B); see also *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405, as modified on denial of reh’g (Jan. 26, 1989) (“Those alternatives and the reasons they were rejected, however, must be discussed in the EIR in sufficient detail to enable meaningful participation and criticism by the public.” (citations omitted)).

in the EIR and to instead address its feasibility solely in a General Response, violates CEQA and is further evidence of the FEIR's failings as an informational document.

Second, the FEIR continues to apply circular logic to reject alternatives for not lessening project impacts. By failing to carry out the full analysis required under CEQA, the FEIR underestimates the Project impacts. As a result, it comes to the incorrect conclusion that the project would not result in significant or unavoidable impacts and therefore the City has no obligation to consider alternatives. However, as discussed at length in this and other comments, there is substantial evidence that the project will have significant impacts on the environment and public health.

Third, the FEIR improperly conflates the City's jurisdiction with feasibility. Alternatives cannot be rejected simply because they are beyond the lead agency's authority.³⁵ And yet, the City relies on this argument to avoid even considering alternatives raised by commenters. For instance, the City relies on the 34-acre property being privately-owned to conclude that a park alternative is infeasible.³⁶ Similarly, the City refuses to consider the Navy property³⁷ as a feasible alternative in part because it does not have jurisdiction over Navy property.³⁸ This ignores the definition of feasibility under CEQA³⁹ and fails to address the central question of whether the OHD as the project proponent has reasonable access, ownership, or control over alternative sites.⁴⁰ In the case of the Navy property alternative, the close relationship between the OHD and the Navy evidenced by a 2021 Joint Use Agreement demonstrates that it is a viable alternative worth considering. Nevertheless, this goes undiscussed in the FEIR. The City should apply the CEQA definition of feasibility and fully evaluate all reasonable alternative locations⁴¹, including the Navy property.

³⁵ See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286–287 (“[I]t is not appropriate to disregard alternatives simply because the alternative may be beyond the scope of expertise of the agency or because the alternative may require implementing legislation since CEQA was intended to provide a basis for consideration and choice by all branches of government.”)

³⁶ FEIR, Section 12.4.2, p. 12-15.

³⁷ It is disingenuous for the City to claim it is not informed about the Joint Use Agreement between the Navy and the Port given the coverage the agreement received in the local press. See, e.g., Commenters' February Letter, p. 71 (citing Brian J. Varela, Port of Hueneme, Navy Partner to Assist Los Angeles County Port Backlog, Ventura County Star, November 28, 2021, 10:40 a.m.; <https://www.vcstar.com/story/news/2021/11/28/port-hueneme-assist-la-county-ports-through-agreement-navy/8771397002/>).

³⁸ FEIR, Section 12.4.2, p. 12-15.

³⁹ CEQA Guidelines define feasibility as capable of “being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Cal.Code Regs., tit.14, § 15364.

⁴⁰ Cal.Code Regs., tit.14, § 15126.6(f)(1). See, e.g., *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 288 (finding that an alternative to develop a university athletic stadium jointly with the city was properly rejected based on a prohibition to spend funds on a non-university stadium and the city's documented lack of interest in a joint stadium project).

⁴¹ Another such alternative site could include prioritizing the on-dock parking structure for which the OHD has sought federal funding over the past several years, which is intended to store over 7,000 vehicles. Commenters' February Letter, p. 71 (citing Oxnard Harbor District, Economic-Environment Partnership, Slide presentation (undated), Slides 29 and 30); see also <https://maritime.dot.gov/PIDPgrants>. While not all information about this proposal is public, it is apparent that it is not speculative; the Port has hired consultants to study this parking

Finally, the FEIR once again ignores the current availability of zero-emission technology⁴² and GLOVIS' role as a leading regional maker of heavy-duty Class 8 zero-emission trucks in its rejection of the Electric Car Carrier Truck Alternative. During public meetings and in public statements, the OHD frequently highlights its alleged commitment to a zero-emission transition, and yet when an opportunity arrives to make a clear commitment that investment is not even considered or analyzed. In order to begin to address the air quality impacts from the Port on the surrounding community, the OHD must invest in a zero-emission transition and establish near-term milestones to achieve that vision, such as the use of zero-emission car-carriers. In their expert reply to the FEIR, Matt Hagemann and Dr. Paul E. Rosenfeld identify several mitigation measures related to zero-emission technology that the City should consider and evaluate to address air quality impacts from the Project.⁴³

Due to deficiencies described above and in previous letters, the EIR contains an inadequate discussion of project alternatives in violation of CEQA.

VI. Mitigation Measures Offered in FEIR Continue to be Inadequate

Under CEQA, a public agency cannot approve a project if there are “feasible mitigation measures which substantially lessen the significant environmental effects” of the project.⁴⁴ Any potential mitigation measure must be at least partially effective in reducing the significance of the impacts at issue.⁴⁵ The FEIR fails to offer mitigation measures that meet this standard. Since the FEIR does not evaluate the full scope of the Project due to an overly narrow project description and project objectives, it fails to analyze, much less address, the significant impacts that would result from the Project. Given that most mitigation measures in the FEIR went unaltered,⁴⁶ those measures continue to be inadequate and will not substantially lessen the significant environmental effects of the full scope of the Project.

Moreover, the few updates made to mitigation measures for biological resources and cultural and tribal resources in the FEIR continue to fall short of addressing the impacts from the Project. For instance, the addition of a preconstruction wildlife survey to the biological resource mitigation measures will be insufficient in detecting special status species, as discussed in detail by Dr. Shawn Smallwood.⁴⁷ As a result, the FEIR's mitigation measures are deficient, and new measures must be considered following a complete evaluation of the Project's full impacts.

structure proposal. Commenters' July Letter, p. 13 (citing Oxnard Harbor District, Professional Services Agreement (May 26, 2021); and Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021)).

⁴² Commenters' February Letter, pp. 71-83; Commenters' July Letter, p. 15. There are companies working on developing zero-emissions Class 6-8 car carrier trucks and a commitment by the OHD to order and use these carriers could drive additional investments in this type of technology. See Namrita Chow, Electric car carriers promise to pack a punch, Automotive Logistics, access Oct. 17, 2022 at 4:52pm, <https://www.automotivelogistics.media/finished-vehicle-logistics/electric-car-carriers-promise-to-pack-a-punch/42868.article>, attached hereto as Attachment 6.

⁴³ Attachment 4, SWAPE Report, pp. 12-13 (hereinafter “SWAPE report”).

⁴⁴ Cal. Pub. Res. Code § 21002.

⁴⁵ *Sierra Club v. County of Fresno*, (2018) 431 P.3d 1151, 1166.

⁴⁶ Commenters' February Letter, pp. 63-67.

⁴⁷ See Attachment 5, Smallwood Reply Letter (Oct. 18, 2022), pp.8-9 (hereinafter “Smallwood Reply Letter”).

VII. The FEIR Inadequately addresses the Cumulative Impacts

The FEIR's flawed cumulative analysis violates CEQA. The City claims that Table 4-1 lists all projects that could contribute to considerable cumulative impacts.⁴⁸ The FEIR also acknowledges various Port projects that are in development, including the 250-acre Multimodal Logistics Park, channel deepening, berth widening, on-dock expansions, expansion of rail lines, the Structure for Transfer of Automobiles Creating Key Economic Development (STACKED) Project, off-Port Cargo storage yards and overall expansion of Port Operations, the INVEST Project, the BUILD Project, and the Port Intermodal Corridor (Hueneme Modernization Project).⁴⁹ Yet, the FEIR fails to include relevant projects in its cumulative analysis.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements for Cumulative Impacts

The FEIR attempts to re-write the CEQA process for what must be considered in a cumulative impact analysis.

The City admits that CEQA requires that the FEIR address cumulative impacts.⁵⁰ Cumulative impacts are those that result from "the combination of the project evaluated in the EIR together with other projects causing related impacts."⁵¹ The incremental effects of an individual project "are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."⁵² Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.⁵³ A relatively "small" impact is not insignificant under CEQA if it contributes to an existing environmental problem.⁵⁴

The City also admits CEQA requires a cumulative impact analysis to contain, at minimum, either 1) a list of past, present, and reasonably anticipated future projects, including those projects outside the agency's control that produce related or cumulative impacts⁵⁵ or 2) a summary of such projections contained in an adopted general plan or related planning document

⁴⁸ FEIR, Section 4.2, p. 4-2.

⁴⁹ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁵⁰ FEIR, Section 4.1, p. 4-1; Cal.Code Regs., tit.14, § 15130; *see also* Cal.Code Regs., tit.14, § 15355

⁵¹ Cal.Code Regs., tit.14, § 15130(a)(1).

⁵² *Id.* at § 15065(a)(3).

⁵³ *Id.* at § 15355(b) (The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time).

⁵⁴ "[A] project's cumulative environmental impact cannot be deemed insignificant solely because its individual contribution to an existing environmental problem is relatively small." *See, San Francisco Baykeeper, Inc. v. State Lands Comm'n* (2015) 242 Cal.App.4th 202, 223. "In fact, 'the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant.'" *Id.* (quoting *Cmtys for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 120).

⁵⁵ FEIR, Section 4.1, p. 4-1; CEQA suggests that agencies consider factors such as the nature of the environmental resource examined, location of project, and type. Cal. Code Regs., tit.14, § 15130(b)(2).

that evaluates regional or areawide conditions.⁵⁶ The cumulative impacts analysis of this Project continues to remain flawed.

As with the Project Description, the FEIR's failure to include several projects in its cumulative impacts analysis stems from its erroneous understanding of the CEQA requirements. The FEIR claims that several pertinent projects need not be considered in its list of past, present, and reasonably anticipated future projects because (1) "each cumulative development project represented in Table 4-1 was "determined to be reasonably foreseeable by the City based on applications that the City received at the time the Notice of Preparation (NOP) for the Draft EIR was released (June 25, 2020)"⁵⁷; and (2) the City does not consider conceptual long-range projects under the jurisdiction of another lead agency to be reasonably foreseeable.⁵⁸

Commenters address each of these excuses in turn. First, whether a project is a "reasonably anticipated" does not turn on whether the City has received an application for it. Indeed, such a requirement is nowhere to be found in the City's or the State's CEQA guidelines. Because this element is not required under law, it should not factor into which projects are listed. Second, as plainly stated in the law, the agency must consider any project that can reasonably have cumulative impacts even if "those projects [are] outside the agency's control." Thus, the legal excuses provided by the City do not pass muster.

B. The FEIR's Conclusions Regarding the Projects Included in the Cumulative Analysis Are Not Supported by Substantial Evidence

The City cites to three different reasons why the projects commenters list should not be considered: (1) that some cumulative impacts are speculative; (2) they are not within the proposed geographic zone; and (3) despite proposed increases in passageways for rail and freight traffic, *this project* doesn't change capacity requirements.⁵⁹ These objections are unfounded.

First, commenters have pointed to several projects that could impact the area surrounding the 34-acre site with supporting evidence demonstrating why they are not speculative. For example, the proposed widening of Hueneme Road to four lanes included in the Roads and Transportation Five-Year Capital Improvement Program; how the Port has invested in a new rail line with GLOVIS; and the capital investments to deepen berths to accommodate larger capacity vessels.⁶⁰ The City makes no effort to engage with the wealth of evidence of these substantial

⁵⁶ *Id.* at § 15130(b)(1).

⁵⁷ FEIR, Section 12.4.2, p. 12-17.

⁵⁸ *Id.*, at p. 12-18.

⁵⁹ *Id.*, at pp. 12-17 to 12-18.

⁶⁰ Commenters' February letter at pp. 19-20 (citing INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary, PROD-00002504; INFRA FY20 Application Project Summary; [2020 OHD Comprehensive Economic Development Strategy](#), PHCN0002370; [2020 OHD Comprehensive Economic Development Strategy](#), PROD-PHCN0002353; INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project, PROD-PHCN00005158; OHD Board of Commissioners Meeting Agenda- September 11, 2017-Press Report Attachment, PROD-00002699; The Hueneme Modernization Project BCA Appendix - March 17 2021, PROD-0004367; The Hueneme Modernization Project INFRA Grant Application FY2021, PROD-0003201; Ventura County Freight Corridor Study, (October 2021), Prepared by Iteris, Inc., on behalf of Southern California Council of Governments, The Port of Hueneme, Caltrans and Ventura County Transportation Commission at 36, PROD-PHCN0001900-2126).

plans. The record evidence demonstrates that concrete steps have been taken to bring the listed projects into fruition and disprove the City’s conclusion that these projects are “speculative.”⁶¹

Second, commenters have provided figures for the proposed developments including a figure showing the relative locations of the 34-acre site to the 250-acre site, a figure showing the relative position of the STACKED project (on the North Terminal), and another showing the traffic pathways and the potential widening of Hueneme Road.⁶² The City’s response to these relevant images has been to claim that these images “do[] not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.”⁶³ At the same time, the City notes that the cumulative impacts are only assessed in the geographic area “bound by Bard Road to the north; Ormond Lagoon Waterway/Edison Drive to the east; the Pacific Ocean to the south; and Ventura Road and other areas within the City of Port Hueneme to the west, but not within the Port of Hueneme or Naval Base Ventura County (“Navy”) Port Hueneme.”⁶⁴

As described above, the City cannot shirk its duty to review cumulative impacts just because a project may be in another agency’s control. Thus, delineating a line for any project “within the Port of Hueneme” is legally void, particularly given how the Port is viewing its many expansion projects as interconnected and in furtherance of their stated goal of expanding throughput. Furthermore, the lines drawn at Bard Road, Ventura Road, and Edison Drive are internally inconsistent. For example, the City addresses air quality concerns arising from Port operations and agricultural use which are outside these boundaries.⁶⁵ The City also extends the VMT analysis to Camarillo Airport and Tuff shed – both of which are outside these arbitrary lines.⁶⁶ The City cannot cherry pick instances in which to apply these arbitrary boundaries in a self-serving manner. The City cites to no authority for setting these specific limitations. At the very least, the city must explain why it chose these boundaries as supported by substantial evidence e.g., scientific studies indicate that emissions from facilities do not travel beyond “X” miles. In summary, these geographic boundaries are arbitrary and not supported by substantial evidence.

Even within these arbitrary boundaries that the City has set, several projects listed have at least some portion of their operations within this geographic region. The City cannot dismiss all these projects as outside the geographic area without taking a hard look at the impacts that portions of these proposed projects will likely have.

Third, the City admits that the “project would result in less trucking and more rail on/off moves compared to existing conditions” yet, the City concludes that it doesn’t need to conduct a cumulative impact analysis because “the City has not received an application for a new rail project.”⁶⁷ Similarly, in response to commenters noting that there are berth widening and

⁶¹ FEIR, Section 12.5, Responses to Comment Letter #206, Response Nos. 206-35 to 206-38, pp. 12-1164 to 12-1165.

⁶² See FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-17, p. 12-1162; Response No. 206-25, FEIR p. 12-1163; and Response No. 206-38, FEIR p. 12-1165.

⁶³ *Id.*

⁶⁴ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁶⁵ FEIR, Section 5.33, p. 5.3-8.

⁶⁶ FEIR, Section 12.4.1, p. 12-13

⁶⁷ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-23, p. 12-1163.

dredging projects that would increase shipping traffic, the City concludes that new cars stored at the vehicle storage facility would not require additional ships.⁶⁸ Even assuming that the temporary 34-acre site will neither facilitate an increase in goods movement by ship nor rail nor truck in the area (a fact that commenters do not concede), the fact that all three pathways propose to be extended in this exact area reflect, without a question, significant impacts. Simply, the City fundamentally and mistakenly conflates these points in the FEIR and leaves the Planning Commission and the public with an incomplete cumulative impacts analysis.

Finally, even with the projects that have been listed in Table 4-1, the City undertakes no analysis of *how* the listed projects will impact the area surrounding the 34-acre site – including but not limited to additional emissions that might result and how that could impact vulnerable populations.⁶⁹ In summary, the EIR’s cumulative impacts analysis remains deficient such that the FEIR cannot be certified.

VIII. The FEIR Fails to Consider Environmental Justice Impacts and Violates CEQA

The temporary 34-acre storage site is located next to low-income, densely populated neighborhoods in south Oxnard. As commenters note in their February letter, a Report prepared by the California Office of Attorney General (“OAG”), provisions of CEQA, and Government Code Section 11135 require lead agencies to study the environmental justice impacts of projects and to mitigate those impacts.⁷⁰ Part of the discussion in the FEIR must include an evaluation of the location of the project because the significance of an impact on people and the environment may change based on the project’s setting.⁷¹ Commenters pointed to studies demonstrating how California communities of color and low-income communities bear a disproportionate burden of the state’s diesel trucking emissions.⁷² Commenters also highlighted that the nearest school is only 780 feet from the Project site and the proposed Project would also be located as close as 360 feet from residences located to the northwest, north, and northeast of the Project site.⁷³

To these points, the City’s response has been to point the public to Global Response No. 5 on environmental justice impacts.⁷⁴ This response is insufficient. Although the City admits that the proposed Project would “result in a minor increase in vehicle traffic...[due to] worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips,” it nevertheless concludes “impacts would be less than significant on sensitive receptors.” This conclusion is based entirely on the assertion that the project site is “not located in an area with poor circulation or heavy traffic.” The City points to no study supporting its circulation finding and proffers no

⁶⁸ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-21, p. 12-1163.

⁶⁹ FEIR, Section 4.2, Table 4-1, p. 4-2.

⁷⁰ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-180 to 206-182, p. 12-1189 (citing the Office of the California Attorney General, *Environmental Justice at the Local and Regional Level* (2012), p. 3, available at https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf).

⁷¹ *Id.*

⁷² FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-183, p.12-1189 (citing Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in California*, fact sheet (Feb. 2019), available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>).

⁷³ FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-185, p. 12-1190 (citing DEIR, p. 5.3-9).

⁷⁴ FEIR, Section 12.4.2, p. 12-11

evidence in support of the traffic patterns. In fact, with the additional projects described above, it would seem that the City has conveniently omitted several projects in the pipeline that would increase traffic and emission patterns.

Commenters appreciate that the City has added language responding to commenters' concerns associated with nearby power plants, superfund site, and factories.⁷⁵ The City summarily concludes that the "distance between the project" and these sites would not create a significant hazard to the public.⁷⁶ However, the City fails to provide the underlying data, study, or processes used to come to this determination. Neither the Commissioners nor the public should accept conclusions that have not been properly substantiated – especially where the health and safety of vulnerable populations and overburdened communities are at stake.

IX. The City has Failed to Address Deficiencies in Language Access, Which has Further Frustrated Meaningful Public Review of the EIR Documents

The City claims that it is under no obligation under State law (CEQA or otherwise) to translate environmental review documents into Spanish or any other language.⁷⁷ This response completely ignores comments previously submitted highlighting the fact that limiting public access violates a core tenet of CEQA⁷⁸ – that "the public holds a 'privileged position' in the CEQA process 'based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.'"⁷⁹

While the City acknowledges that CEQA, "deems public participation and comment during any environmental review process as an essential part of the CEQA process," it has done very little to offer document translation or interpretation. In fact, according to the FEIR's response to comments, only the Port has offered the minimal language access services in the form of a Spanish-translated Executive Summary from the DEIR, and "a video in Mixteco explaining the contents of the Draft EIR."⁸⁰

Under the California Bilingual Services Act, State agencies must distribute applicable translated written materials if the State agency "serves a substantial number of non-English-speaking persons" and "[t]he information solicited, required, or furnished affects or may affect the individual's rights, duties, or privileges with regard to that agency's services or benefits." Although, as local agencies, the City and Port are not directly subject to this rule, refusing to translate environmental documents restricts limited or non-English speaking individuals' ability and right to meaningfully participate in environmental decisions that impact their health and safety. Given the importance of this Project to the many residents for whom English is not a primary language, we reiterate our call to translate the EIR and make it accessible by recirculation in order to ensure meaningful public review.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ FEIR, Section 12.4.2, p.12-9.

⁷⁸ See Commenters' July Letter.

⁷⁹ Cal. Code Regs. tit. 14, § 15201 (1992).

⁸⁰ FEIR, Section 12.4.2, p.12-9.

X. The FEIR's Vehicle Miles Travelled Analysis Remains Woefully Inadequate and Does Not Support a Finding of No Significant Traffic of VMT Impacts

The City admits that neither it, nor the City of Port Hueneme have adopted guidelines or significant criteria for assessing VMT by development projects⁸¹ — a requirement under California Public Resources Code §21099 and 14 Cal. Code Regs § 156064.3 (CEQA Guidelines). Rather than directly responding to our comments highlighting the need for a more robust VMT analysis for the Project, the FEIR points to the same conclusory and vague explanation in its Global Response No. 6 to justify not doing more to provide the Planning Commission and the public with sufficient information to appreciate the full scope of traffic impacts. The FEIR's conclusion that no VMT impacts would result from the Project is unsupported by what little analysis is offered for three key reasons.

First, the FEIR's application of Governor's Office of Planning and Research's ("OPR") Technical Advisory on Evaluating Transportation Impacts ("Technical Advisory") is flawed. The FEIR fails to adopt any specific methodology or criteria for its evaluation of the Project's VMT that would make its conclusions verifiable based on OPR's guidance. It inappropriately adopts a screening threshold when no such threshold applies to this Project and it misapplies the qualitative analysis outlined in the Technical Advisory. The FEIR's conclusions that no VMT or traffic impacts are present are therefore unreliable.

The FEIR contends that the qualitative analysis approach outlined in OPR's Technical Advisory is the appropriate evaluation for the Project's VMT impact.⁸² It also summarily adopts the DEIR's conclusion that no VMT impacts would result from the implementation of the Project without showing how the qualitative analysis approach was specifically applied in this case. The City admits based on the screening thresholds outlined in OPR's Technical Advisory — which apply to residential, office, retail projects, land use plans, and transportation projects — that this project would not "screen out"⁸³, i.e., that further analysis would be required even under a qualitative approach. Yet, the FEIR reaches the conclusion that "the project would lead to a less-than-significant transportation impact" using the same retail threshold it admits is inapplicable.⁸⁴

The Technical Advisory does recommend, however, that "[a]gencies should consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations."⁸⁵ No such data-supported analysis was provided in this FEIR.

Second, the FEIR's analysis on VMT and traffic impacts is conclusory and relies on contradictory assumptions. For example, in its assessment of alleged VMT reductions, the City assumes the elimination of two existing vehicle storage facilities to conclude overall VMT reduction while at the same time defending the DEIR's analysis of the traffic effect of the Project

⁸¹ FEIR, Section 12.4.2, p.12-13.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ California Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts on CEQA (OPR Technical Advisory) (December 2018), p. 17; available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

“under existing and cumulative conditions, with due consideration of other related projects in the area.”⁸⁶ These inconsistencies lead to self-serving conclusions that simply cannot be relied on.⁸⁷ If current conditions are assumed, then VMT analysis would have to account for the higher VMT that the Project would produce as a result of having the approximately 240 daily trips made in individual cars (according to one estimate provided), compared to the more limited car carrier truck trips making the haul to the furthest existing site. Even using that simplistic comparison, which we do not concede qualifies as a VMT threshold under either the Technical Advisory or CEQA guidelines, the Project would still generate more vehicle miles travelled on its own as compared to the furthest existing site.⁸⁸ The FEIR attempts to avoid dealing with this increase in VMT by attempting to shoehorn a threshold analysis for new retail facilities that is inapplicable to the Project.

Third, the FEIR ignores evidence submitted showing that the traffic report that underlies much of the City’s environmental review was merely rubber stamped and created in a way to offer cover for predetermined conclusions. It therefore cannot be relied upon to conclude that no impacts will result from the project.

As commenters pointed out in their July 1, 2022 comment letter to the City, documents made available in response to Public Records Act requests suggest that there was never any intention on the part of the Port applicant or the City to vet the real traffic impacts of the 34-acre site. In fact, emails between Port staff and a land-use planning specialist suggest that the City might forgo a traffic report altogether by providing a letter, noting, “the City just needs a paper trail - this way they can cover themselves with a letter from a professional.”⁸⁹ In subsequent emails, the hired consultant confirmed that they would prepare the trip generation analysis based solely on the Project Description and a Design letter⁹⁰— without considering the requirements outlined in CEQA guidelines or the recommendations found in the Ventura County Freight Corridors Study. These revelations, which the FEIR neglects to address, cast further doubt on the reliability of calculations, information, and analysis used to support the FEIR’s conclusion that no significant traffic or VMT-related impacts will occur.

Given the cursory manner in which the traffic study and VMT analysis were conducted, it is unsurprising that the FEIR is replete with inconsistencies and contradictions that call into question its reliability as an informational document. We call on the Planning Commission to reject this FEIR. Moreover, the City should fix its lack of baseline methodologies and thresholds for assessing the impact of VMT from this Project. Until these errors are corrected, the FEIR fails to meet basic standards under CEQA.

⁸⁶ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-51, pp. 12-1166 to 12-1167.

⁸⁷ Note: the FEIR does not address the inconsistent assumptions highlighted in our February 14, 2022 comment letter wherein we highlight that in order to switch to an analysis that would presume the elimination of two existing sites, the agency must first justify this decision by showing that the existing conditions are somehow misleading or without informational value. No such analysis has been done in the FEIR. See Commenters’ February Letter, p. 25.

⁸⁸ See *id.*, at pp. 24-25.

⁸⁹ Commenters’ July Letter (citing emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018)).

⁹⁰ *Id.* (citing emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018)).

XI. The FEIR Continues to Rely on Flawed Air Emissions Modeling, Lacks the Requisite Health Impact Analysis, and Fails to Properly Assess Greenhouse Gas Emissions.

The FEIR fails to justify its modelling used to calculate greenhouse gas emissions (“GHG”) and air quality impacts and continues to lack the necessary analysis on health impacts. These flaws were originally outlined in a findings report submitted by experts Matt Hagemann and Dr. Paul Rosenfeld and incorporated into commenters’ February 14, 2022 letter.⁹¹ Hagemann and Rosenfeld have reviewed the FEIR and responses to those comments and have concluded that many of the justifications used by the City for their approach to air emissions, health hazards, and GHG emissions remain fundamentally flawed.⁹² Several of these flaws in the FEIR are outlined below:

- **Hazards and Hazardous Materials** – The FEIR fails to address the lack of a Phase I ESA analysis, despite being a key element called for in the City of Oxnard 2030 General Plan Safety and Hazards Chapter. More specifically, the FEIR does not explain why Policy H-7.12, which requires a hazardous materials study for any new development, was not followed.
- **Air Quality and CalEEMod Model** - The FEIR again fails to provide access to, or justify the use of, the underlying data inputs used to calculate the Project’s emissions. More specifically, the FEIR refers to “applicant provided” information for its inputs on the length of construction for the site, yet the underlying data, and the justification for using it, are not made publicly available in the documents attached to the FEIR. This makes it impossible to verify whether the changes to defaults accurately reflect the proposed construction schedule. Despite the City’s claims that relying on “applicant provided” information is sufficient, CalEEMod requires that information used to change defaults be supported by substantial evidence as required under CEQA.⁹³ The calculations, therefore, remain unreliable and the City must either justify these modifications with substantial evidence or revise its calculations. Similarly, the FEIR’s modeling concerning construction activities is flawed as the FEIR arbitrarily modified construction lengths based on different phases of development – potentially underestimating peak daily emissions. Similarly, the FEIR fails to provide substantial evidence for changing off-road construction equipment amounts therefore making it challenging, if not impossible, to verify if these changes are accurate.
- **Greenhouse Gas Emissions** – The conclusion that GHG impacts are “less-than-significant” relies on the same incorrect and unsubstantiated air modelling described above. Moreover, the FEIR relies on outdated thresholds which the City fails to justify through substantial evidence. This has resulted in the FEIR failing to identify any potentially significant GHG impact from the project.

⁹¹ See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (February 9, 2022), Attachment A to Commenters’ February Letter.

⁹² See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (October 17, 2022), attached hereto as Attachment 4, SWAPE Report.

⁹³ See SWAPE Report.

This flawed analysis of air pollution impacts also extends to the FEIR’s treatment of the necessary mitigation and health impacts associated with it. In concluding that the project will not reach the thresholds set by Ventura County Air Pollution Control District (“VCAPCD”), the FEIR relies on an arbitrarily restrictive view of the Project without accounting for the inconsistencies between the Project Description and Objectives and ample evidence demonstrating that this project encompasses more than the 34-acres described and for longer than five years. This arbitrarily restrictive scope is also used by the City to claim that the Project will not pass emissions thresholds set by the VCAPCD⁹⁴ and to justify its refusal to conduct the type of Health Impact Assessment required under the California Supreme Court case, *Friant-Ranch*.

In short, the FEIR’s conclusion misses the mark. While CEQA may not mandate an in-depth risk assessment outright:

“CEQA requires that the EIR have made a reasonable effort to discuss relevant specifics regarding the connection between two segments of information already contained in the EIR, the general health effects associated with a particular pollutant and the estimated amount of that pollutant the project will likely produce.”⁹⁵

Because the FEIR fails to address flaws in its modeling, its estimation of the pollutants generated by the Project is unreliable. Moreover, the narrow and cursory analysis that the FEIR does offer on air pollutants and potential health impacts, is unverifiable given the lack of access to the underlying data. This foundational information is necessary for informed decision-making and public participation. The City, therefore, cannot support its conclusion that the Project falls under the VCAQCD’s thresholds. Even so, the FEIR misinterprets *Friant-Ranch* wherein the California Supreme Court found that CEQA requires analysis correlating increased air emissions to probable resulting human health effects.⁶ The City cannot claim that no emissions will result from this Project just as it cannot avoid the necessary health impact analysis required under *Friant-Ranch* by simply stating that emissions will not surpass thresholds it has arbitrarily chosen to apply.

As further highlighted in Hagemann and Rosenfeld’s review and commenters’ letters, the FEIR also fails to address the following:

- **Diesel Particulate Matter emissions** – The City fails to include a health impact of using equipment producing diesel particulate matter (“DPM”) emissions during a construction phase of the Project slated to last over 180 to 200 days and its justification for not doing so is not supported by the evidence. More specifically, as the Hagemann and Rosenfeld report points out, “until both the Project’s construction and operational health risks are quantified, summed together, and compared to the VCAPCD threshold of 10 in one million, the

⁹⁴ SWAPE Report, pp. 5-6.

⁹⁵ *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 521

FEIR’s response is inadequate” and does not evaluate the Project’s potential health risk impacts.

- **Comprehensive assessment of Toxic Air Contaminants** – The FEIR fails to provide a “good faith reasoned analysis” of the health effects of any increase in Toxic Air Contaminants caused by the Project, including those that result from the combustion of diesel and gasoline engines associated with the entire car storage complex, the 34-acre and the 250-acre sites, increased Port-related emissions due to augmented cargo throughput, and construction related to the aforementioned projects.
- **Encroachment of Port-Related Activities** – The FEIR also fails to adequately address comments concerning the shift in port-activity emissions towards south Oxnard populations adjacent to the Port-serving freight corridors like Hueneme Road.

In short, the FEIR ignores critical flaws in its analysis and inadequate data verification that call into question its reliability as an informational document for environmental assessment. The law requires that the public and the Planning Commission have an accurate assessment of potential health risks and air quality impacts – which this FEIR fails to deliver.

XII. FEIR Continues to Underestimate Impacts on Special Status Species, Habitats, and Wildlife Movement

The City failed to provide good-faith, reasoned responses to the comments raised regarding the DEIR’s biological impacts analysis.⁹⁶ Instead, the City offered partial responses and conclusionary statements that ignores large swaths of commenters’ concerns and failed to make significant changes to its analysis to ensure the full scope of direct, indirect, and cumulative biological impacts from the Project are evaluated by the FEIR. Therefore the FEIR’s conclusions that there will not be a significant impact on biological resources from the Project remains unsupported by substantial evidence.

In its responses, the City avoided addressing the full concerns raised in the expert report prepared by Dr. Shawn Smallwood that determined that significantly more special status species likely rely on the property for habitat, foraging, hunting, mating, or other needs.⁹⁷ The FEIR dismisses this evidence entirely and continues instead to rely on flawed reconnaissance surveys that failed to observe or detect special status species.⁹⁸ Further, Dr. Smallwood identified flaws in the additional assessment attached to the FEIR as Appendix FA.⁹⁹ In fact, he explains that the databases relied upon by the FEIR show bird species using nearby sites with similar levels of disturbance as the Project site, which undermines the FEIR’s conclusion that the Project site cannot be habitat to special status species.¹⁰⁰ The FEIR’s over-reliance on inadequate analysis and surveys means it grossly underestimates the special status species that may use the site and the value of this Project property as important habitat. Eliminating 34-acres of habitat (regardless

⁹⁶ These comments are laid out in significant detail in Commenters’ February Letter, at pp. 39-46 (citing Smallwood report).

⁹⁷ Commenters’ February Letter, at pp. 39-42.

⁹⁸ See Commenters’ February Letter, at pp. 40-41 (citing Smallwood report); Smallwood Reply Letter (Oct. 18, 2022), at pp. 3-5.

⁹⁹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 4-5, 15.

¹⁰⁰ Smallwood Reply Letter (Oct. 18, 2022), at p. 8.

of whether it is used for breeding or wintering) would result in a significant impact on special status species, thereby meeting the City's threshold of significance for a biological resources impact.

The slight update to the proposed mitigation measures is not sufficient to lessen the impact below the threshold level of significance. As was raised in previous comments, an additional pre-construction survey is unlikely to detect species that are notoriously difficult to detect in surveys, such as the burrowing owl.¹⁰¹ Moreover, the fact that there may be a detectable presence of a special status species at the time of the pre-construction survey does not change the fact that after five years of intensive use as a parking lot this habitat will be, at best, unavailable during that period and at worst irreparably damaged or destroyed.¹⁰²

The City's refusal to acknowledge the value of this property to wildlife extends to its alternative analysis as well. The FEIR concludes that using the 34-acre site as open space would not lessen the significant impacts from the Project, but that is based on an erroneous conclusion that building a parking lot on un-developed property would not impact special status species or wildlife movement, which is not supported by substantial evidence.¹⁰³

Commenters incorporate by reference all points raised in Dr. Smallwood's October 18, 2022 reply letter.

XIII. The FEIR must be Recirculated Before Project Approval and Certification

Under CEQA, an EIR must be re-circulated for review and comment whenever significant new information becomes known to the lead agency and is added to the EIR, after public notice of the availability of the draft document has been made, and before the EIR is certified.¹⁰⁴ Under such circumstances the lead agency is specifically required to re-notice the environmental review document to the public and all responsible agencies, and is required to obtain comments from the same, before certifying the document's impacts and alternatives analyses as well as any mitigation measures.¹⁰⁵ A lead agency's decision not to recirculate an EIR must be supported by substantial evidence.¹⁰⁶

"Significant new information" includes any information regarding changes in the environmental setting of the project under review.¹⁰⁷ It also includes information or data that has been added to the EIR and is considered "significant" because it deviates from that which was presented in the draft document, depriving the public of a meaningful opportunity to comment upon a significant environmental effect of the project, or a feasible way to mitigate or avoid such an effect at the time of circulation of the draft.¹⁰⁸ Recirculation is further required where the

¹⁰¹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 8-9.

¹⁰² See *id.*, at p. 9.

¹⁰³ FEIR, Section 12.4.2, p. 12-16.

¹⁰⁴ Pub. Res. Code § 21092.1

¹⁰⁵ See *id.*; see also, Pub. Res. Code § 21153.

¹⁰⁶ Cal. Code Regs. tit. 14, § 15088.5(e)

¹⁰⁷ *Id.*, at § 15088.5(a).

¹⁰⁸ *Id.*

draft EIR is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”¹⁰⁹

While re-circulation is an exception and not the rule in the preparation of final environmental review documents, it is an exception that must be invoked here – where the absence of significant information rendered the DEIR ineffective in meeting CEQA’s substantive mandates, and now, where included, the addition of significant new information substantially changes the FEIR’s analyses and conclusions regarding the Project’s impacts, feasible alternatives and required mitigation.¹¹⁰

As stated in numerous comments to the DEIR, that document failed to provide critical information regarding the duration, scope, and mitigation of the Project’s impacts; it failed to adequately describe fundamental information relating to the phasing and timing of the project’s implementation and phase out by claiming to add permanent jobs to the region; it lacked adequate detail specifically regarding the construction and operations phases of the Project, including mitigation; and it contained analyses and mitigation measures relating to the Project’s air quality, traffic, human health and biological resources impacts based on incorrect datasets and formulas.

In some instances, the FEIR erratically and arbitrarily includes selective new data into its analysis of the Project’s impacts, and in others critical information remains absent from the document.

The FEIR contains significant new information and must be recirculated for public review and comment before being considered by the Planning Commission.¹¹¹ Although this new information does not cure the inadequacies pointed out in comments to the DEIR, the City has added new information that that the public should be allowed to thoroughly review and evaluate with sufficient opportunity to further comment prior to a decision by the Planning Commission. This new information includes, but is not limited to: a revision of Mitigation Measure MM-BIO01 related to biological resources; the addition of land use policies to be considered pertaining to aesthetics; different data on maximum daily construction emissions and maximum daily operational emissions; the addition of a new 2022 California Native Diversity database search performed and new analysis performed resulting from a revised habitat assessment concerning biological resources; alleged revisions to the analysis and evaluation of archaeological resources and mitigation measures proposed as MM-CUL-1 and MM-CUL-2; alleged revisions to the analysis of project impacts and mitigation measures under Tribal Cultural Resources; a new listing of potential hazardous sites; a new summary of significant unavoidable impacts not previously disclosed; remodeling of the project in CalEEMod used for the project to project emissions during construction and operation; and, a list of additional previously undisclosed alternative locations considered by the City. In addition, Appendix D, Air Quality

¹⁰⁹ *Id.*

¹¹⁰ *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Ca4th 1112, 1132.

¹¹¹ Cal. Code Regs. tit. 14, §15088.5.

and Greenhouse Gas Study and Appendix FA – Biological Resources Inventory 2022 were updated with new information previously not disclosed.

The FEIR also contains new references to the storage of electric vehicles at the site without any details as to whether these vehicles will require charging infrastructure at the site while the cars are being stored.¹¹² Thus, it is unclear whether further alterations to the site will be necessary in the near future. In short, this new information adds greater uncertainty and highlights the document's failure as an informational document.

The public must have an adequate opportunity to comment on these many changes and address any new impacts this new information may reveal. Providing just 10 days before a hearing with the Planning Commission does not provide that opportunity for meaningful public engagement concerning the new information contained in the FEIR. Given these revisions, the myriad other information, and alternative analysis added in the FEIR, recirculation is required.

Moreover, on March 21, 2022, our organizations requested that the City schedule a special meeting of the Planning Commission before deciding on whether to approve the Project¹¹³. Not only would this give the Commission an opportunity to hear from stakeholders and members of the public and provide for adequate language access, but it would also give the Commission time to review additional evidence that has become available after the comment period. Given the tremendous interest that this Project has garnered with over 200 written comments received, setting a special pre-determination hearing before the Commission is more than appropriate.

The City released its responses to our comments less than ten full days prior to the October 20, 2022 hearing.¹¹⁴ To provide Commissioners with the opportunity to thoroughly review all the evidence, including the evidence and comments from stakeholders, the special meeting of the Planning Commission should be set at least 30 days prior to it making a final decision on this FEIR and pending Special Use Permit.

XIV. Conclusion

The FEIR's continuing informational deficiencies render it unlawful. The City's responses to commenters do not address their arguments against the adequacy of the DEIR. The FEIR contains an incomplete project description, a deficient cumulative impact analysis that omits relevant projects and impacts, inadequate alternatives analysis, and an incomplete evaluation of environmental justice, air quality, traffic, language access, public health and biological resources impacts. Accordingly, the Planning Commission should not certify an FEIR at this time and must deny the requested Special Use Permit until the City is able to present a comprehensive and accurate report of the Project's scope, impacts, alternatives, and mitigation measures.

¹¹² City of Oxnard, Planning Commission Report, (October 20, 2022), p.10.

¹¹³ See Letter from CAUSE et.al., to Jay Dobrowalski, Re: Port of Hueneme =Vehicle Storage Site Environmental Impact Report Comment Period, (March 21, 2022); available at page 141 of the Planning Commission Staff Report for October 20, 2022.

¹¹⁴ Response to the comments submitted by our organizations were sent out from the email account of Senior Planner, Jay Dobrowalski at 5:00 p.m. on Monday, October 10, 2022.



EARTHJUSTICE



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtooyo Chumash Foundation

MEMORANDUM

Agenda Item No.: F.1

Date: October 20, 2022

To: Planning Commission

From: Joe Pearson II, Planning Manager, (805) 385-8272

Subject: Transmittal Memo No. 2 – Port of Hueneme - Temporary Outdoor Vehicle Storage Facility - PLANNING AND ZONING PERMIT No. 18-500-02 (Special Use Permit); Located at southeast corner of Hueneme Road and Perkins Road (APNs: 231-0-092-105 and 231-0-092-245). A request for a Special Use Permit to construct and operate a temporary outdoor vehicle storage facility for a maximum of five years on the approximately 34-acre project site. Upon expiration of the Special Use Permit, the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface would be removed. The fencing, landscaping, and drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner. The project site is located within the Light Manufacturing with Planned Development Additive Zone (M-1-PD). The request includes certification of the proposed Final Environmental Impact Report (EIR) (State Clearinghouse No. 2020069039) and adoption of the Mitigation Monitoring and Reporting Program (MMRP) which has been prepared pursuant to the California Environmental Quality Act (CEQA). As mandated by the CEQA Guidelines, the EIR has been subject to the City's internal review process and reflects the Lead Agency's independent review and judgment and objectivity with regard to the scope, content, and adequacy of analysis. Filed by Christina Birdsey, 333 Ponomo Street, Port Hueneme, California 93044-0608, designated agent (the "Applicant") on behalf of A&J Oxnard LLC, 18980 Ventura Boulevard, Unit 200, Tarzana, California 91356 (the "Property Owner").

Subsequent to the release of the staff report and posting of transmittal memo #1, staff received additional comment letters from members of the public concerning the proposed project (attached). Staff has reviewed the letters and will provide responses as necessary.

Attachment

A. Public Comment Letters received after Transmittal Memo #1

October 19, 2022

VIA ELECTRONIC MAIL

Rose Chaparro
City Clerk
300 West Third Street
Fourth Floor
Oxnard, CA 93030
Email: cityclerk@oxnard.org

Re: Agenda Item F-1: The Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Honorable Commissioners:

You play a vital role in preserving and enhancing the quality of the City of Oxnard's ("City") natural and built environments by making sound and impartial land use decisions.¹ As Commissioners, you are expected to conduct fair hearings, consider environmental protection, avoid using false or inaccurate information, and make decisions based on evidence in the record.² Your decisions must also be in the best interest of the people of Oxnard and protect their health and safety.³ These core principles must govern your deliberations.

While we have submitted formal written comments on the final Environmental Impact Report ("FEIR") for your consideration, in this letter we present the law governing environmental review of the proposed Temporary Outdoor Vehicle Storage Facility Project ("Project") along with evidence demonstrating why you should not certify a final EIR and should deny the Special Use Permit.

Administrative Process to Date and Need for Recirculation

This agenda item concerns the City's approval for a vehicle storage site to facilitate the Port of Hueneme's ("Port") operations and a related Special Use Permit. A Draft Environmental Impact Report ("DEIR") has been prepared and circulated. After an evaluation of public comments on the DEIR, the Planning Commission must decline to certify FEIR if the report is

¹ See City of Oxnard, Planning Commission (last accessed Aug. 2, 2022) available online <https://www.oxnard.org/city-department/community-development/planning/planning-commission/>.

² Institute for Local Government, The Planning Commissioner's Role at p. 5 (last accessed Aug. 2, 2022) https://www.ca-ilg.org/sites/main/files/file-attachments/resources_PCH_sec1.pdf.

³ City of Oxnard Ethics Advisory Subcommittee, *Report And Recommendations On City Council Ethical Standards And Guidelines* (2015) available online <https://www.oxnard.org/wp-content/uploads/2016/05/Final-Draft-May-2015.pdf>.

inadequate, fails to follow CEQA guidelines and cannot support the approval of the Special Use Permit pending before you.

As explained in greater detail in our comments to the FEIR, this FEIR contains new information that must be recirculated for public review and comment before being considered by the Planning Commission, based on state CEQA regulations. CEQA Guidelines § 15088.5. Although this new information does not come close to addressing the myriad of inadequacies found in both the DEIR and the FEIR, the City adds new information that the public should be allowed to thoroughly review and evaluate with sufficient opportunity to further comment. Moreover, the Planning Commission should have the opportunity to hear from the public and other agencies about these revisions before making its final decision. The FEIR must be recirculated.

The Evidence Strongly Supports Rejecting the FEIR

The FEIR, public comments, additional expert reports, and information initially submitted by the applicant are all considered record evidence. We incorporate by reference our previous letters submitted on February 14, 2022, July 1, 2022, and our comments to the FEIR submitted most recently on October 19, 2022. For your convenience, we have attached these prior comments to this letter as Exhibits A, B, and C. Additionally, in June 2021, CAUSE and NRDC submitted Public Records Act (“PRA”) requests to the City and the Port. Although the City has almost entirely ignored the PRA requests, the Port has produced additional responsive documents. These documents have revealed much more detail about the Port and the City’s true intentions for expanding port operations, including vehicle storage sites.

Since we submitted our supplemental comments to the Planning Commission on July 1, 2022, a subset of these produced documents were brought to the attention of the Planning Division and have since become part of the administrative record. The released documents show, as further explained below, that in compiling the FEIR, the City has: knowingly separated or “piecemealed” this project from other expansion projects in a way that would downplay its true environmental impacts, willfully ignored significant environmental issues, did not include adequate project detail in the FEIR, and failed to translate the relevant EIR documents for meaningful public review.

The Law

Based on the City’s CEQA Guidelines (“Guidelines”), below is a summary of the mandatory elements of a FEIR. To support your assessment of whether the FEIR for the vehicle storage site meets these mandatory elements, we have included questions at the end of each legal requirement to help you evaluate whether applicants have provided satisfactory answers. As you consider these requirements, we request that you keep in mind not only the evidence that applicants submitted, but also the evidence that has come to light through the PRA responses.

1. The FEIR Must Include An Accurate Project Description.

In considering land use and social impacts, the Guidelines require the Commission to review the description of the proposed project. Guidelines § 10.3, 13.3. An accurate project description is foundational to reliable review. As the Guidelines note, the description must include: the size, density, and intensity of the operation. *Id* at § 10.3. Relatedly, the Commission must determine how the Project would generate employment. Guidelines § 13.3.

If a project is too narrowly defined by dividing a proposed development into several segments, it will improperly limit the analysis to only a portion of the project and fail to assess the complete environmental impact of the two halves of the project. CEQA prohibits such “piecemealing” to avoid a more robust review of the potential direct or indirect environmental changes caused by a project.⁴

The FEIR misquotes the law. The standard for when a project needs to be considered is not when the City receives a Permit Application. Rather, the law requires that an EIR must include analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and 2) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.

Thus, an accurate project description is the foundation for an adequate analysis of the environmental impacts. Without a reliable description, decision makers such as yourselves would have to make key permitting decisions in the dark. Moreover, if the City is allowed to proceed in this way, the public will be kept from necessary information to properly evaluate the impact of the proposed project.

Questions:

- **Does the Project Description improperly exclude the 250-acre site in light of evidence showing that it is a “reasonably foreseeable” extension of the current project?**
 - Considering the record evidence that the Port drafted conceptual plans, pursued financial arrangements with customers, listed the project as a priority for grant funding, sought for the site to be designated as an Opportunity Zone, and grouped the two projects in their public annual financial reports, the answer is yes. The 250-acre project is reasonably foreseeable and should have been included in the FEIR Project Description.

⁴ CEQA Portal Topic Paper Project Description at p. 2, AEP (Feb. 2020), available at: <https://ceqaportal.org/tp/CEQA%20Project%20Description%202020%20Update.pdf>.

- **Does the Project Description explain how the Project impacts are temporary?**
 - Considering the evidence demonstrating a serious off-port land deficit, the lack of any evidence showing how the site will be transitioned to a different use in the future, the allegedly temporary project suggests that it will not be temporary.
 - Indeed, if truly temporary, the project would fail to satisfy its own stated objectives— to “reduce and consolidate” reliance on off-port satellite storage locations.
- **Does the Project Description explain how the employment benefits are permanent?**
 - There is scant evidence demonstrating how such a temporary project will provide the promised economic growth and permanent job opportunities.
 - Record evidence indicates that only 14 new jobs would be created.⁵ But does not explain how these jobs would remain after the temporary project is disbanded.

2. The FEIR Must Consider Cumulative Impacts

The FEIR misquotes the law. The standard for when a project needs to be considered in a cumulative impacts analysis is not determined by when the City receives a Permit Application. Rather, CEQA requires a discussion of cumulative impacts i.e., the incremental impact of the project when considered in the context of “closely related past, present, and reasonably foreseeable future projects.” Guidelines § 17.1. Under the same Guidelines, a “reasonably foreseeable future project” is one where the cumulative project is a) “in an adopted capital improvement program ... or other plan” or b) the City or other pertinent agency has devoted significant time and financial resources to prepare for any regulatory review of the project. *Id.* at § 17.2. Furthermore, Section 15130(b) of the State CEQA Guidelines defines consideration of (A) a list of past, present, and reasonably anticipated future projects and (B) a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document as elements necessary to provide an adequate discussion of cumulative impacts.

Each phase of the project will have direct air quality impacts. Changes to air quality will directly and adversely impact the health of Oxnard citizens. Air quality impacts can compound and exacerbate respiratory conditions for vulnerable populations in the area. As commenters have previously noted, to reach the 34-acre site, traffic will pass by five elementary schools, one high school, low-income housing, and a community health clinic.⁶

⁵ The FEIR notes that there will be 167 local employees. However, these are existing GLOVIS employees who would continue to be employed.

⁶ Comments Submitted by Central Coast Alliance United for a Sustainable Economy, Earthjustice, Natural Resources Defense Council, and Wishtooyo Chumash Foundation, The Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit) (Feb. 14, 2022).

The City has a procedural and a *moral* obligation, to ensure that the cumulative impacts of this project do not burden communities that are already disproportionately impacted by poor air quality.

Questions:

- **Based on the record evidence, are there other pieces of evidence demonstrating growth that should have been considered in cumulative assessments?**
 - Yes, evidence demonstrating the resources invested in channel deepening, the STACKED project (among others) indicate that the cumulative impacts of these additional projects must be considered in the FEIR.
- **Does the EIR look at the cumulative and direct impacts from existing or planned projects including warehouses and planned port expansions?**
 - No. Although there is record evidence showing the likelihood of these expansions, these have not been listed or accounted for as past, present, and reasonably anticipated future projects in the EIR, which is in violation of CEQA.
- **Did the EIR include or list the 250-acre site as a cumulative impact?**
 - No. Even if it is not included in the project description as described above, record evidence shows that it is a “reasonably foreseeable future project” for which the Port has devoted significant time and financial resources to prepare for any regulatory review of the project. Guidelines § 17.2. The City’s omission from the cumulative impacts violates CEQA.

3. The FEIR Must Capture Key Environmental Information.

The Guidelines highlight several environmental issue areas including consideration of greenhouse gas (“GHG”) emissions and transportation for which the applicant must provide sufficient information to allow for meaningful review. The Guidelines note that “for land use and transportation related projects, the degree of compliance with policies intended to minimize GHG emissions will remain an important part of assessing their impacts.” Guidelines § 5.1. The Guidelines also note that the State’s metric of Vehicle Miles Traveled (“VMT”) will “replace or augment” the current Level of Service (“LOS”) method. Guidelines § 15. The State formally adopted the VMT metric on July 1, 2020. As such, the Applicant must incorporate the VMT standard either in place of, or in addition to the LOS standard. Yet, the City admits that neither it nor the City of Port Hueneme have adopted guidelines or significant criteria for assessing VMT by development projects.⁷ Instead, the City conducts only a cursory analysis of estimated vehicle trips in order to avoid doing a more robust study and inquiry into what type of impact this project is likely to have. For example, even though there is no evidence that the Port is prepared to shut down existing storage sites, the City conveniently adopts the assumption that this project will reduce trips to those sites while failing to explain how that occurs if this project is allegedly temporary. Moreover, as stated in our FEIR comments,

⁷ FEIR Section 12.4.1, pp. 12-13.

evidence suggests that the traffic study that the City relies on was a hollow gesture, intended to create a paper trail to justify its predetermined conclusions.

Similarly, the FEIR fails to fix or explain fundamental flaws in the modeling used to calculate air emissions from increased traffic, construction, and operation of the site. The FEIR also continues to lack the requisite health impact assessment or proper analysis of GHG's. Because of these omissions, the FEIR is not a reliable report on environmental impacts.

Question:

- **Does the FEIR accurately perform a traffic analysis and consider reasonable, zero-emission alternatives?**
 - No. The evidence has shown that the traffic study was rubberstamped. The City misapplies the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in evaluating the Project's VMT impacts. Furthermore, the VMT analysis is internally inconsistent and conclusory, and cannot be relied on.
 - The Port's failure to consider using zero-emission vehicles (even though GLOVIS is one of the region's only makers of HD Class 8 zero-emission trucks) is an insufficient alternatives and mitigation analysis under CEQA.
- **Does the FEIR accurately assess greenhouse gas emissions, damage to air quality, and health impacts that might stem from the Project?**
 - No. The City refuses to conduct a proper health impact analysis for this Project, insisting that it does not have to do so.
 - The FEIR bases its conclusions on health impacts and air pollution on flawed modeling in which the FEIR has failed to properly justify the inputs used to project those emissions, thus calling into question the calculations the City uses to justify not doing more to protect the public, including the refusal to conduct a proper health risk assessment.
 - Moreover, the FEIR relies on outdated thresholds which the City fails to justify through substantial evidence. This has resulted in the FEIR unjustifiably failing to identify any potentially significant GHG impacts from the project.

4. The FEIR Must Allow Public Participation In The Review Process.

As the Guidelines makes clear, the FEIR must enable meaningful public participation in the review process. See CEQA Guidelines at p. 1. The Guidelines also note that the public must be given notice and an opportunity to comment on the FEIR. *Id.* at p. 10. According to the latest census data, in Oxnard as a whole, 66% of residents speak a language other than English at home. Translation of environmental documents and workshops is necessary to promote non-English speaking individuals' right to meaningfully participate in environmental decisions that impact their health and safety.

Question:

- **Was Project Information translated into Spanish and Mixteco?**
 - The evidence has shown that because the Port failed to translate key environmental documents, workshops, and hearings into Spanish and Mixteco, many Oxnard residents could not meaningfully participate in discussions about the Project.

What the Commissioners are Called to Do Based on the Law and Evidence

As Commissioners, it is your duty to weigh and to evaluate all of the evidence received for this Project, and, in that process, to decide whether this project has undergone the legally required environmental review and meets California's environmental standards. It is also your duty to apply the law whether you agree with it or not. The answers to the above questions highlight the fundamental omissions in the FEIR and the broader CEQA process. The evidence shows that, despite the City's claims to the contrary, the FEIR was inadequate and conclusory in nature, and therefore precluded meaningful public review.

We ask that you not certify a final EIR at this time and deny the Special Use Permit.

In the alternative, the Applicant must incorporate the required information under the City's CEQA Guidelines and recirculate the EIR. CEQA requires agencies to recirculate an EIR when "significant new information" is disclosed and provide an opportunity for a renewed public notice and comment. CEQA Guidelines § 15088.5(d), (f); see also Cal. Pub. Res. Code § 21092.1 (West). The public deserves an opportunity to review and comment on a comprehensive EIR that discloses the full extent of the Project's environmental impacts.

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Council (NRDC)

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishoyo Chumash Foundation



October 19, 2022

City of Oxnard Planning Commission
305 West Third Street
Oxnard, CA 93030

Sent via email planning@oxnard.org

Re: Agenda Item F - Vote No on Port of Hueneme Temporary Outdoor Vehicle Storage Facility

Dear Commissioners,

Climate First: Replacing Oil & Gas (CFROG) is a grassroots environmental nonprofit dedicated to combating the climate crisis by working to shape the transition from fossil fuels to a carbon-free economy in Ventura County. We are committed to the establishment of an economy that is sustainable, inclusive, and promotes renewable energy. **CFROG urges the Oxnard Planning Commission to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion.**

The proposed expansion plans for the Port of Hueneme conflict with the community vision for a healthy, sustainable South Oxnard. We will not accept any more pollution in Oxnard and instead call for an alternative vision: full transparency on planned projects for future port development, a healthy environment with a zero-emission commitment from the Port, and no more industrialization between South Oxnard neighborhoods and coastal beaches.

Environmental Injustice - Don't Create a Diesel Death Zone

The FEIR fails to consider the impact on air quality and community health from diesel trucks that will transport cars from the 34-acre site to dealerships in the County and beyond. This expansion will bring more diesel trucks onto Hueneme Road, polluting the air with more cancer-causing exhaust and other harmful pollutants.

Diesel particulate matter is linked to several serious public health problems [including](#), but not limited to:

- aggravating asthma,
- heart and lung disease,
- cancer, and
- premature mortality.

PO Box 114 ● Ojai, California 93024 ● (508)794-0629 ● haley@cfrog.org ● www.cfrog.org

CFROG is a 501(c)(3) tax-exempt organization ID# 46-2660066

Twenty years ago, diesel engine exhaust was [classified](#) as “carcinogenic to humans” after being linked to lung cancer induction and death from lung cancer. The state estimates that 70 percent of the cancer risk linked to air pollution for the average person in California results from breathing diesel exhaust. To be approving the exponential increase in diesel pollution in a heavily populated community is irresponsible and unjust.

The nearby South Oxnard community is already experiencing an overall pollution burden higher than 94 percent of other California communities, and a diesel particulate matter burden higher than 86 to 90 percent of the rest of the state ([CalEnviroScreen 4.0](#)). This has led to higher than average rates of asthma, low birth weights, and cardiovascular disease in surrounding, down-wind communities.

GLOVIS has [already started](#) to use zero-emission trucks in other communities to improve air quality. At the very least, all transportation as a result of this expansion should be zero-emission, instead of dirty diesel.

Contributing to Climate Crisis

We are increasingly feeling the impacts of climate change in Ventura County - the [fastest warming](#) county in the contiguous United States - from wildfire to continued drought to unavoidable sea level rise. While the FEIR broadly determines this project to have a “less than significant impact” on greenhouse gas emissions, it fails to consider the lasting effects of industrializing an area or the alternative biological carbon sequestration of maintaining open space.

Increasing the number of diesel-powered vehicles will undoubtedly have *significant* climate impacts. A large proportion of diesel particulate matter is composed of black carbon. The [Intergovernmental Panel on Climate Change](#) recently reported that emissions of black carbon are the second largest contributor to global warming, after carbon dioxide emissions.

The FEIR drastically underestimates greenhouse gas emissions by inaccurately describing the project as “temporary” and only considering 3-5 years of impact. First, records have been submitted to the city that indicates the Port of Hueneme has larger expansion plans, including contracts and grant applications, to expand to a 250-acre storage location. Second, the long-term greenhouse gas impacts of industrialization on this land are unaccounted for. What future emissions will be a result of this infrastructure?

Additionally, this is one of the last pieces of unindustrialized land between South Oxnard neighborhoods and the coast. It neighbors the Ormond Beach Wetlands, which are being restored as a public green space for the community to enjoy. The FEIR falsely states that a scenario of “no project/no build” has “no impact” on all impact areas, including air quality, biological resources, and greenhouse gas emissions. This scenario should have been classified as “environmentally superior” as open space can [improve air quality](#), [sequester carbon](#), and [promote healthy wildlife](#).

True Commitment to the Environment means Commitment to People

The Port of Hueneme has received multiple Green Marine certifications, been voted the Greenest Port in the U.S. by industry, and describes itself as “committed to the environment.” CFROG applauds these advancements and is a partner in the Port’s local air monitoring efforts. But we urge the Port to truly follow its commitments by ensuring that all business decisions - from electrification to expansion - are done equitably and in a way that does not reinforce existing systemic inequities.

The FEIR fails to accurately examine the negative impacts of this project. We urge you to not certify the FEIR and deny the proposed Special Use Permit. Thank you for prioritizing the health, air quality, and future of South Oxnard over industrialization and diesel expansion.

With urgency,

A handwritten signature in black ink, reading "Haley Ehlers" with a stylized flourish at the end.

Haley Ehlers, Associate Executive Director



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 0/20 Public Hearing-Public comment to Vote NO on the Temporary Vehicle Storage Project

1 message

Citlali Clarissa <citlalicplaza@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 8:00 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and

environmental justice!

Sincerely,

Citlali Plaza

--

Citlali

**Solis, Rogelio** <rogelio.solis@oxnard.org>

[Ask Planning Action] Agenda Item F

1 message

John Brooks <johnbrooks69@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 8:12 PM

Dear Commissioners,

Please vote No on the proposed "temporary " parking facility in South Oxnard . My friends who live there already suffer from the health impacts of diesel exhaust. South Oxnard has suffered enough and adding to its pollution burden is not what the Port should be doing. At the very least why is there no analysis of the benefits of electric trucks on the already underestimated greenhouse gas and particulate emissions?

The FEIR is inaccurate but I will let the scientists tell you the details.

I just know you should not certify the FEIR and in the name of environmental justice vote No on the pro.

Thank you,

John Brooks
Oak View



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] GLOVIS Port Expansion

1 message

Katie McCarthy <katiejoby@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:29 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Respectfully,

Katie McCarthy



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Item 1 Permit 18-500-021 message

'David Caskey' via Planning <planning@oxnard.org>

Thu, Oct 20, 2022 at 9:05 AM

Reply-To: David Caskey <dlcaskey@yahoo.com>

To: Planning@oxnard.org

Cc: dlcaskey@yahoo.com, saveormondbeach2019@gmail.com, Lucas Zucker <lucas@causenow.org>

Item 1 Temporary Outdoor Vehicle Storage Facility
18-500-02

I urge the Planning Commission to deny this permit. I fully support the position of the Friends of Ormond Beach, of which I'm a member, and of the Central Coast Alliance United for a Sustainable Economy, which I support.

Most of us familiar with the Coast between Pt. Mugu and Port Hueneme would agree that what we've done there is a disgrace. A beautiful and ecologically rich environment has been used as an industrial sewer. The health of the nearby residents has been wrecked. It's a blight, on Oxnard, on Ventura County, and on California and it's commitment to preserve and protect its Coast.

The first step towards recovery is to stop doing harm. You have that chance here, with this decision. There should be no more industrial zoning south of Hueneme Road between the Navy property and the City of Port Hueneme.

The Port is important, but it can be sustained and improved using existing land and infrastructure. The joint use agreement, currently being used to help congestion in the Los Angeles Ports, can be modified to sustain its future viability.

One of the most dedicated, and sorely missed public servants in Ventura County was Carmen Ramirez. She spent many years trying to address the mistakes of the past. In an interview with the LA Times, over five years ago, she said, "It's clear who gets stuck with all the dirty stuff. What other city has three power plants and a Superfund site on the beach. The people of Oxnard have paid their dues."

I hope you honor her memory.

In her words, "We just want to stop the abuse and get our coast back."

Regards,

David Caskey
Port Hueneme



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Opposition to FEIR Final EIR

1 message

Cori Raffaelli <cori.raffaelli@oxnardunion.org>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 12:33 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Cori Raffaelli

This is a staff email account managed by Oxnard Union High School District. This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender.

From: Irene

Sent: Thursday, October 20, 2022 3:03 PM

To: cityclerk@oxnard.org

Cc: Larry Godwin

To: the City of Oxnard and Planning Commissioners

Re: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach

a. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and

b. Adopt a Resolution approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.

For Oxnard,

Please OPPOSE the Port of Hueneme Vehicle Storage at this location.

Oxnard can do better! A car park at Ormond is an imposition efforts any hope for a public project at Ormond.

Despite the Port's claim that the project is temporary, it is an eyesore to the adjacent community already in need of improvements, and a threat to existing rare native coastal environment. This rare parcel is virtually the last remaining native land on our coastline... needs to be protected for a preserve at Ormond for the generations!

Irene Rauschenberger
Oxnard Resident

Sent from Windows Mail

October 19, 2022

Via Email and Federal Express

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org
planning@oxnard.org
cityclerk@oxnard.org

Re: Comments on The Final Environmental Impact Report for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We are in receipt of the Planning Department's Final Environmental Report, and respond here with comments submitted by Central Coast Alliance United for a Sustainable Economy (CAUSE), Natural Resources Defense Council, Earthjustice and the Wishtooyo Chumash Foundation. We submit the documents listed below on the enclosed thumb drive via FedEx, and available through this OneDrive link [4527 - Port of Hueneme Comments - Sources Shared on October 19 2022*](#) via email. These documents contain key references cited in our comments, which we ask you to consider in conducting your review and include in the administrative record associated with this matter.

1. Attachment 1: Dobrowalski July 13th Email

This email is from Mr. Jay Dobrowalski, the Senior Planner for the City of Oxnard Planning Division, acknowledging receipt of our February comment letter, and noting that the letter and all supporting documents would be entered into the record.

2. Attachment 2: Commenters' October 11, 2022 Errata Request

This email is from Commenters requesting an erratum after realizing the supporting documents had not been entered into the record as part of the FEIR documentation.

3. Attachment 3: Previous Comment Letters and Attachments

February 14, 2022 Initial Comment Letter (and attachments) and July 1, 2022 Supplemental Comment Letter (and attachments).

* The following email addresses have access to this folder: jay.dobrowalski@oxnard.org, planning@oxnard.org, cityclerk@oxnard.org. Please email Radhika Kannan at rkannan@earthjustice.org or Fernando Gaytan at fgaytan@earthjustice.org if there are any access issues.

- 4. Attachment 4: SWAPE Reply Report and Supportive Document**
- 5. Attachment 5: Dr. Smallwood Reply Letter and Supportive Documents**
- 6. Attachment 6: 2022 Automotive Logistics News Article on Electric Car-Carrier Trucks**

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtooyo Chumash Foundation

October 19, 2022

Via Email and Federal Express

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org
planning@oxnard.org
cityclerk@oxnard.org

Re: Comments on The Final Environmental Impact Report for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We submit these comments on the Final Environmental Impact Report (“FEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”).

The FEIR fails to address several fundamental deficiencies in the Draft Environmental Impact Report (“DEIR”) that commenters had previously identified. Despite the submission of over 200 comments on the DEIR, the City of Oxnard Planning Division (“OPD” or “City”) has only made minor revisions to its analysis in finalizing the FEIR.¹ Even when confronted with new knowledge, facts, and expertise, including record evidence from the Oxnard Harbor District’s (“OHD” or the “Port”) internal documents, the City has refused to reevaluate its mistaken analysis. Consequently, the FEIR is legally deficient and unfit for certification under the California Environmental Quality Act (“CEQA”).

I. The Record Must Include Commenters’ Submitted Evidence on July 1, 2022

Following the close of the public comment period for the DEIR in February 2022, commenters became aware of new evidence through documents produced in response to a Public Records Act request to the OHD. These documents contained substantial relevant information for decisionmakers to be aware of ahead of deciding whether to approve this proposal. Furthermore, on March 21, 2022, the City hosted a Virtual Community Workshop with presentations from the OHD discussing its plans for the 34-acre Vehicle Storage Site currently under review. At the conclusion of the Virtual Community Workshop, OPD invited additional

¹ Final Environmental Impact Report, Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project, SCH No. 2020069039 (Sept. 2022) (hereinafter “FEIR”).

written comments from the public concerning the proposed Project and the presentation by the Port. In line with this invitation, and to ensure that the Commissioners and other decisionmakers were provided with information necessary to make an informed decision, commenters submitted supplemental comments on July 1, 2022, in addition to the comments submitted on February 14, 2022.

The City of Oxnard Planning Division has acknowledged receipt and noted that the letter and all supporting documents would be entered into the record. The confirmation email is attached hereto as Attachment 1, Dobrowalski July 13, 2022 Email. Although the July 1 letter appears in Attachment F of the Staff Report (along with other letters submitted after February 14, 2022), the supporting evidence does not. When commenters realized that the supporting documents had not been entered into the record as part of the FEIR documentation, commenters sent an email to Mr. Dobrowalski requesting an erratum. This request is attached hereto as Attachment 2, Commenters' October 11, 2022 Errata Request. This erratum has not been filed. As Planning Commissioners are tasked with deciding whether to approve this controversial project, they should have access to the entire record. In an abundance of caution, we are attaching the July 1, 2022 letter, as well as the February 14th letter, and all supporting documents to each of these comments as Attachment 3, Previous Comment Letters and Attachments.

Commenters request that the Commissioners strongly consider both the July 1, 2022, supplemental letter, and all supporting evidence in deciding this permit. We realize that this is a significant amount of information to review in a short amount of time which is also why we previously asked for the Commission's decision to be delayed for 30 days until the Commissioners have had an opportunity to hear from the public and have full access to the entire record in this considerable matter.

II. The FEIR Fails to Adequately Respond to Comments

When comments raise significant environmental issues through expert declarations or evidence-based assertions, the FEIR's response must provide a reasoned, good-faith analysis and "describe the disposition of significant environmental issues raised."² Comments must be "addressed in detail giving reasons why specific comments and suggestions were not accepted."³ Detailed responses are required to "ensure that the lead agency will fully consider the environmental consequences of a decision before it is made."⁴ Generally, the level of detail in the response must match the level of detail in the comment.⁵

"[C]onclusory statements unsupported by factual information" are never an adequate response.⁶ Yet, such conclusory statements are precisely what the City has proffered in its FEIR. Firstly, other than the Vehicle Miles Traveled ("VMT") analysis, the City has not made any substantive changes to the DEIR. Mere editorial changes do not rise to the level of fully engaging with public comments. Secondly, and more egregiously, while commenters have

² Cal.Code Regs., tit.14, §15088(c).

³ *Id.*

⁴ *City of Long Beach v. Los Angeles Unified Sch. Dist.* (2009) 176 Cal.App.4th 889, 904.

⁵ *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.

⁶ Cal.Code Regs., tit.14, §15088(c); *City of Maywood v. Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 391.

provided detailed explanations including several citations to documents produced by the OHD, the City’s response to these detailed and well-supported objections has been to overwhelmingly refer commenters to “Global Responses.” *See e.g.*, FEIR Comment Response 206-15; 206-24 (the response containing nothing more than “Please refer to Global Response GR-3, Relation of Project to the Multimodal Logistics Park and Global Response GR-8, Cumulative Projects.”) At the same time, no additional details can be found in these Global Responses. These Global Responses do not grapple with OHD’s emails, grant applications, internal memos and other logical inconsistencies pointed out by the commenters. This failure to engage extends to most responses to the comments.

As such, the City has failed in its CEQA obligation to provide detailed reasoning for why commenters’ suggestions were not accepted. Overall, the City has not shown a good faith effort to consider public input.

III. The FEIR Improperly Piecemeals the Analysis of the Whole Project and Fails to Analyze the Impacts of Important Project Components

The FEIR’s flawed Project Description violates the fundamental goal of CEQA, which is to provide complete and accurate information about the environmental impacts of a proposed project before it is approved. The City claims that the design of the Project is meant to “[r]educe and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations.”⁷ The FEIR also notes in the Project Description that the 34-acre outdoor vehicle storage facility is meant to be temporary – for a maximum of 5 years.⁸ Yet, the FEIR misstates the true scope of the 34-acre site, leading to an incorrect analysis regarding the design of the Project.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements

The FEIR attempts to re-write the CEQA process for what must be considered in the Project Description.

The law requires that an EIR must include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.⁹

“[T]he environmental review accompanying the first discretionary approval must evaluate the impacts of the ultimate development authorized by that approval. ... Even though further discretionary approvals may be required before development can occur, the agency’s environmental review must extend to the development envisioned by the initial approvals. It is irrelevant that the

⁷ FEIR, Section 3.5, p. 3-15.

⁸ FEIR, Section 3.6, p. 3-15.

⁹ *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 396 (1988), as modified on denial of reh’g (Jan. 26, 1989).

development may not receive all necessary entitlements or may not be built. Piecemeal environmental review that ignores the environmental impacts of the end result will not be permitted.”¹⁰

CEQA mandates “that environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences.”¹¹

The FEIR’s failure to recognize the 250-acre site stems from its erroneous interpretation of CEQA requirements. The FEIR claims that the 250-site does not need to be integrated in this project description and no environmental analysis needs to be conducted because: (1) “the City of Oxnard has not received an application for proposed development of a 250-acre site”¹²; and (2) a 250-acre parcel would require annexation which would be subject to future environmental review.¹³

Whether a project is a “reasonably foreseeable consequence of the initial project” does not depend upon whether the City has received an application for it or whether that project might trigger additional CEQA review. Indeed, such a requirement is nowhere to be found in the City’s or the State’s CEQA Guidelines. The City cites to no authority for these “requirements” for which projects need to be included in its project description.¹⁴ These additional elements are created out of whole cloth by the City to avoid re-writing the project description to include what is *clearly* a foreseeable project. As described above, the City cannot use the fact that the entitlement will be subject to further environmental review as an excuse to avoid integrating the extension in its analysis currently.

B. The FEIR’s Conclusions Regarding the 250-Acre Site Are Not Supported By Substantial Evidence.

The City concludes that because “the future development of a 250-acre site is unspecified and uncertain, the City has determined that potential future development of a 250-acre site is not reasonably foreseeable and is speculative.”¹⁵ However, this conclusion flies in the face of the wealth of documents presented to the City demonstrating how the City was well aware of the depth of the planning for the 250-acre site.

As commenters have highlighted in their previous letters, several documents from the Port (including new documents released in response to commenters’ Public Records Act request) indicate that beginning in 2018, the Port has started drafting conceptual plans, pursuing financial arrangements with customers, hiring consultants related to the project, considering the 250-acre project for grants, and designating the site as an Opportunity Zone.¹⁶ Yet, in response, the FEIR

¹⁰ See Kostka, et al., *Practice Under the California Environmental Quality Act*, § 6.52, p. 298.

¹¹ *Bozung v. LAFCO*, 13 Cal.3d 263, 283-84 (1975); *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1452 (1989).

¹² FEIR, Section 12.4.2, p. 12-9.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Attachment 3, February Comment letter, pp. 9-11 (hereinafter “Commenters’ February Letter”); *see also* Attachment 3, July Comment Letter, pp. 4-5 (hereinafter “Commenters’ July Letter”).

Global Responses makes no effort to address these documents. The City's response is entirely inadequate.

First, the FEIR selectively ignores evidence that the Port has coordinated with the City a more permanent solution to the auto storage issue through the 250-acre site. The Port produced a document titled "Collaboration Call with City of Oxnard" with the goal of "Partnership for Economic Development."¹⁷ The document has an "ongoing deadline" and is supplemented with information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.¹⁸ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that "[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail."¹⁹ Thus, the City was well aware that the 250-acre site was a reasonably foreseeable extension of the 34-acre site.

Second, the Global Response to Comments regarding piecemealing the 250-acre site, is primarily devoted to explaining how the 250-acre Multimodal Logistics Park site "was *conceptual* at the time of the Notice of Preparation and is *one possible concept* for potential future development" (emphasis added).²⁰ But the Port's communications to landowners, the Memoranda of Understanding ("MOU") and Letters of Intent ("LOI") between GLOVIS and the Port, and the funding applications demonstrate that concrete steps have indeed been taken to bring the project into fruition and render the 250-acre site very far from merely "conceptual."²¹

Third, the FEIR's Project Description fails to consider the timescale of the Project. It makes no sense to assume, as the FEIR does, that given the serious land deficits (over 300-acres) the Port is facing, that there will be no further land use planned for automobile storage once the five-year temporary site expires.²² The FEIR summarily dismisses these land deficits by referring commenters to its superficial Global Responses.²³ This is not substantial evidence to support a conclusion that the 250-acre site is speculative. By postponing review of this component, the FEIR improperly bifurcates the project in violation of CEQA, and in doing so, severely underestimates the impact on human health and the environment.

¹⁷ Commenters' July Letter, p. 8 (citing OHD, Collaboration Call with City of Oxnard at p. 2).

¹⁸ *Id.* (Commenters also noted that "Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.")

¹⁹ Commenters' July Letter, p. 8 (citing City of Oxnard & The Port of Hueneme: Partners in Economic Development, *Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard.*)

²⁰ FEIR, Section 12.4.2, Global Response 3, p. 493.

²¹ Commenters' July Letter, pp. 6-8 (citing Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019); *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020); Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020); OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing)).

²² Commenters' February Letter, p. 9; Commenters' July Letter, p. 9 (citing Oxnard & POH Commercial Viability Report, p.1. PROD-PHCN0000828).

²³ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-15, p. 12-1162.

IV. The FEIR's Project Description is Inaccurate and Misleading and Impedes Meaningful Public Review

As stated in prior comments, the City has disingenuously omitted analysis of the broader Port logistics expansion that this Project represents. The City has strained to create a project description that artificially limits the scope of the Project to the 34-acre site, despite substantial evidence demonstrating a much broader plan to increase storage capacity in the region, including at the 250-acre Multimodal Logistics Center. In doing so, the City has produced a FEIR with a flawed project description under CEQA that contradicts its own objectives and fails to offer the Planning Commission the information necessary to properly assess the impacts of this project. This is discussed further in Section V.

The City simply ignores the multiple comments submitted concerning the inadequacy of the project description itself—more specifically, the incompatibility of the Project's objectives with the alleged "temporary" nature of the storage site.²⁴ One of the key objectives listed for this Project is to "reduce and consolidate" reliance on off-port satellite storage locations.²⁵ Yet, the City maintains that the project will be temporary, stating: "[t]he project proposes a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. Future expansion of Port facilities based on the project is speculative at this time."²⁶ The FEIR fails to reconcile this inherent conflict nor explain how the Project, allegedly limited to a maximum of 5 years, will actually result in the consolidation of existing sites to meet the Project's objectives.

As we stated in our July 1, 2022 comment letter, the City has failed to explain how the Project will be both "temporary" and fulfill its objectives to consolidate off-port storage.²⁷ There are no details, for example, for how the site will be transitioned post-Project but continue to serve the consolidation objective and meet the Port's known need for more land to accommodate its expansion.²⁸ Moreover, if this project is truly temporary, it would fail to satisfy the stated objectives—making Alternative One: No Project/No Build by far the environmentally superior alternative²⁹ that the City should adopt. The rejection of this alternative in the FEIR is based on deficient and incomplete analysis.

The inadequacy of the project description means that the Planning Commission is being called to make a decision "in the dark"—without the necessary information to fully appreciate the full scope of this Project or its impact. The approval actions before the Commission, therefore, involve much more than a straightforward EIR approval. Here, Planning

²⁴ See Commenters' July Letter

²⁵ FEIR, Section 3.5, p. 3-15.

²⁶ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-20, p. 12-1163.

²⁷ Commenters' July Letter, pp. 9-10.

²⁸ *Id.*

²⁹ The FEIR also identified Alternative Two: Two Existing Off-Port Vehicle Storage Locations as the environmentally superior option among the Project alternatives. FEIR, Section 6.9.4, pp. 6-16. This conclusion is as flawed as the rejection of the No Project/No Build alternative, as the analysis of this alternative is not only incomplete, but also fails to incorporate feasible mitigation measures to address air quality impacts, such as the implementation of zero-emission technology. See Commenters' February Letter, p 69; FEIR, Section 6.7, pp. 6-5 to 6-10.

Commissioners are not simply being asked whether to certify the FEIR and approve a Special Use Permit for a single project. Despite how the Planning Division has decided to reframe this project as a “Temporary” Vehicle Storage Facility to make it seem benign, this Project sets the stage for an unprecedented expansion of Port activities into the very neighborhoods that have already borne the brunt of air pollution, traffic, noise, and lack of greenspace and coastal access. This is not simply a storage lot; it will hasten the expansion of commercial and industrial activity in the region—an expansion for which we do not know the true extent of environmental impact. Because of these flaws in the project description, the FEIR remains inadequate as an informational document and precludes meaningful public review. It should therefore be rejected in its current form and recirculated for further public review if revised to fix these discrepancies.

V. The FEIR Fails to Consider a Reasonable Range of Alternatives and Improperly Rejects Existing Alternatives

A major function of an EIR is the lead agency’s full assessment of a reasonable range of alternatives stemming from a well-prepared project description and statement of objectives.³⁰ However, where a project description is inadequate or overly narrow—as in the case here—the alternatives analysis risks being equally flawed. As discussed at more length in commenters’ February and July letters,³¹ the project objectives are narrowly tailored in a way that facilitates the City’s improper rejection of alternatives that could offer substantial environmental advantages and avoid worsening air quality and further concentrating industrial uses and harms adjacent to an over-burdened residential neighborhood, while still meeting most project objectives. As a result, the FEIR contains a flawed and incomplete analysis of feasible alternatives and fails as an informational document that facilitates meaningful public engagement. It, therefore, cannot be certified.

The FEIR fails to address the deficiencies in the DEIR’s alternatives analysis. First, the lack of detail provided in the EIR prevents a meaningful public review and a reasonable choice of alternatives.³² For instance, it is impossible to know based on the limited discussion and lack of detailed information provided in the EIR whether there are no feasible alternative sites for car storage that would meet most of the stated objectives.³³ Lead agencies are required to disclose in their EIR their reasons for concluding that no feasible alternative locations exist.³⁴ However, the City’s failure to consider the Navy Base Ventura County (“Navy”) property as an alternative site

³⁰ Cal. Pub. Resources Code, § 21002; Cal.Code Regs., tit.14, § 15124(b); *Laurel Heights Improvement Ass’n v. Regents of the Univ. of California* (1988) 47 Cal.3d 376, 400; *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1163, citing Cal.Code Regs., tit.14, § 15124(b).

³¹ Commenters’ February Letter, pp. 68-83; Commenters’ July Letter, p. 15.

³² See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287 (“Absolute perfection is not required; what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”)

³³ FEIR, Section 1.5, pp. 1-11 to 1-12.

³⁴ Cal.Code Regs., tit.14, § 15126.6(f)(2)(B); see also *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405, as modified on denial of reh’g (Jan. 26, 1989) (“Those alternatives and the reasons they were rejected, however, must be discussed in the EIR in sufficient detail to enable meaningful participation and criticism by the public.” (citations omitted)).

in the EIR and to instead address its feasibility solely in a General Response, violates CEQA and is further evidence of the FEIR's failings as an informational document.

Second, the FEIR continues to apply circular logic to reject alternatives for not lessening project impacts. By failing to carry out the full analysis required under CEQA, the FEIR underestimates the Project impacts. As a result, it comes to the incorrect conclusion that the project would not result in significant or unavoidable impacts and therefore the City has no obligation to consider alternatives. However, as discussed at length in this and other comments, there is substantial evidence that the project will have significant impacts on the environment and public health.

Third, the FEIR improperly conflates the City's jurisdiction with feasibility. Alternatives cannot be rejected simply because they are beyond the lead agency's authority.³⁵ And yet, the City relies on this argument to avoid even considering alternatives raised by commenters. For instance, the City relies on the 34-acre property being privately-owned to conclude that a park alternative is infeasible.³⁶ Similarly, the City refuses to consider the Navy property³⁷ as a feasible alternative in part because it does not have jurisdiction over Navy property.³⁸ This ignores the definition of feasibility under CEQA³⁹ and fails to address the central question of whether the OHD as the project proponent has reasonable access, ownership, or control over alternative sites.⁴⁰ In the case of the Navy property alternative, the close relationship between the OHD and the Navy evidenced by a 2021 Joint Use Agreement demonstrates that it is a viable alternative worth considering. Nevertheless, this goes undiscussed in the FEIR. The City should apply the CEQA definition of feasibility and fully evaluate all reasonable alternative locations⁴¹, including the Navy property.

³⁵ See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286–287 (“[I]t is not appropriate to disregard alternatives simply because the alternative may be beyond the scope of expertise of the agency or because the alternative may require implementing legislation since CEQA was intended to provide a basis for consideration and choice by all branches of government.”)

³⁶ FEIR, Section 12.4.2, p. 12-15.

³⁷ It is disingenuous for the City to claim it is not informed about the Joint Use Agreement between the Navy and the Port given the coverage the agreement received in the local press. See, e.g., Commenters' February Letter, p. 71 (citing Brian J. Varela, Port of Hueneme, Navy Partner to Assist Los Angeles County Port Backlog, Ventura County Star, November 28, 2021, 10:40 a.m.; <https://www.vcstar.com/story/news/2021/11/28/port-hueneme-assist-la-county-ports-through-agreement-navy/8771397002/>).

³⁸ FEIR, Section 12.4.2, p. 12-15.

³⁹ CEQA Guidelines define feasibility as capable of “being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Cal.Code Regs., tit.14, § 15364.

⁴⁰ Cal.Code Regs., tit.14, § 15126.6(f)(1). See, e.g., *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 288 (finding that an alternative to develop a university athletic stadium jointly with the city was properly rejected based on a prohibition to spend funds on a non-university stadium and the city's documented lack of interest in a joint stadium project).

⁴¹ Another such alternative site could include prioritizing the on-dock parking structure for which the OHD has sought federal funding over the past several years, which is intended to store over 7,000 vehicles. Commenters' February Letter, p. 71 (citing Oxnard Harbor District, Economic-Environment Partnership, Slide presentation (undated), Slides 29 and 30); see also <https://maritime.dot.gov/PIDPgrants>. While not all information about this proposal is public, it is apparent that it is not speculative; the Port has hired consultants to study this parking

Finally, the FEIR once again ignores the current availability of zero-emission technology⁴² and GLOVIS' role as a leading regional maker of heavy-duty Class 8 zero-emission trucks in its rejection of the Electric Car Carrier Truck Alternative. During public meetings and in public statements, the OHD frequently highlights its alleged commitment to a zero-emission transition, and yet when an opportunity arrives to make a clear commitment that investment is not even considered or analyzed. In order to begin to address the air quality impacts from the Port on the surrounding community, the OHD must invest in a zero-emission transition and establish near-term milestones to achieve that vision, such as the use of zero-emission car-carriers. In their expert reply to the FEIR, Matt Hagemann and Dr. Paul E. Rosenfeld identify several mitigation measures related to zero-emission technology that the City should consider and evaluate to address air quality impacts from the Project.⁴³

Due to deficiencies described above and in previous letters, the EIR contains an inadequate discussion of project alternatives in violation of CEQA.

VI. Mitigation Measures Offered in FEIR Continue to be Inadequate

Under CEQA, a public agency cannot approve a project if there are “feasible mitigation measures which substantially lessen the significant environmental effects” of the project.⁴⁴ Any potential mitigation measure must be at least partially effective in reducing the significance of the impacts at issue.⁴⁵ The FEIR fails to offer mitigation measures that meet this standard. Since the FEIR does not evaluate the full scope of the Project due to an overly narrow project description and project objectives, it fails to analyze, much less address, the significant impacts that would result from the Project. Given that most mitigation measures in the FEIR went unaltered,⁴⁶ those measures continue to be inadequate and will not substantially lessen the significant environmental effects of the full scope of the Project.

Moreover, the few updates made to mitigation measures for biological resources and cultural and tribal resources in the FEIR continue to fall short of addressing the impacts from the Project. For instance, the addition of a preconstruction wildlife survey to the biological resource mitigation measures will be insufficient in detecting special status species, as discussed in detail by Dr. Shawn Smallwood.⁴⁷ As a result, the FEIR's mitigation measures are deficient, and new measures must be considered following a complete evaluation of the Project's full impacts.

structure proposal. Commenters' July Letter, p. 13 (citing Oxnard Harbor District, Professional Services Agreement (May 26, 2021); and Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021)).

⁴² Commenters' February Letter, pp. 71-83; Commenters' July Letter, p. 15. There are companies working on developing zero-emissions Class 6-8 car carrier trucks and a commitment by the OHD to order and use these carriers could drive additional investments in this type of technology. See Namrita Chow, Electric car carriers promise to pack a punch, Automotive Logistics, access Oct. 17, 2022 at 4:52pm, <https://www.automotivelogistics.media/finished-vehicle-logistics/electric-car-carriers-promise-to-pack-a-punch/42868.article>, attached hereto as Attachment 6.

⁴³ Attachment 4, SWAPE Report, pp. 12-13 (hereinafter “SWAPE report”).

⁴⁴ Cal. Pub. Res. Code § 21002.

⁴⁵ *Sierra Club v. County of Fresno*, (2018) 431 P.3d 1151, 1166.

⁴⁶ Commenters' February Letter, pp. 63-67.

⁴⁷ See Attachment 5, Smallwood Reply Letter (Oct. 18, 2022), pp.8-9 (hereinafter “Smallwood Reply Letter”).

VII. The FEIR Inadequately addresses the Cumulative Impacts

The FEIR's flawed cumulative analysis violates CEQA. The City claims that Table 4-1 lists all projects that could contribute to considerable cumulative impacts.⁴⁸ The FEIR also acknowledges various Port projects that are in development, including the 250-acre Multimodal Logistics Park, channel deepening, berth widening, on-dock expansions, expansion of rail lines, the Structure for Transfer of Automobiles Creating Key Economic Development (STACKED) Project, off-Port Cargo storage yards and overall expansion of Port Operations, the INVEST Project, the BUILD Project, and the Port Intermodal Corridor (Hueneme Modernization Project).⁴⁹ Yet, the FEIR fails to include relevant projects in its cumulative analysis.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements for Cumulative Impacts

The FEIR attempts to re-write the CEQA process for what must be considered in a cumulative impact analysis.

The City admits that CEQA requires that the FEIR address cumulative impacts.⁵⁰ Cumulative impacts are those that result from "the combination of the project evaluated in the EIR together with other projects causing related impacts."⁵¹ The incremental effects of an individual project "are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."⁵² Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.⁵³ A relatively "small" impact is not insignificant under CEQA if it contributes to an existing environmental problem.⁵⁴

The City also admits CEQA requires a cumulative impact analysis to contain, at minimum, either 1) a list of past, present, and reasonably anticipated future projects, including those projects outside the agency's control that produce related or cumulative impacts⁵⁵ or 2) a summary of such projections contained in an adopted general plan or related planning document

⁴⁸ FEIR, Section 4.2, p. 4-2.

⁴⁹ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁵⁰ FEIR, Section 4.1, p. 4-1; Cal.Code Regs., tit.14, § 15130; *see also* Cal.Code Regs., tit.14, § 15355

⁵¹ Cal.Code Regs., tit.14, § 15130(a)(1).

⁵² *Id.* at § 15065(a)(3).

⁵³ *Id.* at § 15355(b) (The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time).

⁵⁴ "[A] project's cumulative environmental impact cannot be deemed insignificant solely because its individual contribution to an existing environmental problem is relatively small." *See, San Francisco Baykeeper, Inc. v. State Lands Comm'n* (2015) 242 Cal.App.4th 202, 223. "In fact, 'the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant.'" *Id.* (quoting *Cmtys for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 120).

⁵⁵ FEIR, Section 4.1, p. 4-1; CEQA suggests that agencies consider factors such as the nature of the environmental resource examined, location of project, and type. Cal. Code Regs., tit.14, § 15130(b)(2).

that evaluates regional or areawide conditions.⁵⁶ The cumulative impacts analysis of this Project continues to remain flawed.

As with the Project Description, the FEIR's failure to include several projects in its cumulative impacts analysis stems from its erroneous understanding of the CEQA requirements. The FEIR claims that several pertinent projects need not be considered in its list of past, present, and reasonably anticipated future projects because (1) "each cumulative development project represented in Table 4-1 was "determined to be reasonably foreseeable by the City based on applications that the City received at the time the Notice of Preparation (NOP) for the Draft EIR was released (June 25, 2020)"⁵⁷; and (2) the City does not consider conceptual long-range projects under the jurisdiction of another lead agency to be reasonably foreseeable.⁵⁸

Commenters address each of these excuses in turn. First, whether a project is a "reasonably anticipated" does not turn on whether the City has received an application for it. Indeed, such a requirement is nowhere to be found in the City's or the State's CEQA guidelines. Because this element is not required under law, it should not factor into which projects are listed. Second, as plainly stated in the law, the agency must consider any project that can reasonably have cumulative impacts even if "those projects [are] outside the agency's control." Thus, the legal excuses provided by the City do not pass muster.

B. The FEIR's Conclusions Regarding the Projects Included in the Cumulative Analysis Are Not Supported by Substantial Evidence

The City cites to three different reasons why the projects commenters list should not be considered: (1) that some cumulative impacts are speculative; (2) they are not within the proposed geographic zone; and (3) despite proposed increases in passageways for rail and freight traffic, *this project* doesn't change capacity requirements.⁵⁹ These objections are unfounded.

First, commenters have pointed to several projects that could impact the area surrounding the 34-acre site with supporting evidence demonstrating why they are not speculative. For example, the proposed widening of Hueneme Road to four lanes included in the Roads and Transportation Five-Year Capital Improvement Program; how the Port has invested in a new rail line with GLOVIS; and the capital investments to deepen berths to accommodate larger capacity vessels.⁶⁰ The City makes no effort to engage with the wealth of evidence of these substantial

⁵⁶ *Id.* at § 15130(b)(1).

⁵⁷ FEIR, Section 12.4.2, p. 12-17.

⁵⁸ *Id.*, at p. 12-18.

⁵⁹ *Id.*, at pp. 12-17 to 12-18.

⁶⁰ Commenters' February letter at pp. 19-20 (citing INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary, PROD-00002504; INFRA FY20 Application Project Summary; [2020 OHD Comprehensive Economic Development Strategy](#), PHCN0002370; [2020 OHD Comprehensive Economic Development Strategy](#), PROD-PHCN0002353; INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project, PROD-PHCN00005158; OHD Board of Commissioners Meeting Agenda- September 11, 2017-Press Report Attachment, PROD-00002699; The Hueneme Modernization Project BCA Appendix - March 17 2021, PROD-0004367; The Hueneme Modernization Project INFRA Grant Application FY2021, PROD-0003201; Ventura County Freight Corridor Study, (October 2021), Prepared by Iteris, Inc., on behalf of Southern California Council of Governments, The Port of Hueneme, Caltrans and Ventura County Transportation Commission at 36, PROD-PHCN0001900-2126).

plans. The record evidence demonstrates that concrete steps have been taken to bring the listed projects into fruition and disprove the City’s conclusion that these projects are “speculative.”⁶¹

Second, commenters have provided figures for the proposed developments including a figure showing the relative locations of the 34-acre site to the 250-acre site, a figure showing the relative position of the STACKED project (on the North Terminal), and another showing the traffic pathways and the potential widening of Hueneme Road.⁶² The City’s response to these relevant images has been to claim that these images “do[] not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.”⁶³ At the same time, the City notes that the cumulative impacts are only assessed in the geographic area “bound by Bard Road to the north; Ormond Lagoon Waterway/Edison Drive to the east; the Pacific Ocean to the south; and Ventura Road and other areas within the City of Port Hueneme to the west, but not within the Port of Hueneme or Naval Base Ventura County (“Navy”) Port Hueneme.”⁶⁴

As described above, the City cannot shirk its duty to review cumulative impacts just because a project may be in another agency’s control. Thus, delineating a line for any project “within the Port of Hueneme” is legally void, particularly given how the Port is viewing its many expansion projects as interconnected and in furtherance of their stated goal of expanding throughput. Furthermore, the lines drawn at Bard Road, Ventura Road, and Edison Drive are internally inconsistent. For example, the City addresses air quality concerns arising from Port operations and agricultural use which are outside these boundaries.⁶⁵ The City also extends the VMT analysis to Camarillo Airport and Tuff shed – both of which are outside these arbitrary lines.⁶⁶ The City cannot cherry pick instances in which to apply these arbitrary boundaries in a self-serving manner. The City cites to no authority for setting these specific limitations. At the very least, the city must explain why it chose these boundaries as supported by substantial evidence e.g., scientific studies indicate that emissions from facilities do not travel beyond “X” miles. In summary, these geographic boundaries are arbitrary and not supported by substantial evidence.

Even within these arbitrary boundaries that the City has set, several projects listed have at least some portion of their operations within this geographic region. The City cannot dismiss all these projects as outside the geographic area without taking a hard look at the impacts that portions of these proposed projects will likely have.

Third, the City admits that the “project would result in less trucking and more rail on/off moves compared to existing conditions” yet, the City concludes that it doesn’t need to conduct a cumulative impact analysis because “the City has not received an application for a new rail project.”⁶⁷ Similarly, in response to commenters noting that there are berth widening and

⁶¹ FEIR, Section 12.5, Responses to Comment Letter #206, Response Nos. 206-35 to 206-38, pp. 12-1164 to 12-1165.

⁶² See FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-17, p. 12-1162; Response No. 206-25, FEIR p. 12-1163; and Response No. 206-38, FEIR p. 12-1165.

⁶³ *Id.*

⁶⁴ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁶⁵ FEIR, Section 5.33, p. 5.3-8.

⁶⁶ FEIR, Section 12.4.1, p. 12-13

⁶⁷ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-23, p. 12-1163.

dredging projects that would increase shipping traffic, the City concludes that new cars stored at the vehicle storage facility would not require additional ships.⁶⁸ Even assuming that the temporary 34-acre site will neither facilitate an increase in goods movement by ship nor rail nor truck in the area (a fact that commenters do not concede), the fact that all three pathways propose to be extended in this exact area reflect, without a question, significant impacts. Simply, the City fundamentally and mistakenly conflates these points in the FEIR and leaves the Planning Commission and the public with an incomplete cumulative impacts analysis.

Finally, even with the projects that have been listed in Table 4-1, the City undertakes no analysis of *how* the listed projects will impact the area surrounding the 34-acre site – including but not limited to additional emissions that might result and how that could impact vulnerable populations.⁶⁹ In summary, the EIR’s cumulative impacts analysis remains deficient such that the FEIR cannot be certified.

VIII. The FEIR Fails to Consider Environmental Justice Impacts and Violates CEQA

The temporary 34-acre storage site is located next to low-income, densely populated neighborhoods in south Oxnard. As commenters note in their February letter, a Report prepared by the California Office of Attorney General (“OAG”), provisions of CEQA, and Government Code Section 11135 require lead agencies to study the environmental justice impacts of projects and to mitigate those impacts.⁷⁰ Part of the discussion in the FEIR must include an evaluation of the location of the project because the significance of an impact on people and the environment may change based on the project’s setting.⁷¹ Commenters pointed to studies demonstrating how California communities of color and low-income communities bear a disproportionate burden of the state’s diesel trucking emissions.⁷² Commenters also highlighted that the nearest school is only 780 feet from the Project site and the proposed Project would also be located as close as 360 feet from residences located to the northwest, north, and northeast of the Project site.⁷³

To these points, the City’s response has been to point the public to Global Response No. 5 on environmental justice impacts.⁷⁴ This response is insufficient. Although the City admits that the proposed Project would “result in a minor increase in vehicle traffic...[due to] worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips,” it nevertheless concludes “impacts would be less than significant on sensitive receptors.” This conclusion is based entirely on the assertion that the project site is “not located in an area with poor circulation or heavy traffic.” The City points to no study supporting its circulation finding and proffers no

⁶⁸ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-21, p. 12-1163.

⁶⁹ FEIR, Section 4.2, Table 4-1, p. 4-2.

⁷⁰ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-180 to 206-182, p. 12-1189 (citing the Office of the California Attorney General, *Environmental Justice at the Local and Regional Level* (2012), p. 3, available at https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf).

⁷¹ *Id.*

⁷² FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-183, p.12-1189 (citing Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in California*, fact sheet (Feb. 2019), available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>).

⁷³ FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-185, p. 12-1190 (citing DEIR, p. 5.3-9).

⁷⁴ FEIR, Section 12.4.2, p. 12-11

evidence in support of the traffic patterns. In fact, with the additional projects described above, it would seem that the City has conveniently omitted several projects in the pipeline that would increase traffic and emission patterns.

Commenters appreciate that the City has added language responding to commenters' concerns associated with nearby power plants, superfund site, and factories.⁷⁵ The City summarily concludes that the "distance between the project" and these sites would not create a significant hazard to the public.⁷⁶ However, the City fails to provide the underlying data, study, or processes used to come to this determination. Neither the Commissioners nor the public should accept conclusions that have not been properly substantiated – especially where the health and safety of vulnerable populations and overburdened communities are at stake.

IX. The City has Failed to Address Deficiencies in Language Access, Which has Further Frustrated Meaningful Public Review of the EIR Documents

The City claims that it is under no obligation under State law (CEQA or otherwise) to translate environmental review documents into Spanish or any other language.⁷⁷ This response completely ignores comments previously submitted highlighting the fact that limiting public access violates a core tenet of CEQA⁷⁸ – that "the public holds a 'privileged position' in the CEQA process 'based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.'"⁷⁹

While the City acknowledges that CEQA, "deems public participation and comment during any environmental review process as an essential part of the CEQA process," it has done very little to offer document translation or interpretation. In fact, according to the FEIR's response to comments, only the Port has offered the minimal language access services in the form of a Spanish-translated Executive Summary from the DEIR, and "a video in Mixteco explaining the contents of the Draft EIR."⁸⁰

Under the California Bilingual Services Act, State agencies must distribute applicable translated written materials if the State agency "serves a substantial number of non-English-speaking persons" and "[t]he information solicited, required, or furnished affects or may affect the individual's rights, duties, or privileges with regard to that agency's services or benefits." Although, as local agencies, the City and Port are not directly subject to this rule, refusing to translate environmental documents restricts limited or non-English speaking individuals' ability and right to meaningfully participate in environmental decisions that impact their health and safety. Given the importance of this Project to the many residents for whom English is not a primary language, we reiterate our call to translate the EIR and make it accessible by recirculation in order to ensure meaningful public review.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ FEIR, Section 12.4.2, p.12-9.

⁷⁸ See Commenters' July Letter.

⁷⁹ Cal. Code Regs. tit. 14, § 15201 (1992).

⁸⁰ FEIR, Section 12.4.2, p.12-9.

X. The FEIR's Vehicle Miles Travelled Analysis Remains Woefully Inadequate and Does Not Support a Finding of No Significant Traffic of VMT Impacts

The City admits that neither it, nor the City of Port Hueneme have adopted guidelines or significant criteria for assessing VMT by development projects⁸¹ — a requirement under California Public Resources Code §21099 and 14 Cal. Code Regs § 156064.3 (CEQA Guidelines). Rather than directly responding to our comments highlighting the need for a more robust VMT analysis for the Project, the FEIR points to the same conclusory and vague explanation in its Global Response No. 6 to justify not doing more to provide the Planning Commission and the public with sufficient information to appreciate the full scope of traffic impacts. The FEIR's conclusion that no VMT impacts would result from the Project is unsupported by what little analysis is offered for three key reasons.

First, the FEIR's application of Governor's Office of Planning and Research's ("OPR") Technical Advisory on Evaluating Transportation Impacts ("Technical Advisory") is flawed. The FEIR fails to adopt any specific methodology or criteria for its evaluation of the Project's VMT that would make its conclusions verifiable based on OPR's guidance. It inappropriately adopts a screening threshold when no such threshold applies to this Project and it misapplies the qualitative analysis outlined in the Technical Advisory. The FEIR's conclusions that no VMT or traffic impacts are present are therefore unreliable.

The FEIR contends that the qualitative analysis approach outlined in OPR's Technical Advisory is the appropriate evaluation for the Project's VMT impact.⁸² It also summarily adopts the DEIR's conclusion that no VMT impacts would result from the implementation of the Project without showing how the qualitative analysis approach was specifically applied in this case. The City admits based on the screening thresholds outlined in OPR's Technical Advisory — which apply to residential, office, retail projects, land use plans, and transportation projects — that this project would not "screen out"⁸³, i.e., that further analysis would be required even under a qualitative approach. Yet, the FEIR reaches the conclusion that "the project would lead to a less-than-significant transportation impact" using the same retail threshold it admits is inapplicable.⁸⁴

The Technical Advisory does recommend, however, that "[a]gencies should consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations."⁸⁵ No such data-supported analysis was provided in this FEIR.

Second, the FEIR's analysis on VMT and traffic impacts is conclusory and relies on contradictory assumptions. For example, in its assessment of alleged VMT reductions, the City assumes the elimination of two existing vehicle storage facilities to conclude overall VMT reduction while at the same time defending the DEIR's analysis of the traffic effect of the Project

⁸¹ FEIR, Section 12.4.2, p.12-13.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ California Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts on CEQA (OPR Technical Advisory) (December 2018), p. 17; available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

“under existing and cumulative conditions, with due consideration of other related projects in the area.”⁸⁶ These inconsistencies lead to self-serving conclusions that simply cannot be relied on.⁸⁷ If current conditions are assumed, then VMT analysis would have to account for the higher VMT that the Project would produce as a result of having the approximately 240 daily trips made in individual cars (according to one estimate provided), compared to the more limited car carrier truck trips making the haul to the furthest existing site. Even using that simplistic comparison, which we do not concede qualifies as a VMT threshold under either the Technical Advisory or CEQA guidelines, the Project would still generate more vehicle miles travelled on its own as compared to the furthest existing site.⁸⁸ The FEIR attempts to avoid dealing with this increase in VMT by attempting to shoehorn a threshold analysis for new retail facilities that is inapplicable to the Project.

Third, the FEIR ignores evidence submitted showing that the traffic report that underlies much of the City’s environmental review was merely rubber stamped and created in a way to offer cover for predetermined conclusions. It therefore cannot be relied upon to conclude that no impacts will result from the project.

As commenters pointed out in their July 1, 2022 comment letter to the City, documents made available in response to Public Records Act requests suggest that there was never any intention on the part of the Port applicant or the City to vet the real traffic impacts of the 34-acre site. In fact, emails between Port staff and a land-use planning specialist suggest that the City might forgo a traffic report altogether by providing a letter, noting, “the City just needs a paper trail - this way they can cover themselves with a letter from a professional.”⁸⁹ In subsequent emails, the hired consultant confirmed that they would prepare the trip generation analysis based solely on the Project Description and a Design letter⁹⁰— without considering the requirements outlined in CEQA guidelines or the recommendations found in the Ventura County Freight Corridors Study. These revelations, which the FEIR neglects to address, cast further doubt on the reliability of calculations, information, and analysis used to support the FEIR’s conclusion that no significant traffic or VMT-related impacts will occur.

Given the cursory manner in which the traffic study and VMT analysis were conducted, it is unsurprising that the FEIR is replete with inconsistencies and contradictions that call into question its reliability as an informational document. We call on the Planning Commission to reject this FEIR. Moreover, the City should fix its lack of baseline methodologies and thresholds for assessing the impact of VMT from this Project. Until these errors are corrected, the FEIR fails to meet basic standards under CEQA.

⁸⁶ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-51, pp. 12-1166 to 12-1167.

⁸⁷ Note: the FEIR does not address the inconsistent assumptions highlighted in our February 14, 2022 comment letter wherein we highlight that in order to switch to an analysis that would presume the elimination of two existing sites, the agency must first justify this decision by showing that the existing conditions are somehow misleading or without informational value. No such analysis has been done in the FEIR. See Commenters’ February Letter, p. 25.

⁸⁸ See *id.*, at pp. 24-25.

⁸⁹ Commenters’ July Letter (citing emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018)).

⁹⁰ *Id.* (citing emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018)).

XI. The FEIR Continues to Rely on Flawed Air Emissions Modeling, Lacks the Requisite Health Impact Analysis, and Fails to Properly Assess Greenhouse Gas Emissions.

The FEIR fails to justify its modelling used to calculate greenhouse gas emissions (“GHG”) and air quality impacts and continues to lack the necessary analysis on health impacts. These flaws were originally outlined in a findings report submitted by experts Matt Hagemann and Dr. Paul Rosenfeld and incorporated into commenters’ February 14, 2022 letter.⁹¹ Hagemann and Rosenfeld have reviewed the FEIR and responses to those comments and have concluded that many of the justifications used by the City for their approach to air emissions, health hazards, and GHG emissions remain fundamentally flawed.⁹² Several of these flaws in the FEIR are outlined below:

- **Hazards and Hazardous Materials** – The FEIR fails to address the lack of a Phase I ESA analysis, despite being a key element called for in the City of Oxnard 2030 General Plan Safety and Hazards Chapter. More specifically, the FEIR does not explain why Policy H-7.12, which requires a hazardous materials study for any new development, was not followed.
- **Air Quality and CalEEMod Model** - The FEIR again fails to provide access to, or justify the use of, the underlying data inputs used to calculate the Project’s emissions. More specifically, the FEIR refers to “applicant provided” information for its inputs on the length of construction for the site, yet the underlying data, and the justification for using it, are not made publicly available in the documents attached to the FEIR. This makes it impossible to verify whether the changes to defaults accurately reflect the proposed construction schedule. Despite the City’s claims that relying on “applicant provided” information is sufficient, CalEEMod requires that information used to change defaults be supported by substantial evidence as required under CEQA.⁹³ The calculations, therefore, remain unreliable and the City must either justify these modifications with substantial evidence or revise its calculations. Similarly, the FEIR’s modeling concerning construction activities is flawed as the FEIR arbitrarily modified construction lengths based on different phases of development – potentially underestimating peak daily emissions. Similarly, the FEIR fails to provide substantial evidence for changing off-road construction equipment amounts therefore making it challenging, if not impossible, to verify if these changes are accurate.
- **Greenhouse Gas Emissions** – The conclusion that GHG impacts are “less-than-significant” relies on the same incorrect and unsubstantiated air modelling described above. Moreover, the FEIR relies on outdated thresholds which the City fails to justify through substantial evidence. This has resulted in the FEIR failing to identify any potentially significant GHG impact from the project.

⁹¹ See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (February 9, 2022), Attachment A to Commenters’ February Letter.

⁹² See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (October 17, 2022), attached hereto as Attachment 4, SWAPE Report.

⁹³ See SWAPE Report.

This flawed analysis of air pollution impacts also extends to the FEIR’s treatment of the necessary mitigation and health impacts associated with it. In concluding that the project will not reach the thresholds set by Ventura County Air Pollution Control District (“VCAPCD”), the FEIR relies on an arbitrarily restrictive view of the Project without accounting for the inconsistencies between the Project Description and Objectives and ample evidence demonstrating that this project encompasses more than the 34-acres described and for longer than five years. This arbitrarily restrictive scope is also used by the City to claim that the Project will not pass emissions thresholds set by the VCAPCD⁹⁴ and to justify its refusal to conduct the type of Health Impact Assessment required under the California Supreme Court case, *Friant-Ranch*.

In short, the FEIR’s conclusion misses the mark. While CEQA may not mandate an in-depth risk assessment outright:

“CEQA requires that the EIR have made a reasonable effort to discuss relevant specifics regarding the connection between two segments of information already contained in the EIR, the general health effects associated with a particular pollutant and the estimated amount of that pollutant the project will likely produce.”⁹⁵

Because the FEIR fails to address flaws in its modeling, its estimation of the pollutants generated by the Project is unreliable. Moreover, the narrow and cursory analysis that the FEIR does offer on air pollutants and potential health impacts, is unverifiable given the lack of access to the underlying data. This foundational information is necessary for informed decision-making and public participation. The City, therefore, cannot support its conclusion that the Project falls under the VCAQCD’s thresholds. Even so, the FEIR misinterprets *Friant-Ranch* wherein the California Supreme Court found that CEQA requires analysis correlating increased air emissions to probable resulting human health effects.⁶ The City cannot claim that no emissions will result from this Project just as it cannot avoid the necessary health impact analysis required under *Friant-Ranch* by simply stating that emissions will not surpass thresholds it has arbitrarily chosen to apply.

As further highlighted in Hagemann and Rosenfeld’s review and commenters’ letters, the FEIR also fails to address the following:

- **Diesel Particulate Matter emissions** – The City fails to include a health impact of using equipment producing diesel particulate matter (“DPM”) emissions during a construction phase of the Project slated to last over 180 to 200 days and its justification for not doing so is not supported by the evidence. More specifically, as the Hagemann and Rosenfeld report points out, “until both the Project’s construction and operational health risks are quantified, summed together, and compared to the VCAPCD threshold of 10 in one million, the

⁹⁴ SWAPE Report, pp. 5-6.

⁹⁵ *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 521

FEIR’s response is inadequate” and does not evaluate the Project’s potential health risk impacts.

- **Comprehensive assessment of Toxic Air Contaminants** – The FEIR fails to provide a “good faith reasoned analysis” of the health effects of any increase in Toxic Air Contaminants caused by the Project, including those that result from the combustion of diesel and gasoline engines associated with the entire car storage complex, the 34-acre and the 250-acre sites, increased Port-related emissions due to augmented cargo throughput, and construction related to the aforementioned projects.
- **Encroachment of Port-Related Activities** – The FEIR also fails to adequately address comments concerning the shift in port-activity emissions towards south Oxnard populations adjacent to the Port-serving freight corridors like Hueneme Road.

In short, the FEIR ignores critical flaws in its analysis and inadequate data verification that call into question its reliability as an informational document for environmental assessment. The law requires that the public and the Planning Commission have an accurate assessment of potential health risks and air quality impacts – which this FEIR fails to deliver.

XII. FEIR Continues to Underestimate Impacts on Special Status Species, Habitats, and Wildlife Movement

The City failed to provide good-faith, reasoned responses to the comments raised regarding the DEIR’s biological impacts analysis.⁹⁶ Instead, the City offered partial responses and conclusionary statements that ignores large swaths of commenters’ concerns and failed to make significant changes to its analysis to ensure the full scope of direct, indirect, and cumulative biological impacts from the Project are evaluated by the FEIR. Therefore the FEIR’s conclusions that there will not be a significant impact on biological resources from the Project remains unsupported by substantial evidence.

In its responses, the City avoided addressing the full concerns raised in the expert report prepared by Dr. Shawn Smallwood that determined that significantly more special status species likely rely on the property for habitat, foraging, hunting, mating, or other needs.⁹⁷ The FEIR dismisses this evidence entirely and continues instead to rely on flawed reconnaissance surveys that failed to observe or detect special status species.⁹⁸ Further, Dr. Smallwood identified flaws in the additional assessment attached to the FEIR as Appendix FA.⁹⁹ In fact, he explains that the databases relied upon by the FEIR show bird species using nearby sites with similar levels of disturbance as the Project site, which undermines the FEIR’s conclusion that the Project site cannot be habitat to special status species.¹⁰⁰ The FEIR’s over-reliance on inadequate analysis and surveys means it grossly underestimates the special status species that may use the site and the value of this Project property as important habitat. Eliminating 34-acres of habitat (regardless

⁹⁶ These comments are laid out in significant detail in Commenters’ February Letter, at pp. 39-46 (citing Smallwood report).

⁹⁷ Commenters’ February Letter, at pp. 39-42.

⁹⁸ See Commenters’ February Letter, at pp. 40-41 (citing Smallwood report); Smallwood Reply Letter (Oct. 18, 2022), at pp. 3-5.

⁹⁹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 4-5, 15.

¹⁰⁰ Smallwood Reply Letter (Oct. 18, 2022), at p. 8.

of whether it is used for breeding or wintering) would result in a significant impact on special status species, thereby meeting the City's threshold of significance for a biological resources impact.

The slight update to the proposed mitigation measures is not sufficient to lessen the impact below the threshold level of significance. As was raised in previous comments, an additional pre-construction survey is unlikely to detect species that are notoriously difficult to detect in surveys, such as the burrowing owl.¹⁰¹ Moreover, the fact that there may be a detectable presence of a special status species at the time of the pre-construction survey does not change the fact that after five years of intensive use as a parking lot this habitat will be, at best, unavailable during that period and at worst irreparably damaged or destroyed.¹⁰²

The City's refusal to acknowledge the value of this property to wildlife extends to its alternative analysis as well. The FEIR concludes that using the 34-acre site as open space would not lessen the significant impacts from the Project, but that is based on an erroneous conclusion that building a parking lot on un-developed property would not impact special status species or wildlife movement, which is not supported by substantial evidence.¹⁰³

Commenters incorporate by reference all points raised in Dr. Smallwood's October 18, 2022 reply letter.

XIII. The FEIR must be Recirculated Before Project Approval and Certification

Under CEQA, an EIR must be re-circulated for review and comment whenever significant new information becomes known to the lead agency and is added to the EIR, after public notice of the availability of the draft document has been made, and before the EIR is certified.¹⁰⁴ Under such circumstances the lead agency is specifically required to re-notice the environmental review document to the public and all responsible agencies, and is required to obtain comments from the same, before certifying the document's impacts and alternatives analyses as well as any mitigation measures.¹⁰⁵ A lead agency's decision not to recirculate an EIR must be supported by substantial evidence.¹⁰⁶

"Significant new information" includes any information regarding changes in the environmental setting of the project under review.¹⁰⁷ It also includes information or data that has been added to the EIR and is considered "significant" because it deviates from that which was presented in the draft document, depriving the public of a meaningful opportunity to comment upon a significant environmental effect of the project, or a feasible way to mitigate or avoid such an effect at the time of circulation of the draft.¹⁰⁸ Recirculation is further required where the

¹⁰¹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 8-9.

¹⁰² See *id.*, at p. 9.

¹⁰³ FEIR, Section 12.4.2, p. 12-16.

¹⁰⁴ Pub. Res. Code § 21092.1

¹⁰⁵ See *id.*; see also, Pub. Res. Code § 21153.

¹⁰⁶ Cal. Code Regs. tit. 14, § 15088.5(e)

¹⁰⁷ *Id.*, at § 15088.5(a).

¹⁰⁸ *Id.*

draft EIR is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”¹⁰⁹

While re-circulation is an exception and not the rule in the preparation of final environmental review documents, it is an exception that must be invoked here – where the absence of significant information rendered the DEIR ineffective in meeting CEQA’s substantive mandates, and now, where included, the addition of significant new information substantially changes the FEIR’s analyses and conclusions regarding the Project’s impacts, feasible alternatives and required mitigation.¹¹⁰

As stated in numerous comments to the DEIR, that document failed to provide critical information regarding the duration, scope, and mitigation of the Project’s impacts; it failed to adequately describe fundamental information relating to the phasing and timing of the project’s implementation and phase out by claiming to add permanent jobs to the region; it lacked adequate detail specifically regarding the construction and operations phases of the Project, including mitigation; and it contained analyses and mitigation measures relating to the Project’s air quality, traffic, human health and biological resources impacts based on incorrect datasets and formulas.

In some instances, the FEIR erratically and arbitrarily includes selective new data into its analysis of the Project’s impacts, and in others critical information remains absent from the document.

The FEIR contains significant new information and must be recirculated for public review and comment before being considered by the Planning Commission.¹¹¹ Although this new information does not cure the inadequacies pointed out in comments to the DEIR, the City has added new information that that the public should be allowed to thoroughly review and evaluate with sufficient opportunity to further comment prior to a decision by the Planning Commission. This new information includes, but is not limited to: a revision of Mitigation Measure MM-BIO01 related to biological resources; the addition of land use policies to be considered pertaining to aesthetics; different data on maximum daily construction emissions and maximum daily operational emissions; the addition of a new 2022 California Native Diversity database search performed and new analysis performed resulting from a revised habitat assessment concerning biological resources; alleged revisions to the analysis and evaluation of archaeological resources and mitigation measures proposed as MM-CUL-1 and MM-CUL-2; alleged revisions to the analysis of project impacts and mitigation measures under Tribal Cultural Resources; a new listing of potential hazardous sites; a new summary of significant unavoidable impacts not previously disclosed; remodeling of the project in CalEEMod used for the project to project emissions during construction and operation; and, a list of additional previously undisclosed alternative locations considered by the City. In addition, Appendix D, Air Quality

¹⁰⁹ *Id.*

¹¹⁰ *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Ca4th 1112, 1132.

¹¹¹ Cal. Code Regs. tit. 14, §15088.5.

and Greenhouse Gas Study and Appendix FA – Biological Resources Inventory 2022 were updated with new information previously not disclosed.

The FEIR also contains new references to the storage of electric vehicles at the site without any details as to whether these vehicles will require charging infrastructure at the site while the cars are being stored.¹¹² Thus, it is unclear whether further alterations to the site will be necessary in the near future. In short, this new information adds greater uncertainty and highlights the document's failure as an informational document.

The public must have an adequate opportunity to comment on these many changes and address any new impacts this new information may reveal. Providing just 10 days before a hearing with the Planning Commission does not provide that opportunity for meaningful public engagement concerning the new information contained in the FEIR. Given these revisions, the myriad other information, and alternative analysis added in the FEIR, recirculation is required.

Moreover, on March 21, 2022, our organizations requested that the City schedule a special meeting of the Planning Commission before deciding on whether to approve the Project¹¹³. Not only would this give the Commission an opportunity to hear from stakeholders and members of the public and provide for adequate language access, but it would also give the Commission time to review additional evidence that has become available after the comment period. Given the tremendous interest that this Project has garnered with over 200 written comments received, setting a special pre-determination hearing before the Commission is more than appropriate.

The City released its responses to our comments less than ten full days prior to the October 20, 2022 hearing.¹¹⁴ To provide Commissioners with the opportunity to thoroughly review all the evidence, including the evidence and comments from stakeholders, the special meeting of the Planning Commission should be set at least 30 days prior to it making a final decision on this FEIR and pending Special Use Permit.

XIV. Conclusion

The FEIR's continuing informational deficiencies render it unlawful. The City's responses to commenters do not address their arguments against the adequacy of the DEIR. The FEIR contains an incomplete project description, a deficient cumulative impact analysis that omits relevant projects and impacts, inadequate alternatives analysis, and an incomplete evaluation of environmental justice, air quality, traffic, language access, public health and biological resources impacts. Accordingly, the Planning Commission should not certify an FEIR at this time and must deny the requested Special Use Permit until the City is able to present a comprehensive and accurate report of the Project's scope, impacts, alternatives, and mitigation measures.

¹¹² City of Oxnard, Planning Commission Report, (October 20, 2022), p.10.

¹¹³ See Letter from CAUSE et.al., to Jay Dobrowalski, Re: Port of Hueneme =Vehicle Storage Site Environmental Impact Report Comment Period, (March 21, 2022); available at page 141 of the Planning Commission Staff Report for October 20, 2022.

¹¹⁴ Response to the comments submitted by our organizations were sent out from the email account of Senior Planner, Jay Dobrowalski at 5:00 p.m. on Monday, October 10, 2022.



EARTHJUSTICE



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

Sincerely,

Radhika Kannan
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Wishtooyo Chumash Foundation

From: Dobrowalski, Jay <jay.dobrowalski@oxnard.org>
Sent: Wednesday, July 13, 2022 9:36 AM
To: Radhika Kannan
Cc: Ospina, Natalia; Kryczka, Heather; lucia@causenow.org; lucas@causenow.org; César Nije; matiwaiya@wishtoyo.org; Fernando Gaytan; tschmitt@wishtoyo.org; Andrea Pereira Schork
Subject: Re: Supplemental Comments on Draft Environmental Impact Report for the proposed Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039 and PZ 18-500-02 (Special Use Permit))

This message originated outside of Earthjustice. Please use caution before opening attachments or links.

Hello Radhika,
Thank you for your recent comment letter; it has been entered into the record.
Sincerely,

Jay Dobrowalski | Senior Planner
Community Development Department
[214 S C Street | Oxnard, CA 93030](#)
O: 805.385.3948 | F: 805.385.7417
www.oxnard.org

Effective February 14, 2022, the Service Center and all public-interfacing City buildings will be open to the public.

Online services remain available through our online portal at www.oxnard.org/planning

- General inquiries should be sent via email to Planning@oxnard.org.
- For [new applications](#), email us at planning@oxnard.org. Large projects can be shipped with prior authorization. Smaller projects may be submitted via email.
- For existing applications, contact your assigned Case Planner by direct email.

For the most up to date information on COVID-19 please visit <https://www.venturacountyrecovers.org/>

On Fri, Jul 1, 2022 at 4:19 PM Radhika Kannan <rkannan@earthjustice.org> wrote:

Dear Mr. Dobrowalski,

Please find attached supplemental comments submitted on behalf of the Central Coast Alliance United for a Sustainable Economy, Earthjustice, Natural Resources Defense Council, and Wishtoyo Chumash Foundation. These comments address the Draft Environmental Impact Report (DEIR) that has been prepared for the proposed "Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)" (the Project).

In support of these comments, we are also providing a link to a shared folder containing copies of the supporting documents and reference materials cited in our supplemental comment letter. You can access the folder by clicking on this link: [Port of Hueneme: Supplemental Comments](#). This link will allow you to download the documents for your review.

As a courtesy, we are also sending, via FedEx, a thumb drive containing these same documents. We trust that the City will consider these comments and our supporting materials as part of the record for the proposed Project — including any materials referenced that are otherwise reasonably available to the City online.

For the reasons discussed in the attached supplemental comments, as well as previous submissions made to the City on this matter, we are urging the City to reject the DEIR in its entirety. Please let me know if you have any questions or trouble downloading the attachment.

Thank you,

Radhika Kannan

Radhika Kannan

Pronouns: she/her/hers

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From: Radhika Kannan
Sent: Tuesday, October 11, 2022 3:44 PM
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Cc: Fernando Gaytan; Ospina, Natalia; Kryczka, Heather; lucia@causenow.org; lucas@causenow.org; Andrea Pereira Schork; tschmitt@wishtoyo.org
Subject: Errata for Administrative Record: Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039) and PZ 18-500-02 (Special Use Permit)
Attachments: Re: Supplemental Comments on Draft Environmental Impact Report for the proposed Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039 and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski,

We are in receipt of the Final Environmental Impact Report (FEIR) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039) and PZ 18-500-02 (Special Use Permit). We look forward to the hearing next week.

We wanted to bring to your attention that our supplemental comment letter submitted on behalf of the Central Coast Alliance United for a Sustainable Economy, Earthjustice, Natural Resources Defense Council, and Wishtoyo Chumash Foundation and all supporting documents and reference materials cited in our supplemental comment letter are not included in the current FEIR or the Appendices.

As you had indicated in your July 13, 2022 email (attached here), the letter and the attachments were entered into the record.

Please help us ensure that the administrative record is complete ahead of the hearing with our supplemental comment letter and the supporting attachments.

Thank you,
Radhika Kannan

Radhika Kannan
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Attachment 3

- February Comment Letter—Submitted by CAUSE, Earthjustice, NRDC, and Wishtoyo Chumash Foundation re: The Port of Hueneme Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18 500 02 (Special Use Permit), submitted February 14, 2022
 - All attachments to the letter available here: [4527 - Port of Hueneme Comments - Sources Shared on February 14 2022](#) *
- July Comment Letter—Submitted by CAUSE, Earthjustice, NRDC, and Wishtoyo Chumash Foundation re: The Port of Hueneme Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18 500 02 (Special Use Permit), submitted July 1, 2022
 - All attachments to the letter available here: [4527 - Port of Hueneme Supplemental Comments - Sources Shared on July 1 2022](#) *

* The following email addresses have access to this folder: jay.dobrowalski@oxnard.org, planning@oxnard.org, cityclerk@oxnard.org. Please email Radhika Kannan at rkannan@earthjustice.org or Fernando Gaytan at fgaytan@earthjustice.org if there are any access issues.



California Emissions Estimator Model®

User's Guide

Version 2020.4.0

Prepared for:
California Air Pollution Control Officers Association (CAPCOA)

Prepared by:
BREEZE Software, A Division of Trinity Consultants
in collaboration with **South Coast Air Quality Management District and**
the California Air Districts

Date:
May 2021

Acknowledgements

This program has been developed by BREEZE Software, a division of Trinity Consultants (Trinity) for the California Air Pollution Officers Association (CAPCOA) in collaboration with South Coast Air Quality Management District (South Coast AQMD) and California Air Districts. The following individuals should be recognized for their contributions to this version of the program.

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CAPCOA also recognizes the important contributions made to CalEEMod by the Institute of Transportation Engineers (ITE) for granting permission to CAPCOA to utilize its trip generation data. ITE's *Trip Generation Manual* can be obtained by visiting ITE's website: <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>.

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California Emission Estimator Model (CalEEMod)[®]

Version 2020.4.0

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(CAPCOA)

Developed by BREEZE Software, A Division of Trinity Consultants in collaboration with the
South Coast Air Quality Management District and the California Air Districts.

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1 Introduction

This User's Guide (Guide) to the California Emission Estimator Model (CalEEMod)[®] is meant to give the user an introduction on how to use the program as well as to document the detailed calculations and default assumptions made in associated appendices. The purpose of CalEEMod is to provide a uniform platform for government agencies, land use planners, and environmental professionals to estimate potential emissions associated with both construction and operational use of land use projects. It is intended that these emission estimates are suitable for quantifying air quality and climate change impacts as part of the preparation of California Environmental Quality Act (CEQA) documents. In addition, individual districts may rely on the model's emission estimates to show compliance with local agency rules.

CalEEMod utilizes widely accepted methodologies for estimating emissions combined with default data that can be used when site-specific information is not available. Sources of these methodologies and default data include but are not limited to the United States Environmental Protection Agency (USEPA) AP-42 emission factors, California Air Resources Board (CARB) vehicle emission models, studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. In addition, some local air districts provided customized values for their default data and existing regulation methodologies for use for projects located in their jurisdictions. When no customized information was provided, and no regional differences were defined for local air districts, state-wide default values were utilized. Since resource data and regulations are constantly changing, local agencies should be consulted to determine whether there are any circumstances when updated values should be used in place of the defaults currently incorporated into CalEEMod. A majority of CalEEMod's default data associated with locations and land use are derived from surveys of existing land uses. For any project that substantially deviates from the types and features included in the surveys, site-specific data that are supported by substantial evidence should be used, if available.

The model provides several opportunities for the user to change the defaults in the model; however, users are required to provide justification for all changes made to the default settings (e.g., reference more appropriate data sources) in the Remarks box provided at the bottom of the screen before the user will be able to proceed to the next screen. Further, the user should make every effort to ensure that correct data is entered, including the choice and percent reduction of mitigation most applicable to the land use project being evaluated.

1.1 Purpose of Model

CalEEMod provides a simple platform to calculate both construction emissions and operational emissions from a land use project. It can calculate both the daily maximum and annual average for criteria pollutants as well as annual greenhouse gas (GHG) emissions. The output from these calculations can be used in the preparation of air quality and GHG analyses in CEQA documents such as Environmental Impact Reports (EIRs)

and Negative Declarations. For projects located in the jurisdiction of San Luis Obispo APCD, the model can also calculate and report the sum of reactive organic gas (ROG) and nitrogen oxide (NO_x) emissions on a rolling quarterly basis for the construction phase. In addition, CalEEMod contains default values for estimating water and energy use which may be useful for preparing hydrology and energy analyses in other sections of a CEQA document. Specifically, the model can aid the user by conducting the following calculations:

- Short-term construction emissions associated with the demolition, site preparation, grading, building, coating, and paving from the following sources:
 - Off-road construction equipment;
 - On-road mobile equipment associated with workers, vendors, and hauling;
 - Fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads. (Fugitive dust from windblown sources such as storage piles and inactive disturbed areas, as well as fugitive dust from off-road vehicle travel, are not quantified in CalEEMod, which is consistent with approaches taken in other comprehensive models.)
 - Architectural coating activities (*including the painting/stripping of parking lots*) and paving (ROG).
- Operational emissions for fully built-out land use development from the following sources:
 - On-road mobile vehicle traffic generated by the land uses;
 - Fugitive dust associated with roads;
 - Architectural coating activities (ROG);
 - Off-road equipment (e.g., forklifts, cranes) used during operation;
 - Landscaping equipment;
 - Emergency generators, fire pumps, and process boilers;
 - Use of consumer products, parking lot degreasers, fertilizers/pesticides, and cleaning supplies (ROG);
 - Wood stoves and hearth usage;
 - Natural gas usage in the buildings;
 - Electricity usage in the buildings (GHG only);
 - Electricity usage from lighting in parking lots and lighting, ventilation and elevators in parking structures;
 - Water usage per land use (GHG only); and,
 - Solid waste disposal per land use (GHG only).

- One-time vegetation sequestration changes
 - Permanent vegetation land use changes
 - New tree plantings
- Mitigation adjustments to both short-term construction and operational emissions. Several of the mitigation measures described in CAPCOA's Quantifying Greenhouse Gas Mitigation Measures¹ have been incorporated into CalEEMod.

¹ Available at: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

2 Program Installation

The CalEEMod program is distributed and maintained by the California Air Pollution Control Officers Association². The most recent version can be downloaded from www.caleemod.com.

2.1 Operating System Requirements

CalEEMod was programmed using Microsoft SQL Compact Edition in conjunction with a Visual Basic Graphical User Interface (GUI). CalEEMod Version 2020.4 requires the following system requirements:

- Microsoft Windows XP, Vista, 7, 8, or 10 Operating System with Microsoft .NET Framework 4 or higher
- Microsoft SQL Server Compact 4.0
- Microsoft Access Database Engine 2010 Redistributable, 32-bit
- 300 Mb hard drive space available

2.2 Installation Procedures

To install CalEEMod Version 2020.4.0:

1. Ensure that the required Microsoft .Net framework is installed on the computer. Microsoft .Net Framework 4.0 is available free from Microsoft at: <https://www.microsoft.com/en-us/download/details.aspx?id=17851>. Once the file is downloaded, unzip the file anywhere onto the computer and run the installation file (setup.exe) and follow the instructions on Microsoft's website to locate the appropriate .msi file.
2. During the installation, Microsoft SQL Server Compact 4.0 will be automatically installed.

However, if the automatic installation fails, visit www.caleemod.com, click on the Download Model tab, and select the appropriate .exe file to be installed on the computer. For 32-bit computers, double click on [SSCERuntime x86-ENU.exe](#) to install the file. For a 64-bit computer, double click on [SSCERuntime x64-ENU.exe](#) to install the file.

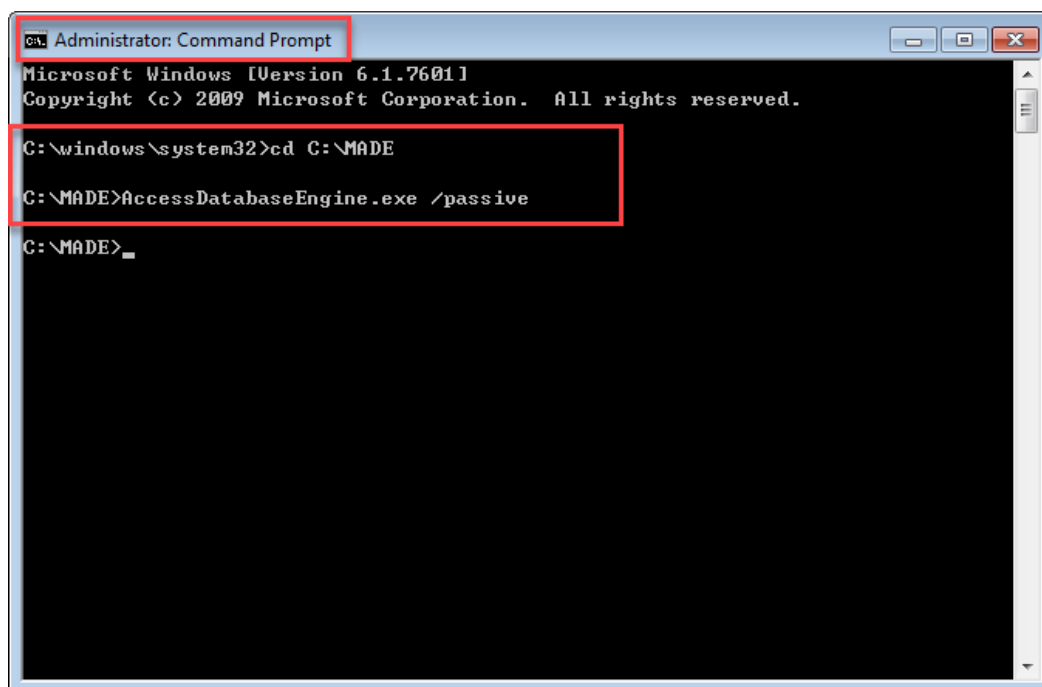
3. During the installation, 32-bit Microsoft Access Database Engine 2010 Redistributable will be automatically installed.

However, if the automatic installation fails, go to <https://www.microsoft.com/en-us/download/details.aspx?id=13255&751be11f-ed8-5a0c-058c-2ee190a24fa6=True>, click on Download, select "AccessDatabaseEngine.exe" (25.3 MB), and click on Next. Once this file is downloaded, double click on "AccessDatabaseEngine.exe" file and follow the instructions to finish the installation.

If the version of Microsoft Office is 64-bit, the 32-bit Microsoft Access Database Engine 2010 Redistributable file can be installed in passive mode by following the instructions below:

² CalEEMod® 2021 All Rights Reserved by California Air Pollution Control Officers Association.

- a) Go to the C: drive - - > Create a new folder "MADE" - - > Copy the 32-bit Microsoft Access Database Engine 2010 Redistributable (AccessDatabaseEngine.exe) installer to that folder
- b) Start a command prompt as an administrator: Click Start - - > In the Start Search box, type cmd, and then press CTRL+SHIFT+ENTER
- c) In Administrator: Command Prompt window - - > Type in "cd C:\MADE" and press ENTER
- d) Type in "AccessDatabaseEngine.exe /passive" and press ENTER
- e) See the following screenshot for Steps 3 c) and d)

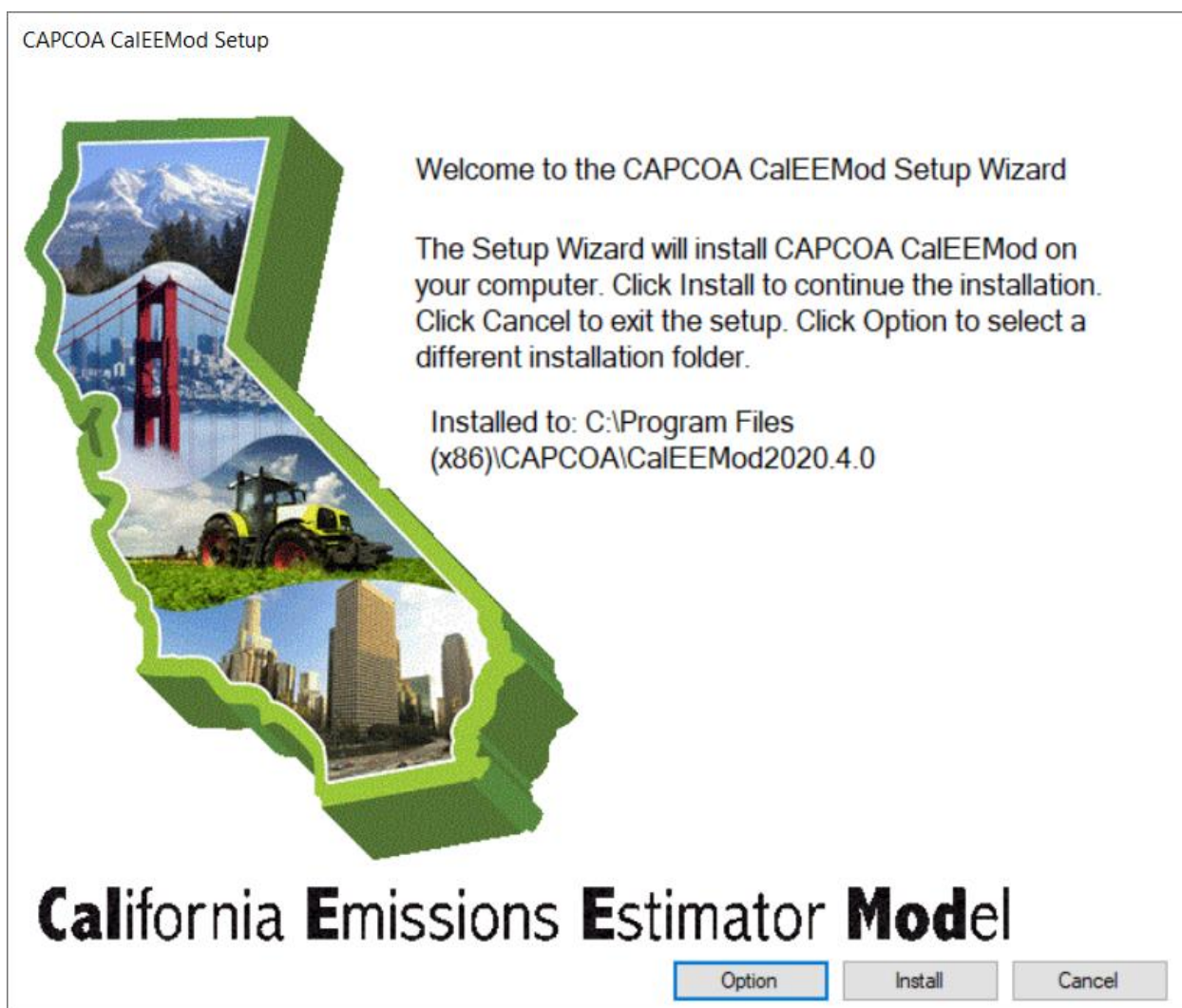


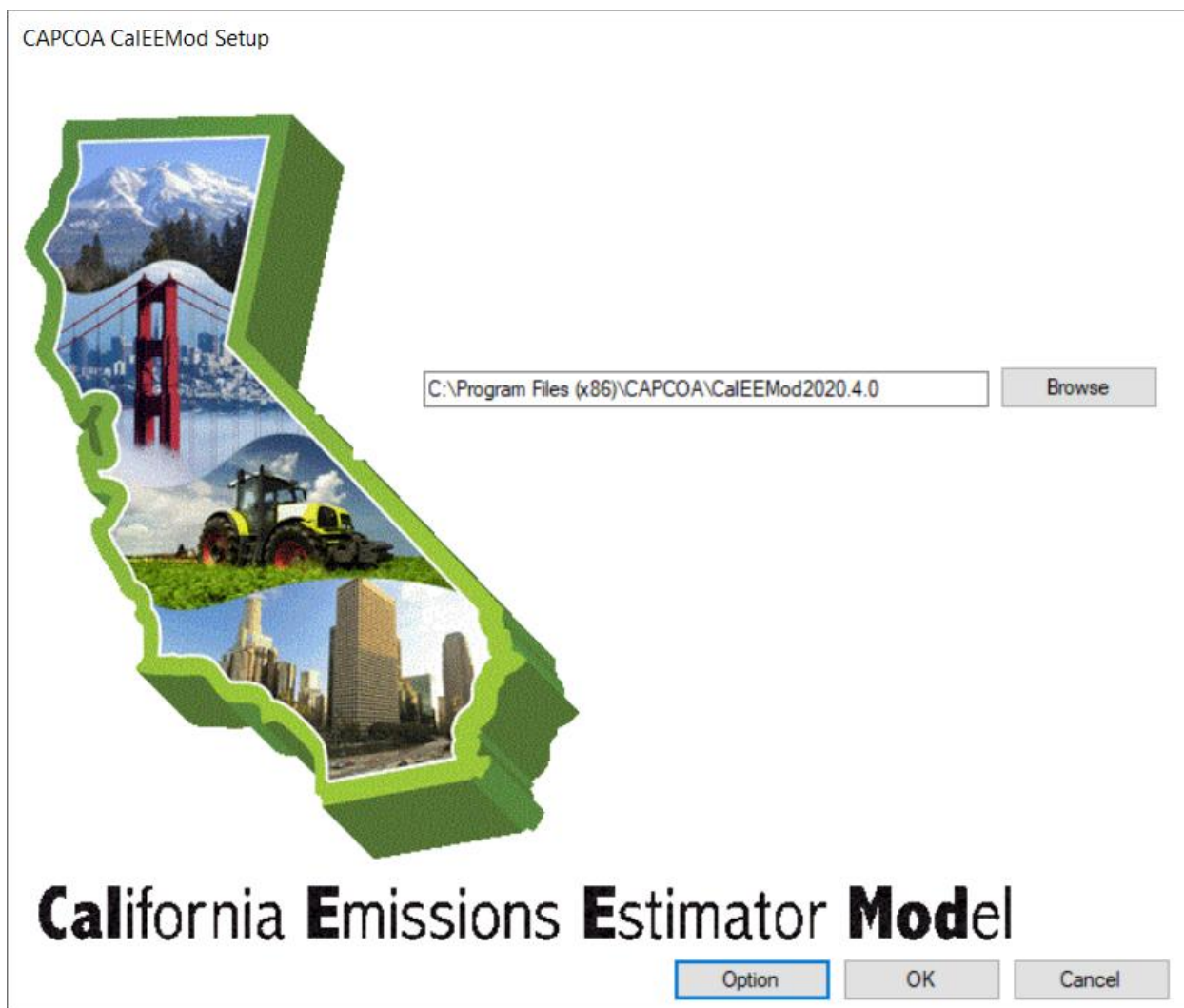
- f) 32-bit Microsoft Access Database Engine 2010 Redistributable should be installed automatically.
4. Visit www.CalEEMod.com, click on the Download Model tab, download the installation file (CalEEMod.WixSetup.Bootstrapper_2020.4.0.29.exe), click on the file and follow the instructions. Screenshots of the CalEEMod Windows Installer XML (WiX) Setup Wizard are provided at the end of this section (see pp.6-9).
5. visit www.caleemod.com, click on the Download Model tab
6. CalEEMod Version 2020.4.0 can be installed side by side with Version 2016.3.2 provided that each version is installed in different folders.

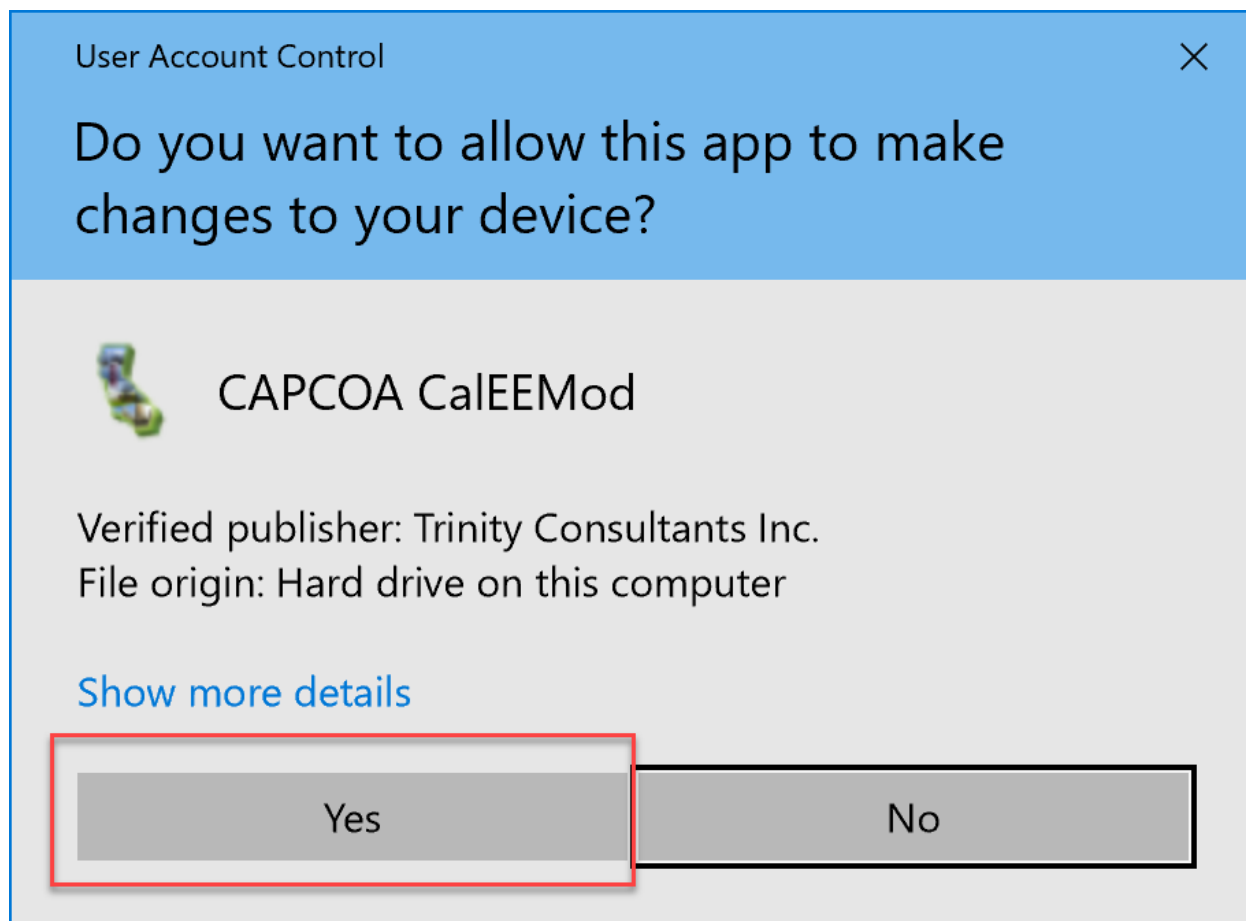
For 32-bit computers, the default directory for CalEEMod Version 2016.3.2 is C:\Program Files\CAPCOA\CalEEMod; for 64-bit computers, the default directory for CalEEMod Version 2016.3.2 is C:\Program Files (x86)\CAPCOA\CalEEMod.

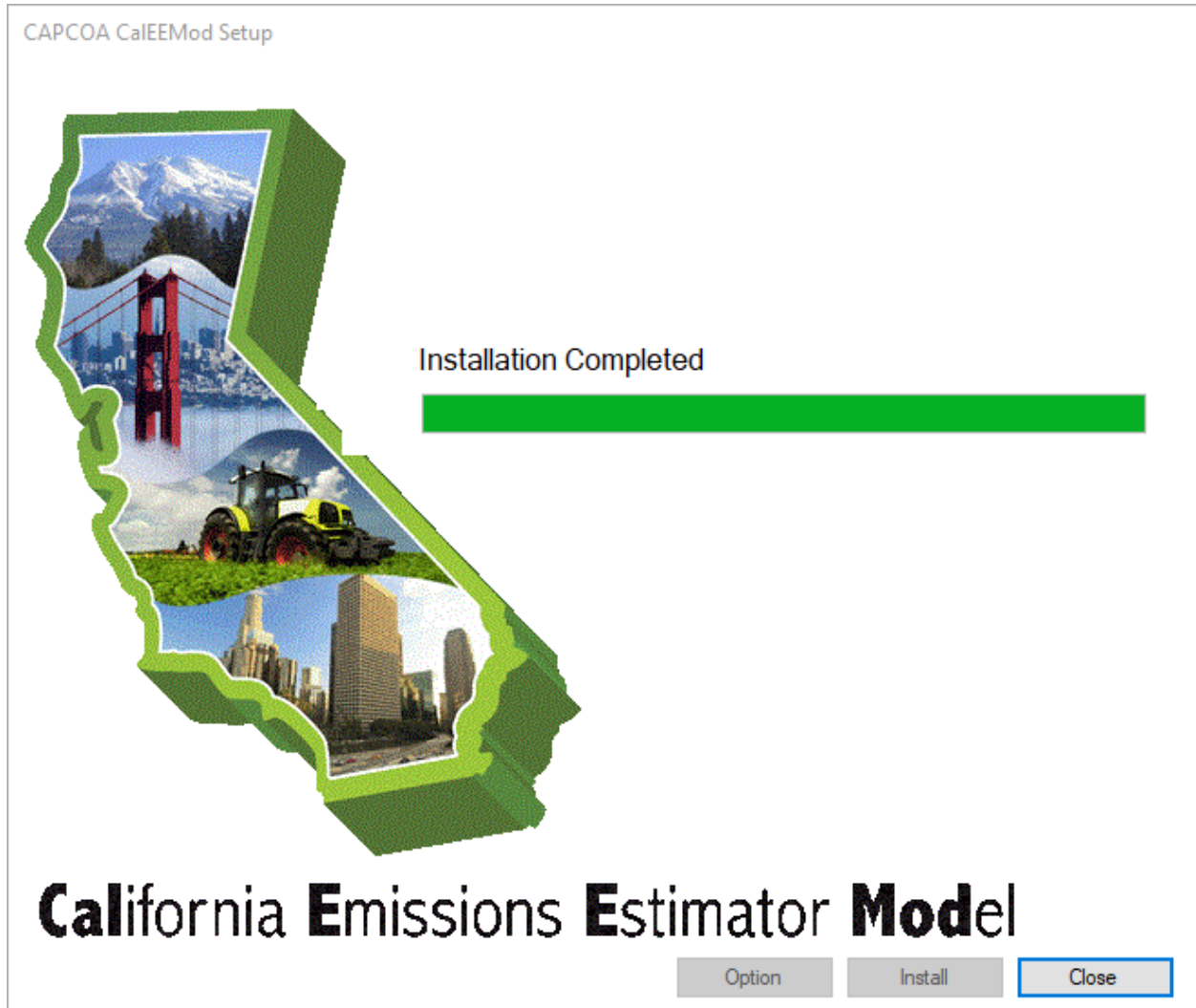
For 32-bit computers, the default directory for CalEEMod Version 2020.4.0 is C:\Program Files\CAPCOA\CalEEMod2020.4.0; for 64-bit computers, the default directory for CalEEMod Version 2020.4.0 is C:\Program Files (x86)\CAPCOA\CalEEMod2020.4.0. Click Next until the installation has completed, then click Finish to exit the installer.

7. If difficulty is encountered when installing CalEEMod (e.g., network firewalls may prevent successful downloading of the model, especially for computers connected to an intranet or other type of network system), verify that the appropriate user privileges are activated and that the computer meets the minimum operating system requirements.
8. The installation process is completed when the CAPCOA CalEEMod 2020.4.0 icon appear in two locations: 1) on the desktop; and 2) in the Start, Programs menu.



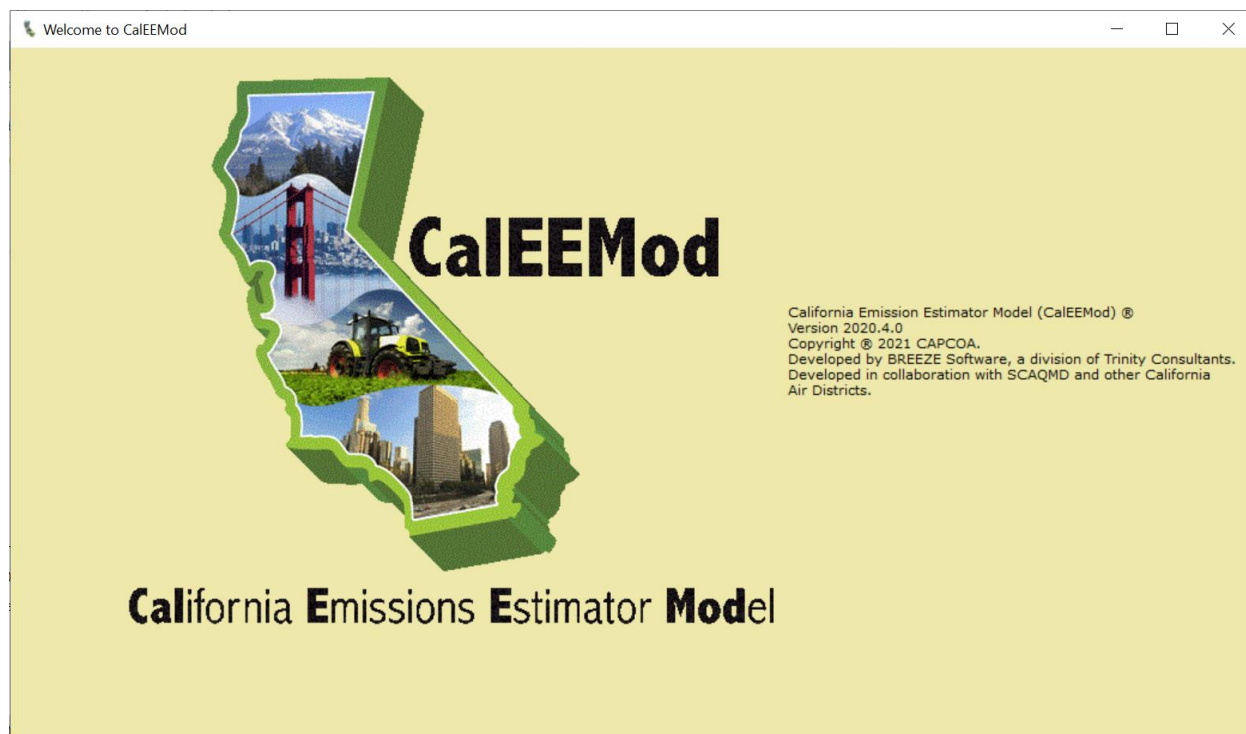






2.3 Starting CalEEMod

To open the model, double click on the CAPCOA CalEEMod2020.4.0 icon from the desktop or select the CAPCOA CalEEMod2020.4.0 program from the Start, Programs menu.

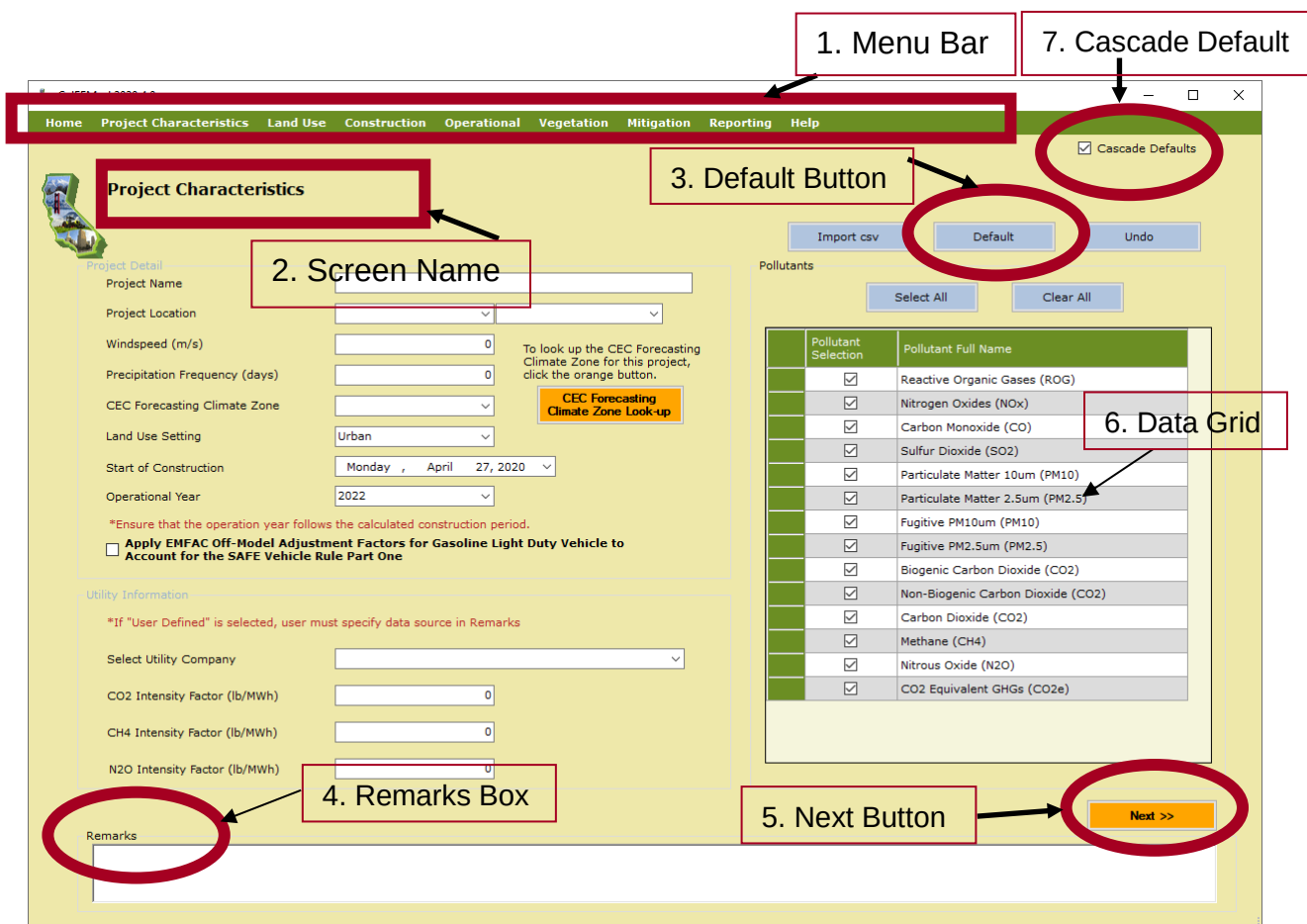


3 Using CalEEMod

3.1 Key Features

CalEEMod is comprised of a series of screens with each designed with an individual purpose to define features of the project such as project characteristics, construction schedule and equipment, operational activity, mitigation measures, etc. The user will need to input basic information about the project such as location, land use type(s) (e.g., residential, commercial, retail, etc.) and project size, and the model will populate subsequent screens with pre-determined defaults. The user may override the defaults to input more accurate, project-specific information as appropriate.

The following screenshot highlights some key features in CalEEMod which are described in more detail below:



The screenshot shows the 'Project Characteristics' screen in CalEEMod. The interface includes a menu bar at the top, a screen title, input fields for project details, a data grid for pollutants, and a 'Next' button. Numbered callouts identify the following features:

- 1. Menu Bar:** A horizontal bar at the top with options: Home, Project Characteristics, Land Use, Construction, Operational, Vegetation, Mitigation, Reporting, Help.
- 2. Screen Name:** The title 'Project Characteristics' displayed on the left side of the screen.
- 3. Default Button:** A button labeled 'Default' located below the 'Import csv' and 'Undo' buttons.
- 4. Remarks Box:** A text input area at the bottom left labeled 'Remarks'.
- 5. Next Button:** An orange button labeled 'Next >>' located at the bottom right.
- 6. Data Grid:** A table listing pollutants with checkboxes for selection. The table has two columns: 'Pollutant Selection' and 'Pollutant Full Name'.
- 7. Cascade Default:** A checkbox labeled 'Cascade Defaults' located in the top right corner.

Pollutant Selection	Pollutant Full Name
☒	Reactive Organic Gases (ROG)
☒	Nitrogen Oxides (NOx)
☒	Carbon Monoxide (CO)
☒	Sulfur Dioxide (SO2)
☒	Particulate Matter 10um (PM10)
☒	Particulate Matter 2.5um (PM2.5)
☒	Fugitive PM10um (PM10)
☒	Fugitive PM2.5um (PM2.5)
☒	Biogenic Carbon Dioxide (CO2)
☒	Non-Biogenic Carbon Dioxide (CO2)
☒	Carbon Dioxide (CO2)
☒	Methane (CH4)
☒	Nitrous Oxide (N2O)
☒	CO2 Equivalent GHGs (CO2e)

- 1. Menu Bar:** A drop down menu bar is found on all screens. For example, the Home menu controls file features such as New Project, Open Project, Save Project, and Save As Project. The Help menu will link to appropriate information for the relevant screen from this User's Guide. All of the other menus will allow navigation between the screens in any order.

2. **Screen Name:** Identifies the name of the current screen.
3. **Default Button:** This button allows the user to restore the program defaults after the user has changed any default values on the screen. User-entered values will be highlighted in **yellow** to clearly indicate the defaults that have been changed. The user will be prompted to specify whether the default should be restored for the current or last cell on the screen or for the entire screen. The Import csv option will allow the user to load a .csv file for a specific data grid. Clicking on the Undo button will allow the user to cancel or undo the previous action.
4. **Remarks:** This section is located at the bottom of each screen and it requires the user to enter comments regarding any defaults that have been replaced with user-defined values. The Remarks section is meant to assist project reviewers to determine or assess the justification for user-defined values entered.
5. **Next Button:** When the user clicks on this button, the next sequential screen will appear. As the user progresses through the model, later screens will also show a Previous button that will take the user to the previous screen.
6. **Data Grid:** This is a common box where values for the variables defined across the top are to be filled in with data. The number of rows will automatically be adjusted based on the number of rows of information required to define the information. On some data grids, the last row may have an asterisk (*) and once the user begins adding information to this row, a new row will be added at the end. To delete a row, select the desired row to delete, and hit the delete button on your keyboard. (Deleting information is generally allowed unless the data grid contains a fixed list such as the Pollutant selection list.) Scroll bars (both horizontal and vertical) may also occur on some data grids, as appropriate.
7. **Cascade Defaults:** CalEEMod has a feature that freezes the automatic downloading of the programmed defaults. Each input screen displays a box called Cascade Default which will be automatically checked to populate defaults in future screens. However, if user unchecks the Cascade Default box, no defaults will be populated in subsequent screens and the user will need to input project-specific data. Unless all the necessary input parameters required for a proper analysis are known, the user should run the model at least once with "Cascade Default" button checked to allow the defaults to be populated. Then, if the user would like to change the project's parameters (e.g., number of dwelling units, building square footage, etc.) without cascading new defaults in later screens, then the user should uncheck the Cascade Default box when in the Land Use screen. This feature may be helpful when the defaults are replaced with project-specific information (e.g., construction schedule, construction equipment, water use, energy use, etc.) and the user would like to evaluate different project scenarios with the same basic project information (e.g., land use type, location, etc.). In addition, by unchecking the Cascade Default box, the following will occur:
 - The defaults in *ALL* subsequent screens will be frozen.
 - Any changes that are made to screens that follow the Land Use screen (e.g., adding a new construction phase) will not cascade defaults relating to that change or add new tabs (e.g., trips and VMT, dust material movement). Thus, the user will need to manually input project-specific information in order for the impacts to be calculated.

- If any changes to land use type (e.g., from single family housing to a hospital) are made, the subsequent screens will not reflect the new land use type causing some incorrect calculations (e.g., impacts from energy and water use) to be performed.

When changing or adding a land use type, the user should click on the Cascade Default button so the future screens will be populated with appropriate defaults and the correct calculations specific to the changed or added land use type will occur.

3.2 Home

The Home tab on the file menu bar that controls the file saving and opening features. The available options are:

- New Project
- Open Project
- Save
- Save As
- Exit

The user should select Open Project to open a project that has been previously created and saved or New Project to create a new project. Note that opening a previously saved project will remove any information that has been entered into the GUI unless it has been saved to a file. Save will save the currently loaded project database as a Microsoft Excel file and this file can be closed, and then re-opened later. Save As will allow the user to change the name of the saved project file. Exit will close CalEEMod. The Microsoft Excel file can be edited following the format of the save file to quickly make edits outside of the Graphical User Interface (GUI) but the user will still need to use the GUI in order to report the results. This can be most useful in making changes to construction lists. Data for individual tabs can be uploaded as a .csv file in various places in CalEEMod to minimize the data entry.

3.3 Defining a Project

To define a project, the user must enter all information on both the Project Characteristics screen and the Land Use screen. After entering information on these two screens, CalEEMod will populate all the other information required to calculate unmitigated construction (unless there is demolition, grading, or site preparation) and operation emissions using default data. If demolition, grading, and/or site preparation activities are part of the project, then the user will need to enter additional information on the appropriate construction screens, including but not limited to, the amount of material to be demolished and transported to or from the site. If site-specific information is not needed for the project, the user can skip this part and jump to the Mitigation screen and enter mitigation measures. After completing the Mitigation screen, the user can proceed to the Reporting screen to select the type of report to be generated for the project.

3.4 Altering Default Data

CalEEMod was designed with default assumptions supported by substantial evidence to the extent available at the time of programming. The functionality and content of CalEEMod is based on fully adopted methods and data. However, CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that

the information is supported by substantial evidence as required by CEQA. If the user chooses to modify any defaults, an explanation will be required in the Remarks box found at the bottom of the screen to justify and support the modification before the user will be able to proceed to the next screen. Modifications to defaults and the explanations are noted in the output report. Comments in the Remarks box are also included in the report and alert reviewers of modifications to the defaults. Comments are important because they show the user's justification for the modifications, which allows the reviewers the ability to determine whether the modifications are appropriate and sufficiently justified.

3.5 Mitigation

Common construction mitigation measures that impact the calculations in CalEEMod have been incorporated as options for the user to select. It is important to note that compliance with fugitive dust rules vary widely by district and include requirements to reduce dust. Even though the fugitive dust rules contain requirements that when implemented, have the effect of mitigating dust emissions, these requirements are not considered to be mitigation per se. For these reasons, requirements such as percentage adjustments to fugitive dust rules have not been incorporated into the unmitigated fugitive dust calculations.

Several mitigation measures from CAPCOA's Quantifying Greenhouse Mitigation Measures have been incorporated including combinations and caps when using multiple mitigation measures. CalEEMod was designed to include typical mitigation measures that are some of the more effective measures available to development projects. If mitigation measures are not available as options in CalEEMod, the user can alter the inputs in the program to adjust to account for mitigation measures that may be less common. This will require separate runs of CalEEMod files to properly account for unmitigated and mitigated scenarios. For more details regarding mitigation, see Subchapter 4.11.

3.6 Reporting

The Reporting tab allows the user to select the type of report (e.g., annual, winter or summer) to present the results of the calculations. The reports can be viewed on screen and then saved as either a Microsoft Excel file or a .pdf file. For more details regarding reporting, see Subchapter 4.11.

4 Detailed Program Screens

4.1 Project Characteristics

The Project Characteristics screen is starting point where the user enters the project name, project location, and selects utility provider, climate zone, and pollutants to be analyzed. The information entered on this screen will trigger project appropriate default data to populate subsequent screens. Any changes entered on this screen will override any previously entered user-defined data and the corresponding default data. The project name will appear in the reports. Each of the information categories on this screen are described in more detail below.

Project Location

To define the region where the project is located, the user is given the option to select Air District, Air Basin, County, or Statewide. The second drop down box will reveal a list of specific locations to the region selected. If the user selects County, It is important to note that there may be some counties that are shared by multiple Air Districts, Air Basins or District-specific sub-regions and the default values (e.g., on-road vehicle emissions, trip lengths, water supply and treatment electricity use, solid waste disposal rates, amount of paved roads, days of landscaping equipment use, architectural coating emissions, and hearth usage) may vary accordingly. Thus, if the user selects County, the user may also be prompted to select the sub-county area. If you are uncertain about what region to choose for your project location, consult your lead agency. See notes in Section 4.3.5 regarding EMFAC subarea.

Wind Speed and Precipitation Frequency

Selection of project location will automatically fill in the default wind speed and precipitation frequency. The user can also choose to override this information and enter a different value. The wind speed, in meters per second (m/s), is used in the fugitive dust calculations. Precipitation frequency, e.g. the number of days per year with a precipitation amount measuring greater than 0.01 inches in one day, is used in the fugitive dust calculations.

Climate Zone

Selection of project location will restrict the climate zones available for the user to choose from based on the climate zones in the project location. The climate zones that have been programmed into CalEEMod are based on the California Energy Commission's (CEC) Forecasting Climate Zones, which are different from the Title 24 Building Climate Zones. The user should determine the correct climate zone by either referring to the figure below or by clicking on the orange button that says "CEC Climate Zone Forecasting Look-up" on the Project Characteristics screen. In addition, the user may also determine the climate zone by city or zip code from the look up tables in Appendix F.

CEC Forecasting Climate Zone Look-up Button

Project Detail

Project Name		
Project Location		
Windspeed (m/s)		0
Precipitation Frequency (days)		0
CEC Forecasting Climate Zone		
Land Use Setting	Urban	
Start of Construction	Monday , April 27, 2020	
Operational Year	2022	

**Ensure that the operation year follows the calculated construction period.*

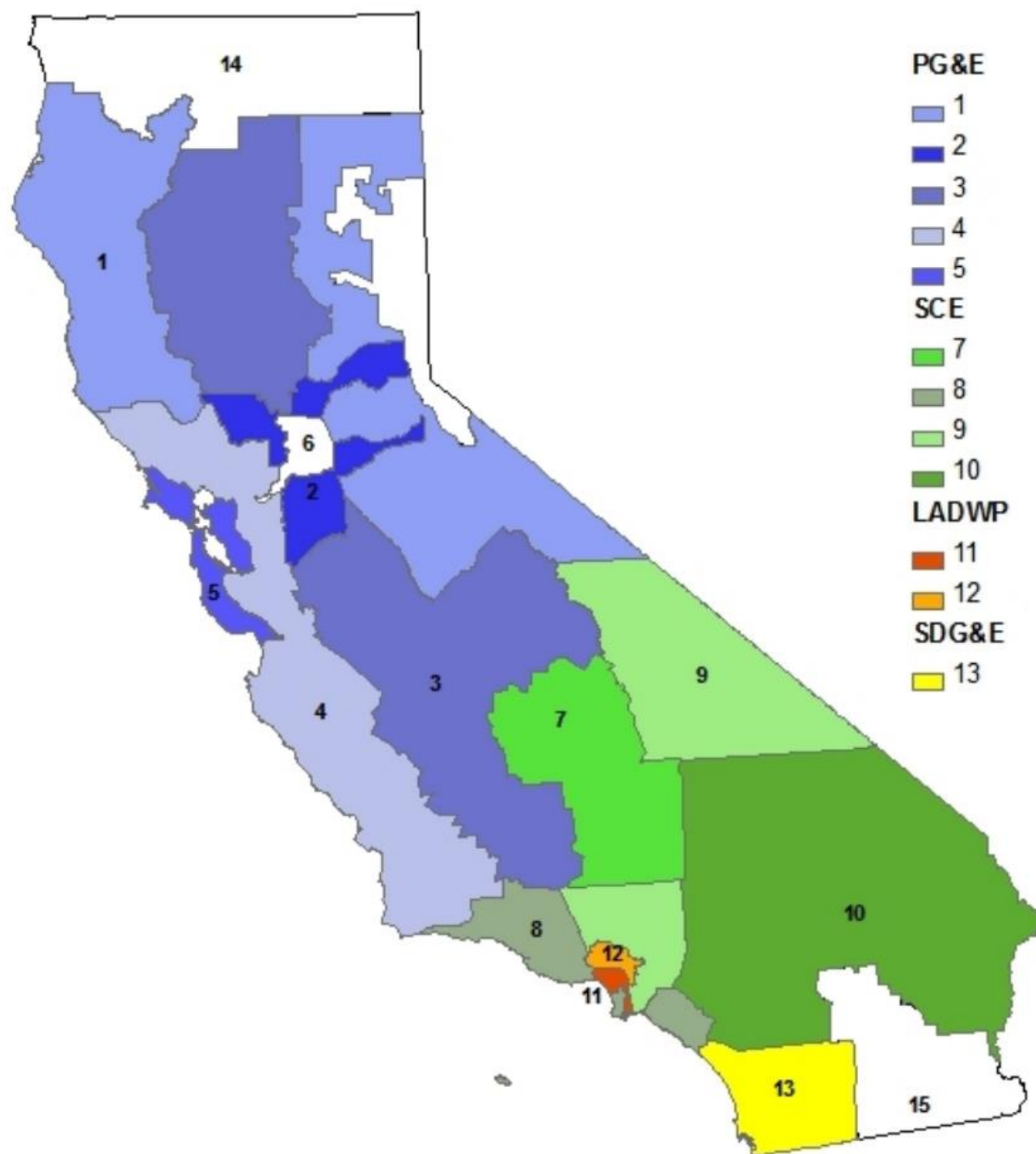
☐ **Apply EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Part One**

To look up the CEC Forecasting Climate Zone for this project, click the orange button.

CEC Forecasting Climate Zone Look-up

CalEEMod utilizes the Forecasting Climate Zones because the baseline data in the 2002 California Commercial End Use Survey (CEUS) and 2009 Residential Appliance Saturation Survey (RASS), upon which CalEEMod relies, are categorized in this manner. Further information on the calculation of building energy usage, including the application of data specific to the Forecasting Climate Zones, is contained in Appendix E.

CEC Forecasting Climate Zones^{3, 4}



³ Adapted from Figure ES-2 of CEC. 2010. Residential Appliance Saturation Survey. Available at: <https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C18.pdf>

⁴ White spaces represent areas served by other electric utilities not included in survey.

Land Use Setting

The Land Use Setting tab is where the user indicates whether the project is located in a rural or urban setting. The user should contact the local air district for the region where the project is located for guidance on the appropriate Land Use Setting to select.

Start of Construction

To indicate when construction of the project will begin, the user will need to insert a date in the Start of Construction field. The date when construction will start triggers a rolling calendar that starts with the construction start date and follows by various construction phases that will be populated with default date ranges in the Construction screen.

Operational Year

CalEEMod is designed to require the user to select the first year when full project operation is expected to begin. CalEEMod relies on the initial operational year to apply the appropriate emission factors in all operational module calculations. CalEEMod can accommodate the following years for the initial operational year: 2000, 2005, 2010-2035, 2040, 2045, and 2050. This wide range of dates allows the user to analyze a project for an operational year that occurs in the past or further into the future. It is important to note that the selection of years is limited to minimize the file size associated with the vehicle emission factors associated with each operational year. For a project that consists of multiple phases with operation activities occurring over multiple years, the user is recommended to run the model multiple times for the various input parameters for each operational year.

EMFAC2017 Off-Model Adjustment Factors

Project Detail

Project Name		
Project Location		
Windspeed (m/s)	0	To look up the CEC Forecasting Climate Zone for this project, click the orange button.
Precipitation Frequency (days)	0	
CEC Forecasting Climate Zone		CEC Forecasting Climate Zone Look-up
Land Use Setting	Urban	
Start of Construction	Monday , April 27, 2020	
Operational Year	2022	

**Ensure that the operation year follows the calculated construction period.*

☐ **Apply EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Part One**

CalEEMod2020.4.0 offers a new feature which allows the user to analyze a project by either applying the original EMFAC2017 emission factors adopted by CARB or the modified EMFAC2017 emission factors which include with off-model adjustments applied to certain gasoline-fueled light duty and medium duty vehicles (EMFAC vehicle codes: LDA, LDT1, LDT2,

and MDV) in accordance with Part One of the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules and actions adopted by the U.S. Environmental Protection Agency and National Highway Traffic Safety Administration in 2020⁵. The off-model adjustment factors apply to the following pollutants: NO_x, TOG, ROG, PM₁₀, PM_{2.5} and CO. CARB's guidance has indicated that the off-model adjustment factor for TOG can be applied to ROG, and the off-model adjustment factor for PM can be applied to PM₁₀ and PM_{2.5}.

- If the box is checked, off-model adjustment factors will be applied to both construction emissions and operational emissions for the aforementioned gasoline-fueled light duty and medium duty vehicles; if the box is not checked, the original EMFAC2017 emission factors will be applied for all vehicle classes, without any off-model adjustments.

Utility Company

From the drop-down list, the user will need to select the appropriate utility company that will serve the project location. When a specific utility is selected, the intensity factors for CO₂, CH₄ and N₂O will be automatically populated with defaults applicable to the specified utility. However, if the utility for the project is not in the drop-down list, the user may select User Defined and the user will need to manually enter the various intensity factors. In addition, the user will need to identify the utility in the Remarks section.

The intensity factors are used in various modules to calculate the GHG emissions associated with electricity use. The default values are based on CARB's Local Government Operations Protocol (LGO)⁶ for CO₂, updated public utility protocols for CO₂, and E-Grid values for CH₄ and N₂O. Each default CO₂ intensity factor is based on the latest reporting year available for each utility. Appendix D, Table 1.2 provides the default CO₂ intensity factor and reporting year from which the factor was identified for each utility identified in the drop-down list. As with other defaults in the model, if a new intensity factor is identified before the defaults in CalEEMod are updated, the user may override the default and provide justification for the change in the Remarks section at the bottom of the Project Characteristics screen.

Pollutants

CalEEMod provides a list of pollutants with adjacent check boxes for the user to select. Upon starting a new project, all the boxes are automatically checked and if the boxes remain checked, all pollutants will be quantified and identified in the reports. If user unchecks any of the boxes, the unchecked pollutants will be excluded from the calculations and the reports. Some of the pollutants may overlap other identified pollutants. For example, carbon dioxide (CO₂) is identified on its own, and it is separated into biogenic and non-biogenic categories. In addition, CO₂ Equivalent GHGs represents, all CO₂ emissions plus methane (CH₄) and nitrous oxide (N₂O) as adjusted by their corresponding Global Warming Potential (GWP) weighted value. The GWPs are based on the 2007 IPCC's Fourth Assessment Report (AR4)⁷, and are consistent with 2014 CARB's Scoping Plan Update⁸.

⁵ Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf; https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf

⁶ Available at: <http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm>

⁷ Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf

⁸ Available at: <http://www.arb.ca.gov/cc/scopingplan/document/updatescopingplan2013.htm>

Remarks

As previously explained in Subchapter 3.4, if the user chooses to modify any defaults, the user will be required to provide an explanation or justification in the Remarks section for incorporating user defined (e.g., non-default) values before the user will be able to proceed to the next screen. Any remarks that are entered will be included in the reports and will assist a reviewer in understanding the reasons for a change in the default value (e.g., new trip rate based on a project-specific traffic study conducted by traffic engineers).

4.2 Land Use

The Land Use screen is where the user identifies the land use(s) that will occur at the project site. The data in the land use types and subtypes, unit amounts, size metric, lot acreage, square feet and population fields determine the default variables that are used in the calculations. It is important to note that for any project that includes a city park, golf course, or recreational swimming pool land use, the user will be prompted to enter the square footage of the buildings associated with these land uses (e.g., restrooms/changing rooms, pro-shop, etc.). By excluding the entire lot size for these three land use types, and instead only using the square footage of the buildings, the calculations for consumer product use will provide a more accurate representation of how and where these materials are used and avoid incorrectly attributing consumer products use to greenspaces and pool water. For more information on the calculations for consumer product use, see Subchapter 4.5, Section 4.5.2.

Home
Project Characteristics
Land Use
Construction
Operational
Vegetation
Mitigation
Reporting
Help

☒ Cascade Defaults


Land Use

Ensure that Unit Amount for the selected Size Metric is consistent with Lot Acreage and Square Feet.

Import csv
Default
Undo

	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
	Educational	Elementary School	100	1000sqft	2.3	100,000	0
▶	Recreational	City Park	12	Acre	12	522,720	0
○							

Population
City Park/Golf Course Building Area Square Feet

Lot Acreage

Remarks

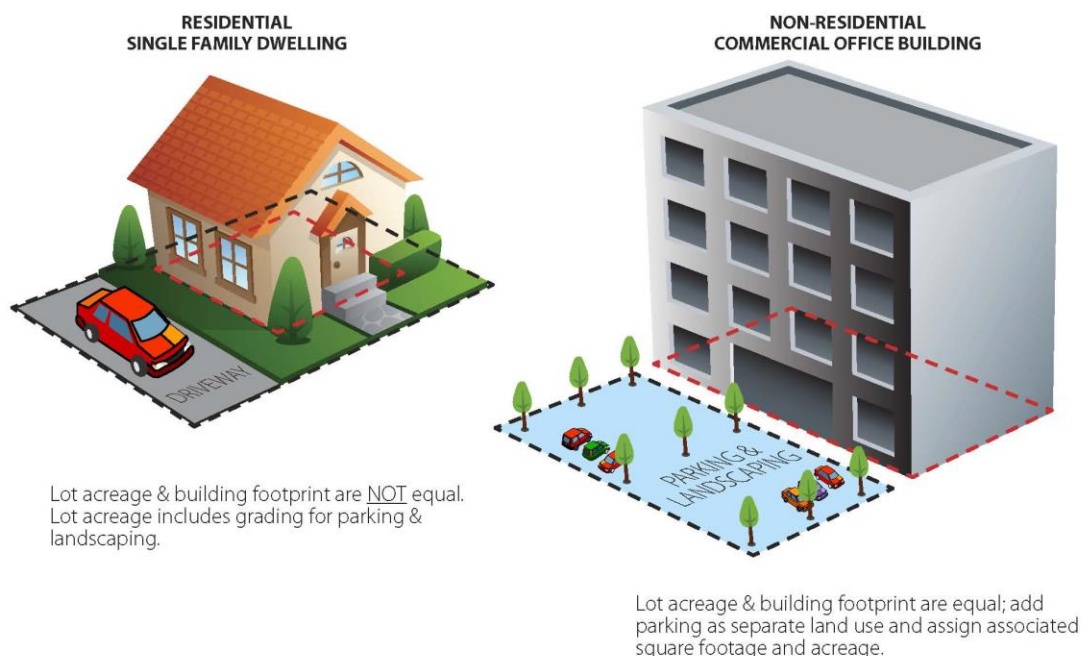
<< Previous
Next >>

Land Use Type

The Land Use Type tab allows the user to select any of the following primary land use types from a drop-down list: Commercial, Educational, Industrial, Parking, Recreational, Residential, and Retail. The 63 different land use types were chosen for inclusion in CalEEMod because each has an established trip rate, which is critical for mobile source calculations. The trip generation data are from the ITE Trip Generation Manual, 10th Edition.⁹

CalEEMod specifically designates parking areas as a separate land use rather than as a part of an associated non-residential land use (e.g., commercial buildings, retail facilities, etc.). However, no separate parking land use for a driveway or garage needs to be identified for residential land uses because parking is already included in the calculation. For more information on how CalEEMod treats parking based on the footprint and lot acreage of residential and non-residential land uses, please refer to the following figure. As depicted, the lot acreage of a residential land use includes the parking and building footprint. For non-residential land uses, the lot acreage is the same as the building footprint, so parking needs to be entered as a separate land use.

CalEEMod Default Lot Acreage for Res and Non Res Land Uses



⁹ ITE Technical Resources website: <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>

For the parking land use subtype, two primary options are available: parking lot or parking structure (e.g., garage). There are four types of parking structures: 1) enclosed; 2) enclosed with an elevator; 3) unenclosed; and, 4) unenclosed with an elevator. The reason for these specific descriptions is so that the model properly accounts for energy impacts associated with ventilation and elevator operations.

For land use subtypes that are not listed (e.g., roads, underground parking, pipelines, etc.) or that do not accurately represent the project being analyzed, each land use subtype has a User Defined option that the user can select. If a User Defined land use subtype is selected, there is no default data (including size metric) that will automatically populate the data fields. Instead, the user will need to manually enter the unit amount, size metric, lot acreage, etc. If these fields are left blank, no emissions will be calculated for the User Defined land use subtype. Also, whatever size metric (e.g., per acre, per 1000 square foot, etc.) the user chooses for the User Defined land use subtype needs to be consistently applied to all subsequent default values (e.g., gallons of water used *per acre* or *per 1000 square foot*). An alternative approach to entering a User Defined land use subtype would be to choose a land use subtype that most closely fits the project and allow the model to populate the data fields with the defaults. Then, the user can go back through the model and modify the defaults with any known specific project information and enter the required Remarks to explain why the defaults are modified.

Land Use Subtype

63 land use subtypes have been included in CalEEMod and each has an established trip rate that is used for calculating mobile source emissions. By tabbing over to the next column in a row, the user can select a variety of land use subtypes. The user also has the option to select a User Defined land use subtype; however, as explained previously, there is no default data (including size metric) that will automatically populate the data fields. Instead, the user will need to manually enter the unit amount, size metric, lot acreage, etc. Land use subtypes are based primarily on the land use definitions used for (mobile source) trip generation rate information from the ITE Trip Generation Manual, 10th Edition. Note that the trip generation rates included in CalEEMod are a subset of a larger compilation of data that can be obtained from ITE.¹⁰ In some cases, similar generalized land uses or surrogate data were mapped to some land use subtypes to generate the default data needed for various modules.

¹⁰ ITE Technical Resource webpage: <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
RESIDENTIAL		
Apartments High Rise	High-rise apartments are units located in rental buildings that have more than 10 levels and most likely have one or more elevators.	222, ITE 10 th
Apartments Low Rise	Low-rise apartments are units located in rental buildings that have 1-2 levels.	220, ITE 10 th
Apartments Mid Rise	Mid-rise apartments in rental buildings that have between 3 and 10 levels.	221, ITE 10 th
Condo/Townhouse	These are ownership units that have at least one other owned unit within the same building structure.	220, ITE 10 th
Condo/Townhouse High Rise	These are ownership units that have three or more levels.	221, ITE 10 th
Congregate Care (Assisted Living)	These facilities are independent living developments that provide centralized amenities such as dining, housekeeping, transportation and organized social/recreational activities. Limited medical services may or may not be provided.	254, ITE 10 th
Mobile Home Park	Mobile home parks consist of manufactured homes that are sited and installed on permanent foundations and typically have community facilities such as recreation rooms, swimming pools and laundry facilities.	240, ITE 10 th
Retirement Community	These communities provide multiple elements of senior adult living. Housing options may include various combinations of senior adult housing, congregate care, assisted living, and skilled nursing care aimed at allowing the residents to live in one community as their medical needs change.	255, ITE 10 th
Single Family Housing	All single-family detached homes on individual lots typical of a suburban subdivision	210, ITE 10 th
EDUCATIONAL		
Day-Care Center	A day care center is a facility where care for pre-school age children is provided, normally during the daytime hours. Day care facilities generally include classrooms, offices, eating areas and playgrounds.	565, ITE 10 th
Elementary School	Elementary schools typically serve students attending kindergarten through the fifth or sixth grade. They are usually centrally located in residential communities to facilitate student access and have no student drivers.	520, ITE 10 th
High School	High schools serve students who have completed middle or junior high school.	530, ITE 10 th
Junior College (2Yr)	This land use includes two-year junior, community, or technical colleges.	540, ITE 10 th

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
Junior High School	Junior High schools serve students who have completed elementary school and have not yet entered high school.	522, ITE 10 th
Library	A library is a facility that consists of shelved books; reading rooms or areas; and sometimes meeting rooms.	590, ITE 10 th
Place of Worship	A place of worship is a building in which public worship (religious) services are held (e.g., church, synagogue, mosque, etc.). A place of worship is comprised of an assembly hall or sanctuary; it may also house meeting rooms, classrooms and occasionally dining catering or party facilities.	560, ITE 10 th
University/College (4Yr)	This land use includes four-year universities or colleges that may or may not offer graduate programs.	550, ITE 9 th (Saturday) and 10 th (Weekday)
RECREATIONAL		
Arena	Arenas are large indoor structures in which spectator events are held. These events vary from professional ice hockey and basketball to non-sporting events such as concerts, shows, or religious services. Arenas generally have large parking facilities, except when located in or around the downtown of a large city.	460, ITE 9 th
City Park	City parks are owned and operated by a city.	411, ITE 10 th
Fast Food Restaurant W/O Drive Thru	This land use includes fast-food restaurants without drive-through windows. Patrons generally order at a cash register and pay before they eat.	933, ITE 10 th
Fast Food Restaurant with Drive Thru	This category includes fast-food restaurants with drive-through windows.	934, ITE 10 th
Golf Course	Golf courses include 9-, 18-, 27- and 36-hole courses. Some sites may also have driving ranges and clubhouses with a pro shop, restaurant, lounge and banquet facilities.	430, ITE 10 th
Health Club	These are privately-owned facilities that primarily focus on individual fitness or training. Typically, they provide exercise classes; weightlifting, fitness and gymnastics equipment; spas; locker rooms; and small restaurants or snack bars.	492, ITE 9 th
High Turnover (Sit Down Restaurant)	This land use consists of sit-down, full-service eating establishments with turnover rates of approximately one hour or less. This type of restaurant is usually moderately priced and frequently belongs to a restaurant chain.	932, ITE 10 th
Hotel	Hotels are places of lodging that provide sleeping accommodations and supporting facilities such as restaurants; cocktail lounges; meeting and banquet rooms or convention facilities; limited recreational facilities and other retail and service shops.	310, ITE 10 th

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
Motel	Motels are places of lodging that provide sleeping accommodations and often a restaurant. Motels generally offer free on-site parking and provide little or no meeting space and few supporting facilities.	320, ITE 10 th
Movie Theater (No Matinee)	Movie theaters consist of audience seating, single or multiple screens and auditoriums, a lobby and a refreshment stand. Movie theaters without matinees show movies on weekday evenings and weekends only; there are no weekday daytime showings.	444, ITE 10 th
Quality Restaurant	This land use consists of high quality, full-service eating establishments with typical turnover rates of at least one hour or longer. Quality restaurants generally do not serve breakfast, some do not serve lunch; all serve dinner. This type of restaurant usually requires reservations and is generally not part of a chain. Patrons commonly wait to be seated, are served by a waiter, order from menus and pay for meals after they eat.	931, ITE 10 th
Racquet Club	These are privately-owned facilities that primarily cater to racquet sports.	491, ITE 9 th
Recreational Swimming Pool	This is a typical recreational swimming pool that may be associated with community centers, parks, swim clubs, etc.	495, ITE 10 th
PARKING		
Enclosed Parking Structure	This is an enclosed parking structure that may be above or below ground. It is not covered in asphalt. This land use will require lighting and ventilation, and will have more than one floor with no elevator.	N/A
Enclosed Parking with Elevator	This is an enclosed parking structure that may be above or below ground. It is not covered in asphalt. This land use will require lighting and ventilation, and will have more than one floor with an elevator.	N/A
Other Asphalt Surfaces	This is an asphalt area not used as a parking lot (e.g., long driveway, basketball court, etc.)	N/A
Other Non-Asphalt Surfaces	This is a non-asphalt area (e.g., equipment foundation, loading dock area, etc.).	N/A
Parking Lot	This is a typical single surface parking lot typically covered with asphalt. This land use will require lighting.	N/A
Unenclosed Parking Structure	This is an unenclosed parking structure that may be above or below ground. It is not covered in asphalt. This land use will require lighting but not ventilation. It will have more than one floor with no elevator.	N/A
Unenclosed Parking with Elevator	This is an unenclosed parking structure that may be above or below ground. It is not covered in asphalt. This land use will require lighting but not ventilation. It will have more than one floor with an elevator.	N/A

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
RETAIL		
Automobile Care Center	An automobile care center houses numerous businesses that provide automobile-related services, such as repair and servicing; stereo installation; and seat cover upholstery.	942, ITE 10 th
Convenience Market (24 Hour)	These markets sell convenience foods, newspapers, magazines and often beer and wine. They do not sell or dispense motor vehicle fuels (e.g., gasoline and diesel).	851, ITE 10 th
Convenience Market with Gas Pumps	These markets sell or dispense motor vehicle fuels (e.g., gasoline and diesel), convenience foods, newspapers, magazines and often beer and wine. This includes convenience markets with motor vehicle fueling dispensers where the primary business is the selling of convenience items, not the fueling of motor vehicles.	853, ITE 10 th
Discount Club	A discount club is a discount store or warehouse where shoppers pay a membership fee to take advantage of discounted prices on a wide variety of items such as food, clothing, tires and appliances. Many items are sold in large quantities or in bulk.	857, ITE 10 th
Electronic Superstore	These are free-standing facilities that specialize in the sale of electronic merchandise.	863, ITE 10 th
Free-Standing Discount Store	Discount stores offer centralized cashiering and sell products that are advertised at discount prices. These stores offer a variety of customer services and maintain long store hours seven days a week.	815, ITE 10 th
Free-Standing Discount Superstore	The discount superstore is similar to the free-standing discount stores with the addition that they also contain a full-service grocery department under the same roof that shares entrances and exits with the discount store area.	813, ITE 10 th
Gasoline/Service Station	This land use includes service stations where the primary business is the fueling of motor vehicles. They may also have ancillary facilities for servicing and repairing motor vehicles.	944, ITE 10 th
Hardware/Paint Store	These stores sell hardware and paint supplies and are generally free-standing buildings.	816, ITE 10 th
Home Improvement Superstore	These are free-standing facilities that specialize in the sale of home improvement merchandise.	862, ITE 10 th
Regional Shopping Center	A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store.	820, ITE 10 th
Strip Mall	Small strip shopping centers contain a variety of retail shops and specialize in quality apparel, hard goods and	826, ITE 9 th

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
	services such as real estate offices, dance studios, florists and small restaurants.	
Supermarket	Supermarkets are free-standing retail stores selling a complete assortment of food: food preparation and wrapping materials; and household, cleaning items. Supermarkets may also contain the following products and services: ATMs, automobile supplies, bakeries, books and magazines, dry cleaning, floral arrangements, greeting cards, limited-service banks, photo centers, pharmacies and video rental areas.	850, ITE 10 th
COMMERCIAL		
Bank (With Drive-Through)	Drive-in banks provide banking facilities for motorists who conduct financial transactions from their vehicles; many also serve patrons who walk into the building.	912, ITE 10 th
General Office Building	A general office building houses multiple tenants where affairs of businesses commercial or industrial organizations or professional persons or firms are conducted. If information is known about individual buildings, it is suggested that this land use be used instead of the more generic office park.	710, ITE 10 th
Government (Civic Center)	A group of government buildings that are interconnected by pedestrian walkways.	733, ITE 10 th
Government Office Building	This is an individual building containing either the entire function or simply one agency of a city, county, state, federal, or other governmental unit.	730, ITE 10 th
Hospital	A hospital is any institution where medical or surgical care and overnight accommodations are provided to non-ambulatory and ambulatory patients. However, it does not refer to medical clinics or nursing homes.	610, ITE 10 th
Medical Office Building	This is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility.	720, ITE 10 th
Office Park	Office parks are usually suburban subdivisions or planned unit developments containing general office buildings and support services, such as banks, restaurants and service stations, arranged in a park-or campus-like atmosphere. This should be used if details on individual buildings are not available.	750, ITE 10 th

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
Pharmacy/Drugstore W/O Drive Thru	These are retail facilities that primarily sell prescription and non-prescription drugs. These facilities may also sell cosmetics, toiletries, medications, stationery, personal care products, limited food products and general merchandise. The drug stores in this category do not contain drive-through windows.	880, ITE 10 th
Pharmacy/Drugstore with Drive Thru	These are retail facilities that primarily sell prescription and non-prescription drugs. These facilities may also sell cosmetics, toiletries, medications, stationery, personal care products, limited food products and general merchandise. The drug stores in this category contain drive-through windows.	881, ITE 10 th
Research & Development	R&D centers are facilities devoted almost exclusively to R&D activities. The range of specific types of businesses contained in this land use category varies significantly. R&D centers may contain offices and light fabrication areas.	760, ITE 10 th
INDUSTRIAL		
General Heavy Industry	Heavy industrial facilities usually have a high number of employees per industrial plant and are generally limited to the manufacturing of large items.	140, ITE 10 th
General Light Industry	Light industrial facilities are free-standing facilities devoted to a single use. The facilities have an emphasis on activities other than manufacturing and typically have minimal office space. Typical light industrial activities include printing, material testing and assembly of data processing equipment. For CalEEMod Version 2020.4.0, this land use subtype must be less than 50,000 square feet. ¹¹	110, ITE 10 th
Industrial Park	Industrial parks contain several industrial or related facilities. They are characterized by a mix of manufacturing, service and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities.	130, ITE 10 th
Manufacturing	Manufacturing facilities are areas where the primary activity is the conversion of raw materials or parts into finished products. It generally also has office, warehouse, and R&D functions at the site.	140, ITE 10 th
Refrigerated Warehouse-No Rail	This is a warehouse that has refrigeration but no rail spur.	157, ITE 10 th
Refrigerated Warehouse-Rail	This is a warehouse that has refrigeration and a rail spur.	157, ITE 10 th

¹¹ For a project with a lot size greater than 50,000 square feet, the user will need to select a different land use type such as general heavy industry, industrial park, or manufacturing.

Table 1: Source of Trip Rates for Land Use Subtypes

Land Use Subtype	Description	Land Use Code and Source
Unrefrigerated Warehouse-No Rail	This is a warehouse that does not have refrigeration and no rail spur.	150, ITE 10 th
Unrefrigerated Warehouse-Rail	This is a warehouse that does not have refrigeration but has a rail spur.	150, ITE 10 th

Unit Amount and Size Metric

By tabbing over to the Unit Amount and Size Metric columns, respectively, the user can enter the number of units (e.g., houses, apartments, etc.) and the corresponding size metric (e.g., per 1000 sq. ft., employees, students, etc.). These data combinations will be used to populate the lot acreage, square feet and population columns on this screen. For example, a school land use allows the user to define its size by the number of students, building square footage, or number of employees. It is important to note that the square footage, which is used for calculating such impacts as architectural coatings and energy use, relates to the total building square footage and not the building footprint or lot acreage which is used for housing density as well as grading and site preparation calculations. A pop-up message was added to let users know that Unit Amount should be consistent with Lot Acreage or Square Feet on the Land Use page, and the Unit Amount should not be left as zero or blank.

Lot Acreage

If actual lot acreage data is available, the user should override the default value. However, for a mixed use, multi-story building, the user should not override the square footage default value for each individual land use or the acreage default value assigned to the residential portion or the split between the non-residential land uses if there is no residential portion. The figure below provides an example of a mixed-use project and instructions for applying the appropriate square footage and acreage.

Acreage is used to estimate housing density and assign construction default data (e.g., grading, site preparation, etc.). Table 2 contains housing density default data per land use in terms of dwelling units (DU) per acre. By using these data, CalEEMod can estimate the number of acres per dwelling unit (DU) for residential land use. For example, if the user enters 10 apartments in a low-rise building, then the lot acreage will be 0.625 acre (10 DU divided by 16 acres/DU). According to the California Energy Commission's Residential Appliance Saturation Survey (RASS), the metric for low rise apartments is 1,000 square feet per DU (see Table 2.1). Similarly, using the same example, the building footprint will be 0.23 acre (10 DU x 1000 sq. ft./DU x 1 acre/43,560 sq. ft.). Thus, the total lot acreage includes the residential footprint plus driveway and landscaping/open space.

After the user has completed entering all of land uses for the project, CalEEMod will add the lot acreage values for each land use and the total will be reflected in the lot acreage text box located at the bottom of the screen. The value in the total lot acreage box cannot be modified by the user.

Example of Mixed Use Project in CalEEMod

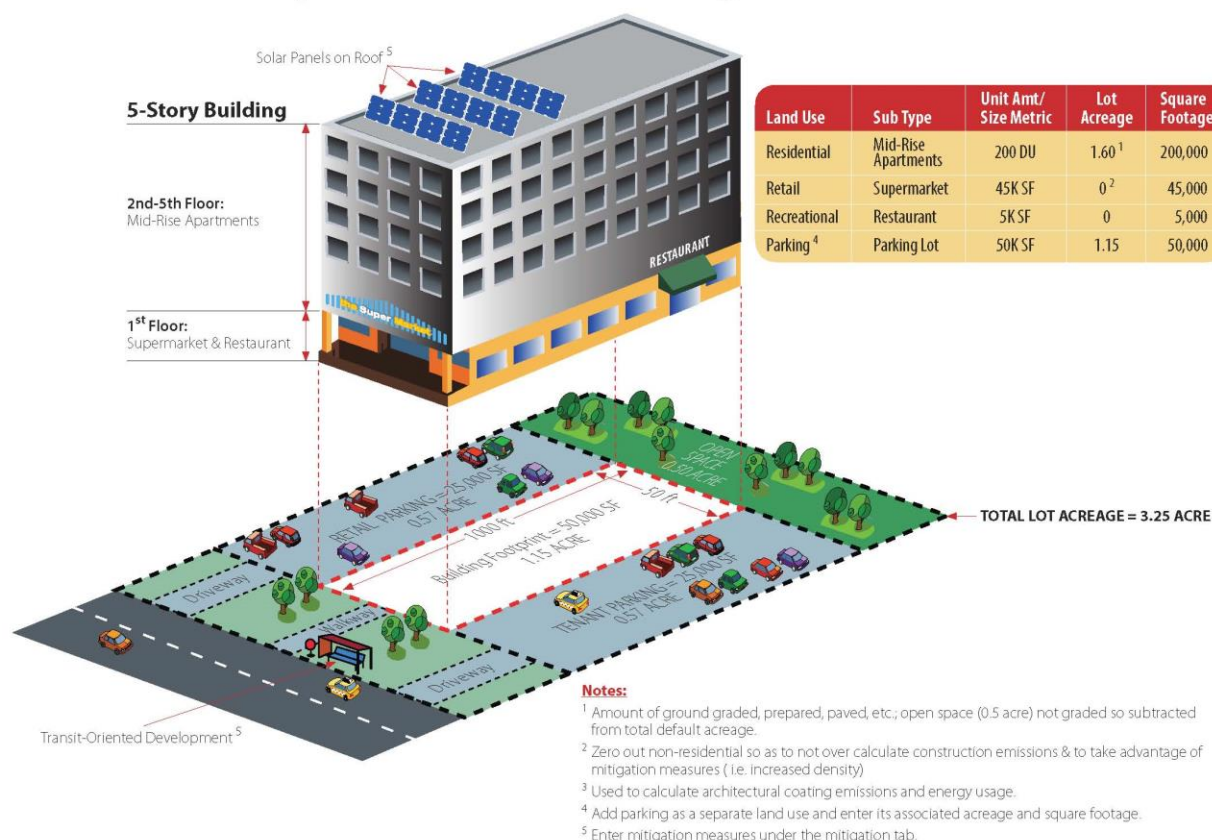


Table 2: Default Housing Density¹

Land Use Subtype	Density (Dwelling Units/Acre)
Single Family Housing	3
Apartments low rise	16
Apartments mid rise	38
Apartments high rise	62
Condo/townhouse	16
Condo/townhouse high rise	64
Mobile Home Park	8
Retirement Community	5
Congregate care (Assisted Living)	16

¹ Based on the density assumed in ITE Trip Generation 8th Edition

Square Footage

If actual square footage of the total building or building footprint is known, the user should override the default value.

Population

After the completing the tabs for unit amount, size metric, lot acreage, and square footage, the population field will contain a default which represents an estimate of the population for each land use type and subtype selected by the user. If the actual population data is known, the user should override the default value.

After the user has completed entering all of land uses for the project, CalEEMod will add the population values for each land use and the total will be reflected in the population text box located at the bottom of the screen. The value in the total population box cannot be modified by the user.

City Park/Golf Course Building Area Square Feet (text box)

If the user selects a City Park and/or Golf Course land use, a text box will appear at the bottom of the screen that will prompt the user to enter the building square footage of all the buildings that will be located on the City Park and/or Golf Course property (e.g., restrooms/changing rooms, pro-shop, etc.). The user must input site-specific building square footage data because there are no default values for building footprints on these types of land uses. If the building square footage is left blank (e.g., zero square feet), a warning message will appear to remind the user to enter a value in this field.

Recreational Swimming Pool Building Area Square Feet (text box)

If the user selects a Recreational Swimming Pool land use, a text box will appear at the bottom of the screen that will prompt the user to enter the building square footage of all the buildings that will be located on the property (e.g., restrooms/changing rooms, pro-shop, etc.). The user must input site-specific building square footage data because there is no default value for the building footprint on this type of land use. If the building square footage is left blank (e.g., zero square feet), a warning message appear to remind the user to enter a value in this field.

4.3 Construction

After completing the Land Use screen and clicking on the Next button, the Construction screen will appear along with seven tabs/sub-screens that cover the following construction topic areas: Construction Phase; Off-Road Equipment; Dust from Material Movement; Demolition; Trips and VMT, On-Road Fugitive Dust, and Architectural Coatings. To move from one tab/sub-screen to another, the user can use the Next and Previous buttons, or click on any of grey tabs. The construction tabs/sub-screens contain default information that was obtained from a survey of construction sites conducted by South Coast Air Quality Management District (South Coast AQMD). The construction survey data is grouped by construction phase and lot acreage and can be found in Appendix E1. The default construction equipment list and phase length data were determined to be the most appropriate for the size and types surveyed. In addition, some data in the survey was extrapolated to create default values for project sizes that were not in the survey. However, if the user has more detailed site-specific equipment and phase information, the user should override the default values.

4.3.1 Construction Phase

The Construction Phase tab is where the user can enter the type of each construction phase and the date range for each phase. Default phases are based on the total lot acreage of the project. Depending on the project being modeled, not all phases may be necessary, so the user may need to delete phases that are not applicable to the project. For example, not all projects require demolition. In addition, the user may need to add multiple phases of similar types for large projects with staged build out scenarios. It is important to note that if a project has demolition, grading, and site preparation phases, the user will need to provide additional project-specific data on the Demolition and Dust from Material Movement sub-screens.

Phase Name and Phase Type

The Phase Name and Phase Type fields will be automatically populated with the following default construction phases: Site Preparation; Demolition; Grading; Building Construction; Paving; and, Architectural Coating. The inclusion of any of these phases will define the types of calculations and default assumptions for on-road vehicle trips and fugitive emissions that occur in subsequent construction sub-screens. The definitions of the default phase types are as follows:

- Demolition involves removing buildings or structures.
- Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
- Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.
- Building Construction involves the construction of the foundation, structures and buildings.
- Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.
- Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

Start Date and End Date

The user can enter with the aid of a calendar, the Start Date and End Date for each construction phase. The default Start Date is the Start of Construction date defined on the Project Characteristics screen. The cells will be automatically populated with a default construction schedule starting with the Demolition phase, with subsequent phases starting the following day after the previous phase's end date. The user may change the defaults to alter the total days estimated for each phase. Because CARB's emission factors vary from year to year, when the user inserts the start and end dates for each construction phase, the model will select the correct emission factors for the year when each piece of off-road equipment will be utilized.

Days per Week

The user can select from a drop-down box the number of days per week (either 5, 6, or 7 days) that construction will occur. Five days per week assumes that construction will occur from Monday through Friday, and six days per week assumes that construction will occur Monday through Saturday.

Total Days

The Total Days field is intended to indicate the number of days that it will take to complete a particular construction phase and this field is initially populated with default values. If the End Date or the Days per Week fields are changed, clicking the Total Days field will trigger a recalculation of the Total Days. If the Total Days field for any phase is changed, then once leaving this field, the program will automatically adjust the End Date based on the Start Date for that phase.

4.3.2 Off-Road Equipment

The Off-Road Equipment tab is for the user to select the type and quantity of off-road equipment needed for each construction phase and to define the daily usage schedule. Since equipment lists can be lengthy and vary widely for each construction phase, the user will need to first select the phase from Phase Name drop down list or by clicking on the Previous or Next buttons located next to the phase name, and then select the off-road equipment that will be used for each construction phase. The Off-Road Equipment screen calculates emissions based on the expected off-road equipment engine use for each piece of equipment listed over the duration of the phase length. It is important to note that fugitive emissions from off-road equipment are calculated elsewhere on other construction screens.

After the user enters the Equipment Type, Number of Units, and Hours per Day for each piece of equipment that will be used in any phase, the Horsepower and Load Factor fields will be automatically populated with the default average values from CARB's OFFROAD2011. If equipment-specific information is available, the user can override these default values. In some cases, CARB's OFFROAD2011 emission factors are not available for all years. Thus, if the user selects a construction year that does not have corresponding emission factors, CalEEMod has been programmed to substitute the emissions factors from nearest, lower end (e.g., oldest) year. For example, if construction will occur in year 2037 (a year which does not have emission factors), CalEEMod will substitute the emission factors from year 2035 instead. Since newer equipment tends to have less emissions than older equipment, by selecting emission factors from year 2035 (an older year), the calculations may result in a conservative, slight overestimate of emissions.

If the project requires the use of off-road equipment that is not specifically listed in the drop-down list, the user can select from three generalized equipment categories to add customized equipment to the analysis: 1) Other Construction Equipment; 2) Other General Industrial Equipment; and, 3) Other Material Handling Equipment. In addition, the user may choose to select a surrogate equipment type which has a similar horsepower rating and load factor. To include water trucks and cement trucks in the analysis, the user needs to first determine if these trucks are off-road or on-road vehicles. If they are only driven off-road, then the user can select the Off-Highway Trucks category in the Off-Road Equipment screen. If the trucks are driven on-road, the user can account for the on-road emissions by entering this information as Additional Vendor Trips on the Trips and VMT screen (see Subchapter 4.3.5).

4.3.3 Dust from Material Movement

The Dust from Material Movement sub-screen is intended for calculating fugitive dust emissions associated with the Site Preparation and Grading phases (defaults) during construction. This sub-screen calculates the following three types of fugitive dust: 1) fugitive dust from dozers moving dirt; 2) fugitive dust from graders or scrapers leveling the land; and; 3) fugitive dust from loading or unloading dirt into haul trucks. These methods have been adapted from USEPA's AP-42 method for Western Coal Mining. Once the user enters the amount of material imported and exported to the site, CalEEMod will estimate the number of hauling trips associated with from material transport activities. The user may define the units in terms of Ton of Debris or Cubic Yards. The user may also select whether the import/export of material is phased (e.g., the same truck that arrives with material departs with another load of material to export in one round trip or two one-way trips. The calculations for non-phased material import/export trips assume that one truck arrives empty and departs full and a different truck arrives full for a total of two round trips (or four one-way trips). Thus, phasing of material import and export trips reduces the number of haul trips.

The Total Acres Graded field represents the cumulative distance traversed on the property by the grading equipment, assuming a blade width of 12 feet. To properly grade a piece of land, multiple passes with grading equipment may be required. So even though the lot size is a fixed number of acres, the Total Acres Graded could be an order of magnitude higher than the footprint of the lot and is calculated based on the equipment list (including number of equipment), the number of days need to complete the grading and/or site preparation phase, and the maximum number of acres a given piece of equipment can traverse in an 8-hour workday. For more information regarding how Dust from Material Movement is calculated, including grading rates, see Appendix A, Subchapter 4.3.

4.3.4 Demolition

The Demolition sub-screen is intended for the user to enter the amount of material that is demolished, if a demolition phase is selected by the user as part of the construction project. The user can select the Size Metric to define the amount of demolished material that is expected to be generated during the demolition phase in terms of Ton of Debris or Building Square Footage. With this data, fugitive dust emissions generated during demolition are calculated. The calculation of fugitive dust emissions during demolition is derived from the methodology described in the report prepared for the USEPA by Midwest Research Institute, Gap Filling PM₁₀ Emission Factors for Selected Open Area Dust Sources.

4.3.5 Trip and VMT

The Trip and VMT sub-screen is used to provide the number and length (in terms of vehicle miles traveled or VMT) of on-road vehicle trips for workers, vendors, and hauling for each construction phase. Depending on the land use type and subtype combined with the various construction phases, CalEEMod will populate the fields for Number of Trips, Trip Length, and Vehicle Class for worker, vendor and haul trips, respectively, with default values. The vehicle class descriptor HHDT, MHDT means that there is a 50/50 percent mix of heavy-heavy duty trucks and medium-heavy duty trucks. Similarly, the vehicle class descriptor LDA, LDT1, LDT2 means that there is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively. The user may override the defaults and enter different weightings of vehicle fleet mixes. It is important to note that CalEEMod's database has EMFAC2017 emission factors for the following years: 2000, 2005, 2010-2035, 2040, 2045, and 2050 so if the user selects a construction year that does not have corresponding EMFAC2017 emission factors for on-road vehicles, CalEEMod has been programmed to substitute the emissions factors from nearest, lower end (e.g., oldest) year. For example, if construction will occur in year 2037 (a year which does not have emission factors), CalEEMod will substitute the emission factors from year 2035 instead. Since newer equipment tends to have less emissions than older equipment, by selecting emission factors from year 2035 (an older year), the calculations may result in a conservative, slight overestimate of emissions. Note: CalEEMod only adopts EMFAC's Statewide, Air Basin, Air Districts and County regions, it does not include EMFAC's MPO and sub-area regions.

CalEEMod quantifies the number of construction workers by multiplying 1.25 times the number of pieces of equipment for all phases (except Building Construction and Architectural Coating). For the Building Construction, the number of workers is derived from a study conducted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) which determined the number of workers needed for various types of land uses and corresponding project size. This study and its analysis are included in Appendix E2. For the Architectural Coating phase, the number of workers is approximately 20% of the number of workers needed during the Building Construction phase.

The number of vendor trips during the Building Construction phase is also derived from a study conducted by the SMAQMD. The SMAQMD trip survey during construction counted cement and water trucks as vendor trips (instead of counting them as off-road vehicle trips) and these trip rates were incorporated into the calculations for the Building Construction phase. If the user deletes the Building Construction phase from the analysis, but the project will require water and/or cement trucks, then the user will need to account for these either as vendor trips under another construction phase or under the Off-Road equipment screen.

The default values for hauling trips assume that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips). Similarly, a haul truck needed to export material is assumed to have an arrival trip in an empty truck and a loaded departure truck (e.g., 2 one-way trips). Thus, each trip to import and export material is considered as two separate round trips (or 4 one-way trips). However, if the Phase box is checked, the same haul truck that imported the material will be assumed to be the same haul truck that export material resulting in one round trip (or 2 one-way trips).

4.3.6 On-Road Fugitive Dust

The On-Road Fugitive Dust sub-screen defines the variables that will be used to determine the fugitive dust emissions from on-road vehicles driving over paved and unpaved roads during construction. CalEEMod automatically populates the data fields based on the construction phase. The calculations use emission factors from USEPA's AP-42 for paved roads (January 2011 edition) and unpaved roads (November 2006 edition). Each data field is the same as those defined in the aforementioned AP-42 sections.

4.3.7 Architectural Coatings

The Architectural Coatings sub-screen is intended to calculate ROG emissions associated with painting the interior/exterior of residential and non-residential buildings as well as calculate emissions from parking lot painting or striping. The user may override any of the default interior and exterior surface areas estimated for residential and non-residential buildings. In addition, each of these surface types has a different emission factor indicating the ROG content of the paint in grams per liter (g/L). It is important to note that the parking area square footage is not included in the non-residential interior/exterior square footage when calculating emissions attributable to parking lot striping. See Appendix A, Subchapter 4.7 for the methodology of estimating surface areas to be coated from building square footage.

4.4 Operational Mobile

The operational mobile screen is made up of four sub-screens: Vehicle Trips, Vehicle Emissions, Fleet Mix and Road Dust. These screens are used in defining the information necessary to calculate the emissions associated with operational on-road vehicles.

4.4.1 Vehicle Trips

This sub-screen includes the trip rates, trip lengths, trip purpose, and trip type percentages for each land use subtype in the project. The user can edit any of this information by entering a new value in the appropriate cell. Trip rates are in terms of the size metric (thousand square footage or dwelling unit) defined on the land use screen and are listed for weekday, Saturday and Sunday if available. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips are assumed to take a slightly different path than a primary trip and are assumed to be 25% of the primary trip lengths. Pass-by trips are assumed to be 0.1 miles in length and are a result of no diversion from the primary route. Residential trip types are defined as home-work (H-W), home-shop (H-S), and home-other (H-O). Non-residential trip types are defined as commercial –customer (C-C), commercial-work (C-W), and commercial-nonwork (C-NW) such as delivery trips. Appendix A includes the equations and methodology used to calculate motor vehicle emissions from the operation of a project.

The trip rates are based on ITE 8th, 9th, and 10th edition average trip rates for the respective land use categories.

Home
Project Characteristics
Land Use
Construction
Operational
Vegetation
Mitigation
Reporting
Help

☒ Cascade Defaults

Operational - Mobile

Vehicle Trips
Vehicle Emissions
Fleet Mix
Road Dust

Import csv
Default
Undo

	Land Use SubType	Size Metric	WkDy Trip Rate (/size /day)	Sat Trip Rate (/size /day)	Sun Trip Rate (/size /day)	Res H-W Trip Length (miles)	Res H-S Trip Length (miles)	Res H-O Trip Length (miles)	Non Res C-C Trip Length (miles)	Non Res C-W Trip Length (miles)	Non Res C-NW Trip Length (miles)	Primar Trip (%)	Divert Trip (%)	Pass-B Trip (%)	Res H-W Trip (%)	Res H-S Trip (%)	Res H-O Trip (%)	Non Res C-C Trip (%)	Non Res C-W Trip (%)	Non Res C-NW Trip (%)
>	City Park	Acre	0.78	1.96	2.19	0	0	0	7.3	9.5	7.3	66	28	6	0	0	0	48	33	19
	Elementary School	1000sqft	19.52	0	0	0	0	0	7.3	9.5	7.3	63	25	12	0	0	0	30	65	5

Remarks

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4.4.2 Vehicle Emissions

This sub-screen contains the detailed vehicle emission factors based on EMFAC2017. Appendix A includes the description of how these emission factors were derived from EMFAC2017. It is anticipated that most users will not edit data in this sub-screen. There are separate tabs for annual, summer, and winter emissions values. If the user wants to alter the breakdown of fuel types (catalytic, non-catalytic, and other) within a vehicle class, they will have to provide their own data. This will likely be an infrequent change due to CEQA enforceability requirements.

EMFAC2017 includes vehicle N₂O emissions. Beginning with CalEEMod Version 2020.4.0, N₂O emissions from vehicles are included.

This screen along with the previous screen (Vehicle Trips) and next screen (Fleet Mix) will provide the data for the model to calculate the emissions associated with on-road motor vehicle use. The calculation does not include the fugitive dust emissions from travel over roads as these are associated with the next screen (Road Dust).

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	Emission Type	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	ROG_RUNEX	0.011569	0.036629	0.020885	0.03431	0.142021	0.146363	0.099965	0.06135	0.121891	0.016582	2.485552	0.104163	0.123264
	ROG_RUNLS	0.032544	0.178366	0.102956	0.111672	0.53648	0.131815	0.248157	0	0.147394	0.004232	0.696387	0.010141	0.027119
	ROG_STREX	0.352614	0.718619	0.556777	0.717698	0.111376	0.031828	0.165157	0.000001	0.026164	0.108995	2.904525	0.015697	0.129993
	SO2_IDLEX	0	0	0	0	0.000091	0.000153	0.001506	0.017071	0.001031	0	0	0.003258	0
	SO2_RUNEX	0.002534	0.003015	0.003303	0.00404	0.007921	0.006921	0.012365	0.012986	0.012086	0.011192	0.002102	0.010675	0.01517
	SO2_STREX	0.000568	0.000692	0.000756	0.000931	0.000118	0.000043	0.00026	0	0.000157	0.000311	0.000709	0.00002	0.000206
	TOG_DIURN	0.021722	0.069256	0.037655	0.042631	0.001386	0.000383	0.001198	0	0.00405	0.001143	0.359071	0.000142	0.498909
	TOG_HTSK	0.122818	0.304211	0.184613	0.211764	0.124779	0.034377	0.115875	0.000001	0.071573	0.026618	0.626398	0.003075	0.079525
	TOG_IDLEX	0	0	0	0	0.030566	0.016134	0.070622	0.854864	0.072273	0	0	0.146009	0
	TOG_RESTL	0.015505	0.043741	0.027567	0.032632	0.000665	0.000182	0.000551	0	0.001656	0.000669	0.169834	0.00006	0.176517
	TOG_RUNEX	0.01682	0.053448	0.030414	0.046467	0.176526	0.170076	0.125455	0.069851	0.166055	0.022042	3.038283	0.122005	0.169642
	TOG_RUNLS	0.032544	0.178366	0.102956	0.111672	0.53648	0.131815	0.248157	0	0.147394	0.004232	0.696387	0.010141	0.027119
	TOG_STREX	0.386063	0.786797	0.609595	0.785489	0.121943	0.034847	0.180826	0.000001	0.028646	0.119335	3.158968	0.017187	0.142326
	N2O_IDLEX	0	0	0	0	0.000828	0.002291	0.022536	0.28402	0.015517	0	0	0.051453	0
	N2O_RUNEX	0.00567	0.011926	0.009398	0.01193	0.055145	0.087959	0.125995	0.216034	0.156257	0.018502	0.070676	0.163719	0.083071
	N2O_STREX	0.029957	0.036775	0.040736	0.044384	0.025811	0.007817	0.018328	0	0.008537	0.049945	0.016785	0.001805	0.020606

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4.4.3 Fleet Mix

Beginning with CalEEMod Version 2016.3.1, the fleet mix was separated from the Vehicle Emissions screen and a new Fleet Mix screen was created so that users can change default fleet mix associated with different land use subtypes.

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	Land Use SubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
>	City Park	0.497654	0.056751	0.196874	0.153095	0.037883	0.007919	0.003658	0.01568	0.000656	0.000176	0.024652	0.001765	0.003237
	Elementary School	0.497654	0.056751	0.196874	0.153095	0.037883	0.007919	0.003658	0.01568	0.000656	0.000176	0.024652	0.001765	0.003237

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4.4.4 Road Dust

This sub-screen is used to change any of the default values that are used in the USEPA's AP-42 methods for calculating fugitive emissions from paved and unpaved roads. The defaults for the road dust (e.g., material silt content, material moisture content, and mean vehicle speed) are statewide averages, but the user can override the defaults if data specific to the project is known. Local jurisdictions can also provide guidance to users as to what default properly reflects known regional road dust parameters.

For the San Luis Obispo region, the user is recommended to provide the following unpaved road dust parameters overriding the statewide defaults if users choose to use USEPA's AP-42 methods:

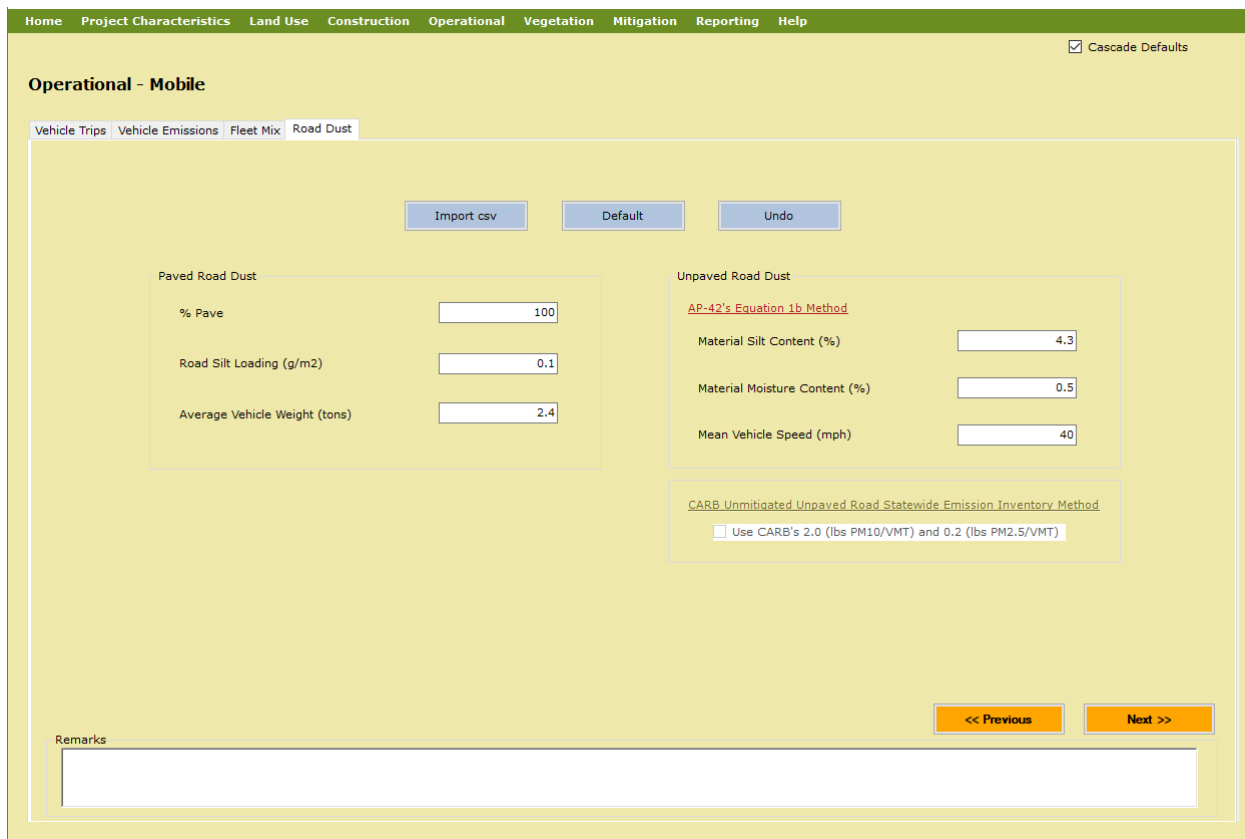
9.3 for Material Silt Content (%) (*instead of 4.3 statewide default*)

0.1 for Material Moisture Content (%) (*instead of 0.5 statewide default*)

32.4 for Mean Vehicle Speed (mph) (*instead of 40 statewide default*)

Beginning with CalEEMod Version 2016.3.1, projects located in San Luis Obispo County APCD and Sacramento Metropolitan AQMD were provided an additional option for the user to select

CARB's 2.0 lbs. PM₁₀/VMT¹² as the default unmitigated fugitive dust emission factor for unpaved roads during the operational phase. If this default is selected, an emission factor of 0.2 lbs. PM_{2.5}/VMT is also applied based on a 10% PM_{2.5}/ PM₁₀ ratio^{13, 14}. By checking the box, the program will use CARB's emission factor to override the calculated emission factor based on USEPA AP-42. Note: For project locations other than San Luis Obispo County APCD and Sacramento Metropolitan AQMD, CARB's 2.0 lbs. PM₁₀/VMT is not an option that the user can select.



4.5 Area

The area source screen consists of four sub-screens: Hearths, Consumer Products, Area Architectural Coatings, and Landscaping Equipment. Natural gas emission variables from all uses except hearths are included in the energy use screen (described in Section 4.6).

4.5.1 Hearths and Woodstoves

This sub-screen allows the user to enter the number of woodstoves and hearths of various types as well as the usage of these devices. Woodstoves are separate from fireplaces since a home may have both and these devices may have different use patterns. The number of devices that is

¹² Available at: <http://www.arb.ca.gov/ei/areasrc/fullpdf/full7-10.pdf>

¹³ Available at: http://www3.epa.gov/ttnchie1/ap42/ch13/related/mri_final_fine_fraction_dust_report.pdf

¹⁴ Available at: http://www.arb.ca.gov/app/emsmv/emssumcat_query.php?F_YR=2015&F_DIV=-4&F_SEASON=A&SP=2009&F_AREA=CA#0

entered for each device type represents the total number of devices installed in the dwelling units for a particular land use. Appendix A contains the emissions calculation methodology and details of variables that the user cannot override. Some of these emissions may be classified as biogenic and are therefore reported as CO₂-Biogenic. For most locations a default percent of hearths and stoves was provided by air districts and is multiplied through. The number of devices was chosen to include in CalEEMod instead of a percentage to allow for incorporation of various air district rules regarding hearths and woodstoves in new residences without having specialized data entry screens. Commercial land uses by default do not have hearths or woodstoves in CalEEMod. These are included for those cases where they may occur such as in restaurants or hotels.

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Woodstoves

*Note that days/year and woodmass are not linked. Changing days/year will not update woodmass/year.

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Residential Land Use Subtype	# Conventional	# Catalytic	# Non-Catalytic	# Pellet	Days/Year	Wood Mass (lb/year)
Single Family Housing	0	12.45	12.45	0	82	3,019.2

Fireplaces

*Note that days/year and woodmass are not linked. Changing days/year will not update woodmass/year.

Residential Land Use Subtype	# Wood	# Gas	# Propane	# No Fireplace	Hours/Day	Days/Year	Wood Mass (lb/year)
Single Family Housing	87.15	136.95	0	24.9	3	82	3,078.4

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The San Joaquin Valley jurisdiction has a regulatory limit on the number of hearths depending upon the type and number of residential developments. The regulatory limit is generated by CalEEMod but all the input parameters (e.g., unit density, etc.) are necessary to determine the value. Thus, the regulatory limit is disclosed during the reporting stage under the Default Value box in the report. The model, however, calculates emission impacts from the number of hearths inputted on the Area source screen (listed under the New Value column in the report). Therefore, if the user wants to calculate emissions from regulatory limit, the report needs to be run to determine the regulatory limit and the user needs to go back to the Area Source screen to input that value and re-run the report. If the user chooses to calculate emissions from a different number of hearths (e.g., the number of hearths less than the regulatory limit), then that number needs to be inputted on the Area Source screen to properly calculate emissions. Again, the report will

provide the regulatory limit under the Default Value column and the user input value under New Value column.

4.5.2 Consumer Products

Consumer products are various solvents used in non-industrial applications which emit ROG during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics and toiletries. South Coast AQMD has developed an emission factor based on the total of all building square footage for both residential and non-residential buildings. Details of how this emission factor was developed can be found in Appendix E. The user can change this emission factor if more relevant data is available. Beginning with CalEEMod Version 2016.3.1, ROG emissions from pesticides/fertilizers for City Parks and Golf Courses and ROG emissions from parking surface degreasers are separate from the general consumer products category. Also beginning with CalEEMod Version 2016.3.1, the model also assumes that there would be no ROG emissions from the actual pool surface area for Recreational Swimming Pools because the chemicals used for maintaining pools are not considered to be ROG. Details of how the ROG emission factors for pesticides/fertilizers and parking surface degreasers were determined can be found in Appendix E.

4.5.3 Area Architectural Coatings

This sub-screen has text boxes for the reapplication rate and coating ROG content for each building surface type and parking surface. The reapplication rate is the percentage of the total surface area that is repainted each year. A default of 10% is used, meaning that 10% of the surface area is repainted each year (i.e., all surface areas are repainted once every 10 years). Daily emissions divide the annual rate by 365 days per year. This is based on assumptions used by South Coast AQMD in their district rules regarding architectural coatings. Some districts provided details on their coating regulations that phase-in over time, which have been incorporated to the extent feasible, given the general classifications of paint (interior or exterior for residential and non-residential). Coating ROG content from state regulations are used for air districts that did not provide specific architectural coating information. Consult your local air district for suggested values that may be lower than the state regulations.

The ROG contents under the Operational Area Architectural Coatings screen (either CalEEMod defaults or site-specific values defined by users) become the default ROG contents for the Area Mitigation screen. The user may check the box under the Area Mitigation screen and specify a lower ROG content limit.

4.5.4 Landscape Equipment

This sub-screen has two text boxes to show the number of snow days or summer days. In addition, the defaults consider a realistic number of days which the landscaping equipment would be operated. For example, landscaping at commercial facilities typically do not take place during a weekend or during the summer at educational facilities that are not open. The number of days is applied to the appropriate landscape equipment types available in OFFROAD2011 using the average horsepower and load factors of the population mode. The derivation of emission factors used for each equipment type from OFFROAD2011 is described in Appendix A.

4.6 Energy Use

The energy use screen is used to gather the information necessary to estimate the emissions associated with building electricity and natural gas usage (non-hearth). The electricity energy use is in units of kilowatt hours (kWh) per size metric for each land use subtype. Natural gas use is in units of a thousand British Thermal Units (kBtu) per size metric for each land use subtype.

Title 24 of the California Code of Regulations, known as the California Building Standards Code or Title 24, contains energy conservation standards applicable to all residential and non-residential buildings throughout California. With CalEEMod, building electricity and natural gas use is divided into two categories: 1) end uses subject to Title 24 standards; and, 2) end uses not subject to Title 24 standards. The distinction is used when the mitigation measure for exceeding Title 24 standards (BE-1) is applied. Lighting is also a separate category in CalEEMod for which a separate mitigation measures (LUT-1) may be applied for using energy efficient lighting.

For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, and since a separate mitigation measure is applicable to this end use, CalEEMod makes lighting a separate category.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24, with Title 24 uses including building heating and hot water end uses. Non-Title 24 natural gas uses include cooking and appliances (including pool/spa heaters).

The baseline values are based on the CEC sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies¹⁵. For climate zones not included in these surveys, data from the closest climate zone was used as a surrogate. Since these studies are based on older buildings, adjustments have been made to account for changes due to Title 24 building codes as described in Appendix E. The user should select the use historical box if they only want an adjustment to the 2005 standards which were in effect when CARB developed its Scoping Plan 2020 No Action Taken predictions. After selecting the historical button, the user must also click the default button to load the historical default values.

¹⁵ CEC. October 2010. Residential Appliance Saturation Survey. Available at:

<http://www.energy.ca.gov/appliances/rass>

CEC. March 2006. Commercial End-Use Survey. Available at: <https://www.energy.ca.gov/data-reports/surveys/california-commercial-end-use-survey/2006-california-commercial-end-use-survey>

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Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Energy Intensity (KBTU/size/yr)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/yr)
City Park	0	0	0	0	0
Elementary School	1.62	1.48	3.69	13.5	0.86
Single Family Housing	912.41	6,155.97	1,608.84	10,517.5	1,599

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4.7 Water and Wastewater Use

This screen estimates the land uses contribution of GHG emissions associated with supplying and treating water and wastewater. This screen is used to enter the amount of water in gallons used indoors and outdoors for each land use subtype.¹⁶ The indoor water is also used to estimate the amount of wastewater. The electricity intensity factor for various phases of providing water is provided. Depending on the specific water supply used or treatment method used these numbers can vary over a wide range. Supplying water is bringing the water from its primary source such as the ground, river, or snowpack to the treatment plant. Distributing the water is bringing the water from the treatment plant to the end users. The electricity intensity factors are multiplied by the utility GHG emissions intensity factors for the GHGs and are classified as indirect emissions. The default electricity intensity is from the CEC's 2006 Refining Estimates of Water-Related

¹⁶ Gleick, P.H.; Haasz, D.; Henges-Jeck, C.; Srinivasan, V.; Cushing, K.K.; Mann, A. 2003. Waste Not, Want Not: The Potential for Urban Water Conservation in California. Published by the Pacific Institute for Studies in Development, Environment, and Security. Full report available at: http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf. Appendices available at: <http://pacinst.org/publication/waste-not-want-not/> Dziegielewski, B.; Kiefer, J.C.; Optiz, E.M.; Porter, G.A.; Lantz, G.L.; DeOreo, W.B.; Mayer, P.W.; Nelson, J.O. 2000. Commercial and Institutional End Uses of Water. Published by the American Water Works Association Research Foundation.



Energy Use in California using the average values for Northern and Southern California¹⁷. The location will automatically select the appropriate values if using these defaults. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Wastewater may also have direct emissions of GHGs. These depend on the type of wastewater treatment system (e.g., septic, aerobic or lagoons) used and therefore the wastewater treatment type percentages are variables. In addition, the model calculates impacts if the solids are digested either through an anaerobic digester or with co-generation from combustion of digester gas. Each type has associated GHG emission factors. Some of these may be classified as biogenic. Not all the biogenic emissions are accounted for since there are not adequate emissions factors at this time. Refer to Appendix A on how to properly change the defaults, if necessary, and the methodology used to calculate impacts from wastewater treatment.

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	Land Use Subtype	Size Metric	Indoor Water Use (gals/year)	Outdoor Water Use (gals/year)	Electricity Intensity Factor To Supply (kWhr /Mgal)	Electricity Intensity Factor To Treat (kWhr /Mgal)	Electricity Intensity Factor To Distribute (kWhr /Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWhr /Mgal)	Septic Tank (%)	Aerobic (%)	Facultative Lagoons (%)	Anaerobic Digester with Combustion of Digester Gas (%)	Anaerobic Digestion with Cogeneration from Combustion of Digester Gas (%)
▶	City Park	Acre	0	14,297,77...	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0
	Elementary School	1000sqft	2,899,691...	7,456,350...	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0
	Single Family Housing	Dwelling Unit	16,223,35...	10,227,76...	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0

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¹⁷ CEC-500-2006-118. Available at <https://planning.lacity.org/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.21%20Water-Related%20Energy%20Use.PDF>

4.8 Solid Waste

The solid waste screen determines the GHG emissions associated with disposal of solid waste into landfills. To estimate the eventual contribution of GHG emissions from solid waste disposed by a land use annually, the total amount of carbon dioxide and methane that would be evolved over the span of many years is calculated. This is based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste¹⁸. Waste disposal rates by land use and overall composition of municipal solid waste in California is primarily based on CalRecycle data. The amount of methane emitted depends on characteristics of the landfill, and therefore the default percentage is based on the types of landfills assumed by CARB in their GHG emissions inventories. Portions of these emissions are biogenic. The defaults for the gas capture (e.g., no capture, flaring, energy recovery) are statewide averages except for Santa Barbara APCD which has a 100% landfill capture gas flare. The user can override the defaults if the gas capture at the landfill to be used by the project is known. Local jurisdictions can also provide guidance to users as to what default properly reflects known regional solid waste gas capture.

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	Land Use Subtype	Size Metric	Solid Waste Generation Rate (tons/year)	Landfill No Gas Capture (%)	Landfill Capture Gas Flare (%)	Landfill Capture Gas Energy Recovery (%)
>	City Park	Acre	1.03	6	94	0
	Elementary School	1000sqft	130	6	94	0
	Single Family Housing	Dwelling Unit	178	6	94	0

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¹⁸ IPCC. 2006. 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Volume 5 Waste. Available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html>.

4.9 Off-Road Equipment

The Operational - Off-Road Equipment sub-screen allows the user to identify any off-road equipment used during operational activities (e.g., forklifts, cranes, loaders, generator sets, pumps, pressure washers, etc.) at the project site. Because such equipment cannot be assumed to be needed for a particular land use project, a user must provide the data for CalEEMod to calculate the resulting emissions from off-road equipment operation. A dropdown list of off-road equipment is provided for the user to identify each piece of equipment. The model requires the following specific information per equipment type. The user would need to provide the number of pieces for each equipment type. The model assumes an operation activity of 8 hours per day and 260 days per year, as well as the horsepower and load factor of the equipment type, but the user can override the default assumptions with project specific information. Finally, the model assumes diesel fuel, but a dropdown menu is provided to allow the user to choose bio-diesel, compressed natural gas (CNG) or electrical if known, to power the equipment.

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	Equipment Type	Number of Equipment	Hours/Day	Days/Year	HorsePower (HP)	Load Factor	Fuel Type
+	Bore/Drill Rigs	0	8	260	221	0.5025	Diesel
	Crawler Tractors	0	8	260	212	0.4288	Diesel
	Concrete/Industrial Saws	0	8	260	81	0.73	Diesel
	Air Compressors	0	8	260	78	0.48	Diesel
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4.10 Stationary Sources

The Stationary Sources screen consists of five sub-screens: Emergency Generators and Fire Pumps and their default emission factors, Process Boilers and their default emission factors, and User Defined Sources. Consult with the local air district to determine if permitted stationary sources should be included in the project analysis using CalEEMod.

4.10.1 Emergency Generator and Fire Pumps and Default Emission Factors

Two sub-screens allow the user to enter emergency power generators and diesel fueled fire pumps and to estimate emissions. This type of equipment operates only for maintenance and testing, or during emergency situations, such as power failures. To calculate emissions, the user must enter the engine rating (in horsepower), the anticipated maximum daily usage, and the anticipated maximum annual usage into the Emergency Generators and Fire Pumps sub-screen. The user may change the default load factor. The default emission factors for the equipment are shown on the separate Generators/Fire Pumps EF (emission factor) sub-screen. The user can replace the default emission factors but needs to provide custom emission factors in the predefined units. See Appendix A for the sources of default emission factors and emission calculation methodology.

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	Equipment Type	Number of Equipment	Fuel Type	Horsepower (HP)	Load Factor (0-1)	Hours/Day	Hours/Year	Equipment Description
+	Emergency Generator	0	Diesel	50	0.73	0	0	Emergency Generator - Diesel (50 ...
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Equipment Description	TOG E.F.	TOG E.F. Units	ROG E.F.	ROG E.F. Units	CO E.F.	CO E.F. Units	NOX E.F.	NOX E.F. Units	SO2 E.F.	SO2 E.F. Units	PM 10 E.F.	PM 10 E.F. Units	PM 2.5 E.F.	PM 2.5 E.F. Units	CO2 E.F.	CO2 E.F. Units	CH4 E.F.	CH4 E.F. Units
Emergency Generator - Dese...	0.00...	lb/hp...	0.00...	lb/hp...	3.7	g/hp-hr	3.325	g/hp-hr	0.0049	g/hp-hr	0.15	g/hp-hr	0.15	g/hp-hr	1.15	lb/hp...	0.07...	g/hp-hr

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4.10.2 Process Boilers and Default Emission Factors

Two sub-screens allow the user to enter process boilers and to estimate emissions. Do not use this option for boilers providing space heating or building hot water, as these uses are included building energy use (See Subchapter 4.6). To calculate process boiler emissions, the user must enter the boiler rating (in million BTU/hr) and maximum anticipated daily and annual heat input in the Process Boilers sub-screen. The default emission factors for boilers are shown on the separate Boiler EF (emission factor) sub-screen. The user can replace the default emission factors, but needs to provide custom emission factors in the predefined units. See Appendix A for the sources of default emission factors and emission calculation methodology.

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	Equipment Type	Number of Equipment	Fuel Type	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)	Equipment Description
▶	Boiler	1	Diesel	5	50	600	Boiler - Diesel (0 - 9999 MMBTU)
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Equipment Description	TOG E.F.	TOG E.F. Units	ROG E.F.	ROG E.F. Units	CO E.F.	CO E.F. Units	NOX E.F.	NOX E.F. Units	SO2 E.F.	SO2 E.F. Units	PM 10 E.F.	PM 10 E.F. Units	PM 2.5 E.F.	PM 2.5 E.F. Units	CO2 E.F.	CO2 E.F. Units	CH4 E.F.	CH4 E.F. Units
> Boiler - Diesel (0 - 9999 MMB...	0.556	lb/10...	0.34	lb/10...	5	lb/10...	0.052	lb/M...	0.225	lb/10...	1	lb/10...	0.25	lb/10...	25,000	lb/10...	0.216	lb/10...

Remarks

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4.10.3 User Defined

An option for the user to define stationary sources other than emergency generators, fire pumps and process boiler has been included in the User Defined sub-screen. Emissions for this source would include any other miscellaneous sources that typically require permits to operate issued by an air district. Emissions may be manually entered here, either by transferring values from the permits to operate, or by calculating emissions outside of CalEEMod. Any emissions entered here will be transferred to the appropriate reports.

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☒ Cascade Defaults

Operational - Stationary Sources

Emergency Generators and Fire Pumps Generators / Fire Pumps EF Process Boilers Boilers EF User Defined

Import csv Default Undo

Equipment Type	Fuel Type (s)	TOG (lb / day)	TOG (tpy)	ROG (lb / day)	ROG (tpy)	CO (lb / day)	CO (tpy)	NOX (lb / day)	NOX (tpy)	SO2 (lb / day)	SO2 (tpy)	PM 10 (lb / day)	PM 10 (tpy)	PM 2.5 (lb / day)	PM 2.5 (tpy)	CO2 (lb / day)	CO2 (tpy)	CH4 (lb / day)	CH4 (tpy)

Remarks

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4.11 Vegetation

The vegetation screen is used to estimate the one-time change in carbon sequestration capacity due to a project. There are two sub-screens, Land Use Change and Sequestration. The methods used are based on IPCC¹⁹.

4.11.1 Land Use Change

The Land Use Change sub-screen estimates GHG emissions due to a change in vegetation resulting from a change in land use type. The user enters the vegetation land use type, the initial and final acreage of the vegetation land use type, and the annual carbon dioxide equivalent accumulation per acre if the user chooses to override the default value. Settlement land use acreage is not considered since it is a net zero at steady state unless trees are added.

¹⁹ IPCC. 2006. 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 4. Available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html>

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☒ Cascade Defaults

Vegetation

Land Use Change Sequestration

Import csv Default Undo

	Vegetation Land Use Type	Vegetation Land Use Subtype	Initial Acres	Final Acres	Annual CO2 accumulation per acre (tonnes CO2/year)
	Grassland	Grassland	5	4	4.31

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4.11.2 Sequestration

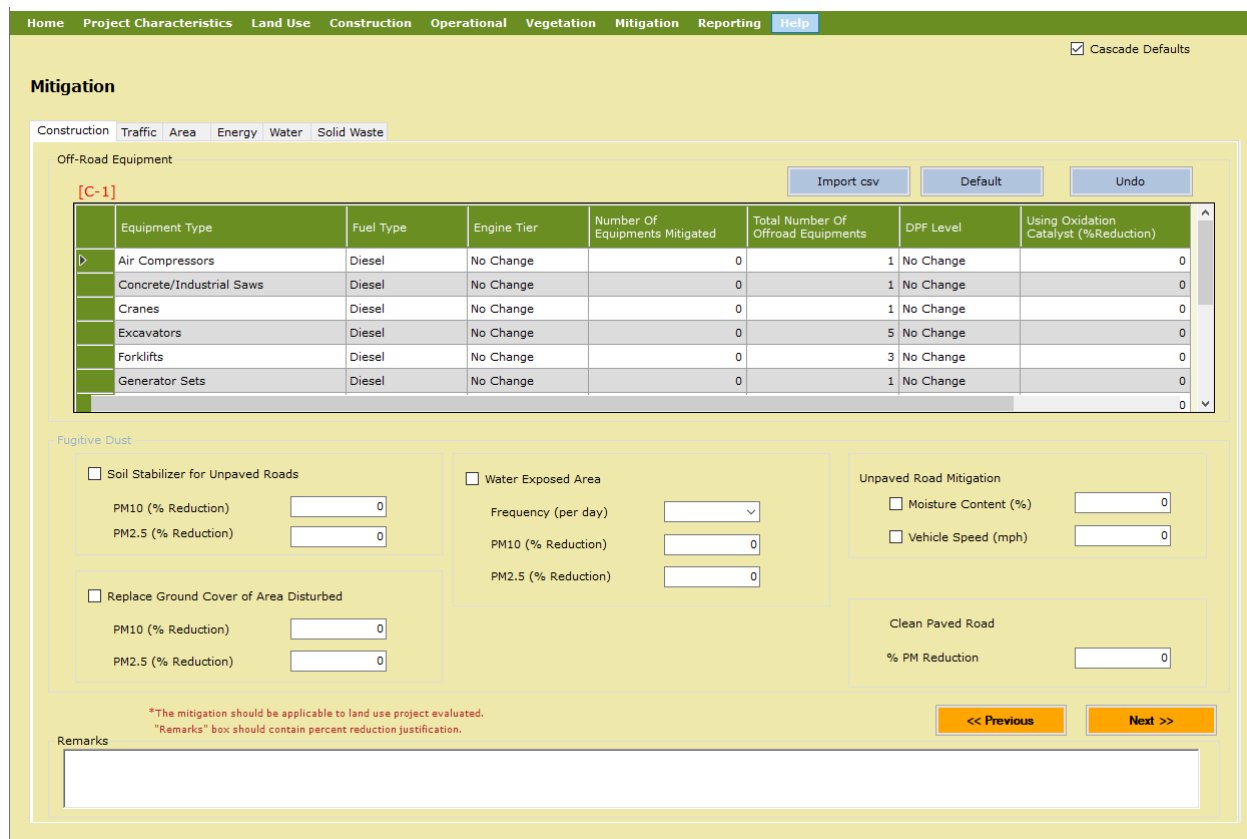
This sub-screen of Vegetation is used to estimate the GHG emissions associated with the sequestration of net new trees added to the project site. Consistent with IPCC recommendations a 20-year active growth period is assumed. The user enters the tree type or miscellaneous if it is not known, and the total number of trees. The user can override the default carbon sequestration rate.

4.12 Mitigation

The mitigation screen consists of six sub-screens that the user can indicate and supply the necessary information to estimate the emissions after mitigation measures have been implemented. The mitigation measures included in CalEEMod are largely based on the CAPCOA Quantifying Greenhouse Gas Mitigation Measures (<http://www.capcoa.org/wp-content/uploads/downloads/2010/09/CAPCOA-Quantification-Report-9-14-Final.pdf>) document. The CAPCOA measure numbers are provided next to the mitigation measures in CalEEMod to assist the user in understanding each measure by referencing back to the CAPCOA document. This User's Guide focuses on key aspects of the Mitigation sub-screens which are described in more detail in the following sections.

4.12.1 Construction Mitigation

This sub-screen consists of a data-grid of off-road construction equipment to apply various mitigation measures and check boxes with supplemental information for fugitive dust emissions mitigation.



Mitigation

Construction Traffic Area Energy Water Solid Waste

Off-Road Equipment

Import csv Default Undo

	Equipment Type	Fuel Type	Engine Tier	Number Of Equipments Mitigated	Total Number Of Offroad Equipments	DPF Level	Using Oxidation Catalyst (%Reduction)
[C-1]	Air Compressors	Diesel	No Change	0	1	No Change	0
	Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0
	Cranes	Diesel	No Change	0	1	No Change	0
	Excavators	Diesel	No Change	0	5	No Change	0
	Forklifts	Diesel	No Change	0	3	No Change	0
	Generator Sets	Diesel	No Change	0	1	No Change	0

Fugitive Dust

☐ Soil Stabilizer for Unpaved Roads

PM10 (% Reduction)

PM2.5 (% Reduction)

☐ Replace Ground Cover of Area Disturbed

PM10 (% Reduction)

PM2.5 (% Reduction)

☐ Water Exposed Area

Frequency (per day)

PM10 (% Reduction)

PM2.5 (% Reduction)

Unpaved Road Mitigation

☐ Moisture Content (%)

☐ Vehicle Speed (mph)

Clean Paved Road

% PM Reduction

*The mitigation should be applicable to land use project evaluated.
*Remarks box should contain percent reduction justification.

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To apply mitigation to construction equipment, the user selects the equipment type, notes the number of equipment mitigated (of the total number of off-road equipment listed), and type of mitigation that applies. If substantial evidence supporting reductions was available at the time of development, options include fuel type (diesel, CNG, electric, hybrid, biodiesel), engine tier (typically select Tier 4), diesel particulate filter tiers (Tier 3 being the most effective), and use of oxidative catalysts. The program estimates how much if any increase or decrease in emissions to apply for each pollutant. Some mitigation measures have trade-offs in pollutant reductions and therefore may result in increases of some pollutants. The mitigation option to use alternative fuel for construction equipment is consistent with mitigation measure C-1 in the CAPCOA Quantifying GHG Mitigation document.

To apply mitigation to construction fugitive dust, the user must select the check box in front of the mitigation measure name, and enter the appropriate information in the drop-down or text boxes. Some fugitive dust mitigation required by some air districts will not appear since the fugitive dust

sources being mitigated are not quantified by CalEEMod (e.g., fugitive dust generated by wind over land and storage piles). For any fugitive dust source that is not quantified, it is not appropriate to apply the reduction.

For Unpaved Road Mitigation for construction fugitive dust, the maximum vehicle speed and the minimum moisture content for unpaved roads are entered. Defaults for these values are those entered on the On-Road Fugitive Dust screen. Mitigated emissions are calculated using the VMT from on-road vehicles traveling along unpaved roads, previously calculated from the percentages entered on the On-road Fugitive Dust Screen (e.g., % Pave Worker, % Pave Vendor or % Pave Hauling).

Users may check the boxes and provide a lower vehicle speed and a higher moisture content to conduct the mitigation calculation. If during a particular construction phase the user defined mitigated vehicle speed is higher than the unmitigated vehicle speed and/or the user defined mitigated moisture content is lower than the unmitigated moisture content, a warning message will be displayed. In this case, the unmitigated values will be used, resulting in no mitigation being calculated.

4.12.2 Traffic Mitigation

There are two traffic mitigation sub-screens that the user can select from, Land Use & Site Enhancement and Commute. First, the user must select the Project Setting as defined in the CAPCOA document (pp. 59-60).

- Low Density Suburban: An area characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central city (a suburb).
- Suburban Center: An area that serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb.
- Urban: An area which is located within the central city with higher density of land uses than you would find in the suburbs. It may be characterized by multi-family housing and located near office and retail.
- Urban Center (*referred to as Compact Infill in the CAPCOA document*): An area which is located within or contiguous with the central city. Examples may include redevelopment areas, abandoned sites, or underutilized older buildings/sites.

If the CAPCOA measure did not distinguish between Suburban Center and Low-Density Suburban, values for Low Density Suburban were used. Similarly, if Urban Center and Urban values were not distinguished, Urban values were used.

The user checks the box next to each mitigation measure and fills in the appropriate information as required. The maximum reduction caps defined in the CAPCOA Quantifying GHG Mitigation document are integrated into these calculations. The CAPCOA traffic mitigation measure numbers included in CalEEMod are the following: LUT-1, LUT-3, LUT-9, LUT-4, LUT-5, LUT-6, SDT-1, SDT-2, SDT-3, PDT-1, PDT-2, PDT-3, TST-1, TST-3, TST-4, TRT-1, TRT-2, TRT-4, TRT-15, TRT-14, TRT-6, TRT-7, TRT-11, TRT-3, and TRT-13. The NEV network mitigation measure (SDT-3) assumes the low end of the CAPCOA recommendations.

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Land Use & Site Enhancement
Commute

Commute Trip

☐ Implement Trip Reduction Program [TRT-1, TRT-2]
% employee eligible
Program Type
☐ Transit Subsidy [TRT-4]
% employee eligible
Daily Transit Subsidy Amount (\$)
☐ Implement Employee Parking "Cash-Out" [TRT-15]
% employee eligible
☐ Workplace Parking Charge [TRT-14]
% employee eligible
Daily Parking Charge (\$)
☐ Encourage Telecommuting and Alternative Work schedules [TRT-6]
% employee work 9/80
% employee work 4/40
% employee telecommute 1.5 days
☐ Market Commute Trip Reduction Option [TRT-7]
% employee eligible
☐ Employee Vanpool/Shuttle [TRT-11]
% employee eligible
% vanpool mode share
☐ Provide Ride Sharing Program [TRT-3]
% employee eligible

School Trip

☐ Implement School Bus Program [TRT-13]
% family using

*The mitigation should be applicable to land use project evaluated.
"Remarks" box should contain percent reduction justification.

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Remarks

4.12.3 Area Mitigation

The user can select from a few area source mitigation measures on the Area sub-screen by checking the appropriate box and supplying any additional information in the text boxes. These measures include all natural gas hearths, no hearths, electric landscaping equipment use, reduced ROG coatings, and reduced general category consumer product ROG content. The area landscaping mitigation to prohibit gas powered landscape equipment is consistent with mitigation A-1 in the CAPCOA Quantifying GHG Mitigation document.

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Mitigation

Construction Traffic Area Energy Water Solid Waste

Hearth

☐ Only Natural Gas Hearth

☐ No Hearth

Consumer Products for General Category

☐ Use Low VOC Cleaning Supplies

Architectural Coatings

	EF (g/L)
☐ Use low VOC Paint (Residential Interior)	250
☐ Use low VOC Paint (Residential Exterior)	250
☐ Use low VOC Paint (Non-residential Interior)	250
☐ Use low VOC Paint (Non-residential Exterior)	250
☐ Use low VOC Paint (Parking)	250

Landscape Equipment [A-1]

☐ % Electric Lawnmower	0
☐ % Electric Leafblower	0
☐ % Electric Chainsaw	0

Remarks

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*The mitigation should be applicable to land use project evaluated.
"Remarks" box should contain percent reduction justification.

Import csv

4.12.4 Energy Mitigation

The user selects energy mitigation measures on the Energy sub-screen by using the check boxes or the data-grid. These correspond to CAPCOA Mitigation Measures LE-1, BE-1, AE-1, AE-2, AE-3 and BE-4 as listed in the CAPCOA Quantifying GHG Mitigation document. The lighting is a percentage reduction in lighting as supplied by the user. The data-grid is used to enter the land use subtypes that will use energy efficient appliances. The percent improvement is the typical percent improvement above standard appliances according to the 2008 Energy Star Annual Report²⁰. Alternative Energy has two methods to enter the amount of alternative energy. The first is the amount of kW-hr generated. The second is the percentage of the total electricity use by buildings that is generated. At this time alternative energy methods that are not carbon neutral are not quantified. To apply the amount of alternative energy only one of the two methods (kW-hr or percentage) needs to be entered for CalEEMod to calculate emission reductions.

²⁰ Available at: https://www.energystar.gov/ia/partners/annualreports/annual_report_2008.pdf

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☐ Exceed Title 24

[BE-1]

% Improvement

☐ Install High Efficiency Lighting

[LE-1]

% Lighting Energy Reduction

☐ On-site Renewable Energy

[AE-1, AE-2, AE-3]

☐ kWh Generated

☐ % of Electricity Use Generated

Import csv

Energy Efficient Appliances

*The mitigation should be applicable to land use project evaluated.
*Remarks box should contain percent reduction justification.

[BE-4]

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30
DishWasher		15
Fan		50
Refrigerator		15
+		

Remarks

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4.12.5 Water Mitigation

On the Water sub-screen, water mitigation can either be estimated as the percent reduction based on a water conservation strategy or the other individual mitigation measures. The CAPCOA Quantifying GHG Mitigation document includes water supply and use measures WSW-1 and WSW-2, and WUW-1 through WUW-5.

For CAPCOA Mitigation Measure WSW-3 (Use Locally Sourced Water Supply), using locally-sourced water or water from less energy-intensive sources reduces the electricity and indirect CO₂ emissions associated with water supply and transport because water from local or nearby groundwater basins, nearby surface water and gravity-dominated systems have smaller energy-intensity factors. This mitigation measure is not included in the Water mitigation sub-screen, therefore, to implement WSW-3, the user should alter the energy intensity values in water and run a separate CalEEMod run to accommodate these values.

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*The mitigation should be applicable to land use project evaluated.
"Remarks" box should contain percent reduction justification.

Import csv

Water Conservation Strategy

* Cannot be used with other water mitigation strategies

☐ Apply Water Conservation Strategy [WUW-2]

% Reduction Indoor

% Reduction Outdoor

Water Supply

☐ Use Reclaimed Water [WSW-1]

% Indoor Water Use

% Outdoor Water Use

☐ Use Grey Water [WSW-2]

% Indoor Water Use

% Outdoor Water Use

Indoor Water Use

☐ Install Low-flow Bathroom Faucet [WUW-1]

% Reduction in flow

☐ Install Low-flow Kitchen Faucet [WUW-1]

% Reduction in flow

☐ Install Low-flow Toilet [WUW-1]

% Reduction in flow

☐ Install Low-flow Shower [WUW-1]

% Reduction in flow

Outdoor Water Use

☐ Turf Reduction [WUW-5]

Turf Reduction Area (acres)

% Reduction turf

☐ Use Water-Efficient Irrigation Systems [WUW-4]

% Reduction

☐ Water Efficient Landscape [WUW-3]

MAWA (gal/yr)

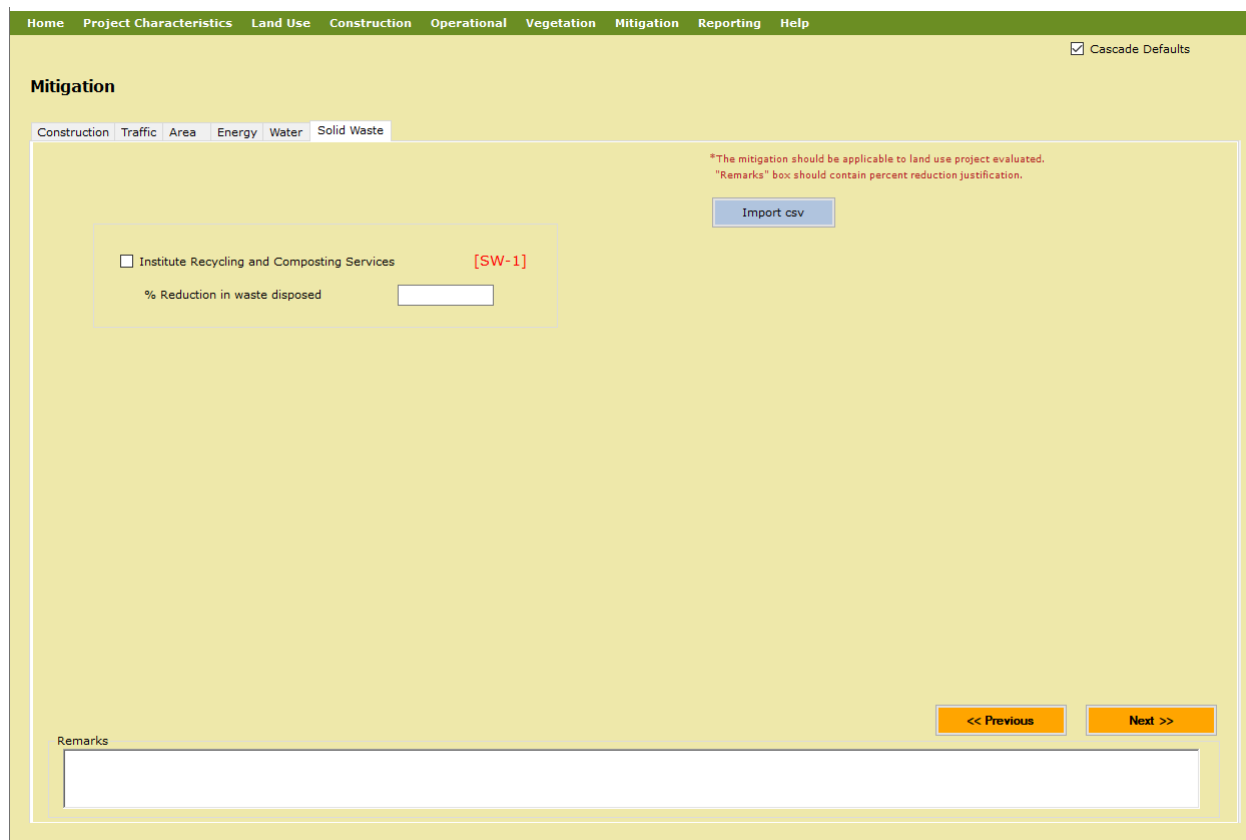
ETWU (gal/yr)

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4.12.6 Solid Waste Mitigation

The user can calculate an emissions reduction for recycling waste. This mitigation measure corresponds to CAPCOA Mitigation Measure: SW-1.



The screenshot shows the 'Mitigation' section of the CalEEMod software. The 'Solid Waste' tab is selected. A checkbox labeled 'Institute Recycling and Composting Services' is present, with a red label '[SW-1]' next to it. Below this checkbox is a text input field for '% Reduction in waste disposed'. A blue 'Import csv' button is located to the right of the checkbox. A red note states: '*The mitigation should be applicable to land use project evaluated. "Remarks" box should contain percent reduction justification.' At the bottom, there is a 'Remarks' text area and two orange buttons: '<< Previous' and 'Next >>'. A 'Cascade Defaults' checkbox is checked in the top right corner.

4.13 Reporting

The user initiates final emission calculations by selecting the report and clicking on the Recalculate All Emissions and Run Report button. The available reports include: Annual, Summer (peak) Daily, Winter (peak) Daily, Mitigation and Summary of peak daily emissions and annual GHG emissions. A separate report viewer will appear on the screen. From this report viewer, the user can view each selected report on-screen, print each report, save each report as either a Microsoft Excel .xls file, an Adobe Acrobat .pdf file, or in the case of the Mitigation report, a Microsoft Word .doc file. It is important to note that the data presented in the Excel file has already been calculated and the calculated results are placed in the grids as text. For this reason, the user cannot change an emission value presented in an Excel file and expect the report to calculate a revised value. These values, however, can be copied to new Excel spreadsheet for any further desired calculation with the data. If the user elects to generate a Summary report, the project needs to use only the CalEEMod defaults and there can be no remarks on any page.





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October 18, 2022

Fernando Gaytan
Earthjustice
707 Wilshire Boulevard, Suite 4300
Los Angeles, CA 90017

**Subject: Comments on the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility
Project (SCH No. 2020069039)**

Dear Mr. Gaytan,

We have reviewed the September 2022 Final Environmental Impact Report (“FEIR”) and December 2021 Draft Environmental Impact Report (“DEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) located in the City of Oxnard (“City”). Upon review, we find that the FEIR is insufficient in addressing our concerns regarding the Project’s hazards and hazardous materials air quality, health risk, and greenhouse gas impacts. As asserted in our February 9th, 2022 comment letter, an updated EIR should be prepared to adequately evaluate the Project’s potential impacts on the environment.

Hazards and Hazardous Materials

Inadequate Analysis of Impacts

In our February 9th comment letter, we found that the DEIR’s finding of-less-than-significant impacts associated with Hazards and Hazardous Materials were made without an adequate evaluation of potential impacts and the findings should not be relied upon for the purposes of determining significance. To adequately disclose and mitigate Hazards and Hazardous Materials, we stated a Phase I Environmental Site Assessment was necessary for the Project site. The FEIR did not address this comment adequately.

In response to comment 206-232 and 206-233 (p. 12-1199), the FEIR provides no explanation to failing to address the comment we made, that the failure to prepare a Phase I ESA was inconsistent with the City of Oxnard 2030 General Plan Safety and Hazards Chapter, which states:

Policy SH-7.12 Hazardous Material Studies. Ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project.

The responses provide no explanation as to why Policy SH-7.12 was not followed. As the policy states, a Phase I ESA is necessary and an updated EIR should be prepared to include a Phase I.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

In our February 9th comment letter, we identified several issues with the DEIR's air model (California Emissions Estimator Model, "CalEEMod")¹ that artificially reduced the Project's construction and operational emissions. After review of the FEIR, we found that it fails to address all our concerns and maintain that the DEIR's CalEEMod model is flawed and fails to accurately estimate the Project's criteria air pollutant emissions. As such, we find the DEIR and FEIR to be inadequate and maintain that an updated EIR should be prepared to adequately evaluate the Project's local and regional air quality impacts. Until a proper air quality analysis is conducted, the Project should not be approved.

Unsubstantiated Changes to Individual Construction Phase Lengths

As discussed in our February 9th comment letter, the "Port of Hueneme 34-acre Temporary Vehicle Storage Facility" CalEEMod model included several unsubstantiated changes to the default individual construction phase lengths. Review of the FEIR demonstrates that the Project again fails to justify or correct this modeling error. As discussed below, we find the DEIR and FEIR to be inadequate for two reasons, and maintain that the less-than-significant air quality impact conclusion is unsubstantiated. Specifically, regarding the changes to the default individual construction phase lengths, the FEIR states:

"The comment states that the Draft EIR fails to mention or justify the individual construction phase lengths. As shown in Appendix A to Appendix D of the Draft EIR, the construction phasing is based on the Client provided RFI. As such, any changes to the default phasing were based on the project applicant provided information. For this type of project, CalEEMod does not provide default construction information. As such, the use of applicant provided information is imperative for construction phasing inputs. No further response is needed" (emphasis added) (Response 206-241, p. 12-1201).

However, the FEIR again fail to provide the above-mentioned Client Provided RFI. As such, we cannot verify that the changes are an accurate reflection of the proposed construction schedule. According to the CalEEMod User's Guide:

¹ "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/download-model>.

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”²

Here, until the FEIR provides the above-mentioned Client Provided RFI and shows the calculations used for the revised individual construction phase lengths, we cannot verify the changes are accurate.

These unsubstantiated changes to the individual construction phase lengths present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User’s Guide, each construction phase is associated with different emissions activities (see excerpt below).³

Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

Thus, by disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As such, there will be less construction activities required per day and, consequently, less pollutants emitted per day. As a result, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance. Thus, we reiterate our February 9th comment that the DEIR’s CalEEMod model is unsubstantiated, and the DEIR and FEIR’s less-than-significant air quality impact conclusion should not be relied upon.

Unsubstantiated Changes to Off-Road Construction Equipment Unit Amounts

As discussed in our February 9th comment letter, the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” CalEEMod model included several unsubstantiated changes to the off-road construction equipment unit amounts. Review of the FEIR demonstrates that the Project again fails to justify or correct this modeling error. As discussed below, we find the DEIR and FEIR to be inadequate and

² “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at*: <https://www.aqmd.gov/caleemod/user's-guide>, p. 12.

³ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at*: <https://www.aqmd.gov/caleemod/user's-guide>, p. 32.

maintain that the less-than-significant air quality impact conclusion is unsubstantiated. Specifically, regarding the changes to the default off-road construction equipment unit amounts, the FEIR states:

“The comment states that the Draft EIR fails to mention or justify the unit amounts of equipment. The model inputs used in the technical study are consistent with the Draft EIR’s project description, as shown in Section 1.3 of the Draft EIR. Project specific information was included in the modeling in accordance with the requirements of CalEEMod and CEQA in order to provide more project-specific analysis of potential impacts. These project specific inputs were shown in detail in Appendix D of the Draft EIR” (emphasis added) (Response 206-246, p. 12-1201).

As demonstrated above, the FEIR states that the off-road construction equipment unit amounts were noted in Section 1.3 of the Draft EIR DEIR’s. However, upon further review, the DEIR and associated documents fail to mention or justify the off-road construction equipment unit amounts in the project description or elsewhere in the Project documents. As such, we cannot verify that the changes are an accurate reflection of the proposed construction equipment. As previously stated, according to the CalEEMod User’s Guide:

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”⁴

Here, as the DEIR and FEIR fail to provide substantial evidence to support the off-road construction equipment unit amounts, we cannot verify the changes. As such, we reiterate our February 9th comment that the Project’s CalEEMod model is unsubstantiated, and the DEIR and FEIR’s less-than-significant air quality impact conclusion should not be relied upon.

Diesel Particulate Matter Emissions Inadequately Evaluated

As discussed in our February 9th comment letter, the DEIR failed to adequately evaluate the Project’s potential health risk impacts. Review of the FEIR again demonstrates a failure to adequately evaluate the Project’s potential health risk impacts. As such, we find the FEIR to be inadequate and maintain that the DEIR’s less-than-significant impact conclusion regarding the Project’s health risk impact should not be relied upon. Regarding the toxic air contaminant (“TAC”) emissions associated with Project construction and operation, the FEIR states:

“The comment states that the Draft EIR ignores the use of the Ventura County Air Pollution Control District (VCAPCD) Air Quality Assessment Guidelines with response to health risk impacts. The VCAPCD 2003 Guidelines, Section 6.5.1, Determining Whether the Project will Emit Toxic Air Contaminants states that lead agencies should refer to Appendix D, Major Toxic Air Contaminant Regulations and Common Toxic Air Contaminant Sources and Substances, for a list of common toxic air contaminant sources and substances that may be encountered at facilities

⁴ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.agmd.gov/caleemod/user's-guide>, p. 12.

in Ventura County and Appendix B, Common Equipment and Processes Requiring a VCAPCD Permit to Operate. The project would include offroad equipment during construction which may emit diesel particulate matter. However, construction would be temporary, lasting up to 200 days, and would not be concentrated in one area of the site. Thus, emissions would disperse rapidly and would not expose sensitive receptors to substantial pollutant concentrations. Furthermore, the project would not exceed applicable VCAPCD significance thresholds during construction or operation. Finally, as shown in the closest meteorological station to the project site at the Oxnard Airport, the predominant wind direction blows from the west to the east away from the closest sensitive receptors to the project site. As stated on page 1-5 of the Draft EIR, all vehicles stored at this vehicle storage facility would be light duty vehicles; no trucks or diesel-powered vehicles be stored at this facility. As such, the project would not result in air quality impacts related to diesel powered vehicles and idling trucks. Please refer to Global Response GR-4, Traffic Related Pollution and Health Risks. Regarding electrification of the Port fleet, the comment does not reference the content of nor challenge the adequacy of the Draft EIR, and no further response is required” (p. 12-1171).

Furthermore, the FEIR states:

“Commenters also claim that the Draft EIR should address health impacts related to increased diesel emissions and particulate matter. As identified in the Draft EIR (Section 5.3.5, Air Quality Project Impacts and Mitigation) Measures, pp. 5.3-12), the project would not expose nearby sensitive receptors to substantial concentrations of substantial pollutant concentrations exceeding state or federal standards or in excess of health risk criteria for toxic air contaminants and impacts would be less than significant. The operational and construction emissions generated by the project were remodeled in CalEEMod in the Final EIR to account for all proposed land uses, to reflect the 316 daily operational trips as discussed in the Draft EIR, and to remove certain reductions used in the Draft EIR CalEEMod analysis (see the updated emissions tables in Final EIR, Section 5.3.5, Air Quality Project Impacts and Mitigation Measures, pp. 5.3-12, and Appendix D, CalEEMod Output Results of this Final EIR). As shown in this Final EIR, the corrections do not result in a change in any significance determination previously disclosed in the Draft EIR, nor do they indicate a substantially more severe environmental impact than was previously disclosed. Thus, the operational and construction emissions generated by the project would continue to not exceed applicable significance thresholds and would not expose nearby sensitive receptors to substantial concentrations of substantial pollutant concentrations exceeding state or federal standards or in excess of health risk criteria for toxic air contaminants” (Response GR-4, p. 12-10).

As demonstrated above, the FEIR claims that preparing a quantified construction and operational HRA is not necessary, as the emissions generated by the Project would not exceed applicable significance thresholds. However, this is incorrect. As discussed in our February 9th comment letter, the Project’s failure to prepare a quantified construction and operational HRA is inconsistent with the Office of

Environmental Health Hazard Assessment (“OEHHA”).⁵ As such, until both the Project’s construction and operational health risks are quantified, summed together, and compared to the VCAPCD threshold of 10 in one million, the FEIR’s response is inadequate, and we maintain our February 9th comment that the FEIR failed to adequately evaluate the Project’s potential health risk impacts.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The FEIR estimates that the Project would generate net annual greenhouse gas (“GHG”) emissions of 319.8 metric tons of carbon dioxide equivalents per year (“MT CO₂e/year”), which does not exceed the SCAQMD threshold of 3,000 MT CO₂e/year (p. 5.8-12). Furthermore, the FEIR’s analysis relies upon the Project’s consistency with the City’s Energy Action Plan (“EAP”) in order to conclude that the Project would result in a less-than-significant GHG impact (p. 5.8-13). However, review of the FEIR demonstrates that the Project again fails to adequately evaluate potential GHG impacts. As discussed below, we maintain that the DEIR’s and FEIR’s GHG analyses, as well as the subsequent less-than-significant impact conclusion, are incorrect for three reasons:

- (1) The DEIR and FEIR’s quantitative GHG analysis rely upon an incorrect and unsubstantiated air model;
- (2) The DEIR and FEIR rely upon an unsupported quantitative threshold; and
- (3) The DEIR and FEIR fail to identify a potentially significant GHG impact.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As discussed in our February 9th comment letter, the DEIR’s quantitative GHG analysis relied upon an incorrect and unsubstantiated air model. Review of the FEIR demonstrates that the Project again fails to justify or correct some of these modeling errors. As discussed below, we find the DEIR and FEIR to be inadequate and maintain that the Project’s less-than-significant GHG impact determination is unsubstantiated. Specifically, regarding the Project’s air modeling, the FEIR states:

“The comment states that the Draft EIR’s quantitative GHG analysis is unsubstantiated. The Final EIR is updated as reflected in Responses to Comment 206-235 through 206-258 and changes to the Draft EIR are included in Section 5.8 of the Final EIR.” (p. 12-1204).

However, this response is inadequate. While we acknowledge that the FEIR substantiated or corrected most of their modeling input parameters, the FEIR still fails to sufficiently address *all* of our comments regarding the Project’s flawed CalEEMod models. Specifically, the FEIR fails to provide access to the “Client provided RFI,” which is cited as justification for the revised construction-related CalEEMod input parameters, as previously discussed. As such, emissions associated with the Project remain underestimated, and the DEIR’s and FEIR’s quantitative GHG analyses should not be relied upon to determine Project significance. As such, we reiterate our February 9th comment that the DEIR’s

⁵ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/hotspots2015.html

CalEEMod models are unsubstantiated, and the DEIR's and FEIR's less-than-significant GHG impact conclusion should not be relied upon.

2) Incorrect Reliance Upon an Outdated Quantitative GHG Threshold

As discussed in our February 9th comment letter, the DEIR relies upon an unsupported GHG threshold. Review of the FEIR demonstrates that the Project again fails to adequately justify or correct this error. As discussed below, we find the DEIR and FEIR to be inadequate and maintain that the Project's less-than-significant GHG impact determination is unsubstantiated.

As previously stated, the FEIR estimates that the Project would generate net annual GHG emissions of 319.8 MT CO₂e/year, which would not exceed the SCAQMD threshold of 3,000 MT CO₂e/year (p. 5.8-12). Regarding the DEIR's use of an interim threshold, the FEIR states:

"The comment states that the Draft EIR incorrectly relied upon an outdated quantitative GHG threshold. The City understands that the 3,000 MT CO₂e per year threshold was proposed a decade ago and was never adopted. However, the 3,000 MT CO₂e per year threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008) document and subsequent Working Group meetings (latest in 2010). This threshold uses the Executive Order S-3-05 goal as the basis, so it is not tied to only the 2020 target year and is thus not outdated. This threshold is also based on the 90% capture rate methodology, which means that 90% of total emissions from all new or modified projects would be subject to some type of CEQA analysis, which was the approach taken by SCAQMD to establish the stationary/industrial source threshold, as well as by the California Air Resources Board (for interim threshold for stationary source projects) and one of the options suggested by the California Air Pollution Control Officers Association (quantitative threshold based on market capture). Further, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction. As such, the use of the 3,000 MT CO₂e threshold is appropriate and substantiated" (p. 12-1183).

However, the DEIR's use of this threshold remains incorrect. Regardless of the FEIR's claims, the Association of Environmental Professionals ("AEP") guidance states:

"[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine development and reduction potentials out to the next GHG reduction milestone (2030 or 2050).⁶

As discussed in our February 9th comment letter, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, rather than relying upon the outdated 2008 SCAQMD Draft thresholds, we recommend that the Project evaluate GHG

⁶ "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at*: https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

emissions per the next tier and apply the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/year, which was calculated by applying a 40% reduction to the 2020 targets.⁷

3) *Unsubstantiated Air Model Indicates a Potentially Significant GHG Impact*

When applying the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.⁸ As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 319.8 MT CO₂e/year (p. 5.8-12). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."⁹ The FEIR estimates that the Project would generate approximately 14 new jobs (p. 1-6). As the Project does not include any residential land uses, we estimate a service population of 14 people.¹⁰ When dividing the Project's net annual GHG emissions, as estimated by the DEIR, by a service population of 14 people, we find that the Project would emit approximately 22.8 MT CO₂e/SP/year (see table below).¹¹

FEIR Greenhouse Gas Emissions per Capita	
Annual Emissions (MT CO ₂ e/year)	319.8
Service Population	14
Service Population Efficiency (MT CO ₂ e/SP/year)	22.8
2035 SCAQMD Efficiency Target	3.0
<i>Exceeds?</i>	Yes

As demonstrated above, the Project's service population efficiency value, as estimated by the DEIR's provided net annual GHG emission estimates and service population, vastly exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, indicating a potentially significant impact not previously identified or addressed by the DEIR or FEIR. As such, we find the FEIR to be inadequate and maintain our February 9th comment that the DEIR's less-than-significant GHG impact determination should not be relied upon, as it is based on an outdated significance threshold. As a result, an updated EIR should be prepared, which includes an updated GHG analysis, and additional mitigation should be incorporated accordingly, per CEQA Guidelines.

⁷ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

⁸ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

⁹ CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>.

¹⁰ Calculated: 0 residents + 14 employees = 14 service population.

¹¹ Calculated: (62.3 MT CO₂e/year) / (14 service population) = (4.45 MT CO₂e/SP/year).

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in a potentially significant air quality and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Therefore, to reduce the Project's emissions, we recommend consideration of SCAG's 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") and Greenhouse Gas Project Level Mitigation Measures ("PMM-GHG-1"), as described below:¹²

SCAG RTP/SCS 2020-2045	
Air Quality Project Level Mitigation Measures – PMM-AQ-1:	
In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:	
a) Minimize land disturbance.	
b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.	
c) Cover trucks when hauling dirt.	
d) Stabilize the surface of dirt piles if not removed immediately.	
e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.	
f) Minimize unnecessary vehicular and machinery activities.	
g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	
h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.	
j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet.	
k) Ensure that all construction equipment is properly tuned and maintained.	
l) Minimize idling time to 5 minutes—saves fuel and reduces emissions.	
m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	

¹² "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocial_addendum_4_mitigationmeasures.pdf?1606004420, p. 4.0-2 – 4.0-10; 4.0-19 – 4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, available at: <https://scag.ca.gov/peir>.

n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.
q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.
s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects.
t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.
u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).
w) As applicable for port projects, the following measures should be considered: - Develop specific timelines for transitioning to zero emission cargo handling equipment (CHE) - Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress. - Use short side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives to gradually ramp up the usage of shore power. - Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized. - Maximize participation in the Port of Los Angeles' Vessel Speed Reduction Program or the Port of Long Beach's Green Flag Initiation Program in order to reduce the speed of vessel transiting within 40 nautical miles of Point Fermin. - Encourage the participation in the Green Ship Incentives. - Offer incentives to encourage the use of on-dock rail.
aa) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.
bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible: - Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85% - Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%. - Nonroad diesel engines on site shall be Tier 2 or higher. - Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp. - Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.

- Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.
- The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following:
 - i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
 - ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
 - iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
- The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- The contractor shall maintain a monthly report that, for each on road diesel vehicle, nonroad construction equipment, or generator onsite, includes:
 - i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
 - ii. Any problems with the equipment or emission controls.
 - iii. Certified copies of fuel deliveries for the time period that identify:
 - 1. Source of supply
 - 2. Quantity of fuel
 - 3. Quantity of fuel, including sulfur content (percent by weight)

Greenhouse Gas Project Level Mitigation Measures – PMM-GHG-1

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.

c) Include off-site measures to mitigate a project's emissions.

d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

- i. Use energy and fuel-efficient vehicles and equipment;
- ii. Deployment of zero- and/or near zero emission technologies;
- iii. Use lighting systems that are energy efficient, such as LED technology;
- iv. Use the minimum feasible amount of GHG-emitting construction materials;
- v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
- vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse;
- vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy;
- viii. Incorporate design measures to reduce water consumption;
- ix. Use lighter-colored pavement where feasible;

x. Recycle construction debris to maximum extent feasible; xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above.
e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program;
f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;
g) Improving transit access to rail and bus routes by incentives for construction and transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and
h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes.
i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles;
j) Land use siting and design measures that reduce GHG emissions, including: i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees; iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and

v.	Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.
k)	Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible.
l)	Require at least five percent of all vehicle parking spaces include electric vehicle charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in.
m)	Encourage telecommuting and alternative work schedules, such as: i. Staggered starting times ii. Flexible schedules iii. Compressed work weeks
n)	Implement commute trip reduction marketing, such as: i. New employee orientation of trip reduction and alternative mode options ii. Event promotions iii. Publications
q)	Price workplace parking, such as: i. Explicitly charging for parking for its employees; ii. Implementing above market rate pricing; iii. Validating parking only for invited guests; iv. Not providing employee parking and transportation allowances; and v. Educating employees about available alternatives.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The updated EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hageman CV

Attachment B: Paul Rosenfeld CV



Technical Consultation, Data Analysis and
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**Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermid and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International*

Conferences on Soils Sediment and Water. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23rd *Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 5-14-2021
Trial, October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty, Plaintiff vs. Consolidated Rail Corporation and National Railroad Passenger Corporation
d/b/a AMTRAK,
Case No.: No. 18-L-6845
Rosenfeld Deposition, 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe, Plaintiff vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA
Rail, Defendants
Case No.: No. 17-cv-8517
Rosenfeld Deposition, 5-25-2021

In the Superior Court of the State of Arizona In and For the Cuntly of Maricopa
Mary Tryon et al., Plaintiff vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case Number CV20127-094749
Rosenfeld Deposition: 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al *Plaintiffs*, vs. CNA Insurance Company et al.
Case Number 1:17-cv-000508
Rosenfeld Deposition: 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*.
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case No.: 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No.: 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action NO. 14-C-30000
Rosenfeld Deposition, June 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM
Rosenfeld Deposition: July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil Action No. CV 2008-2076
Rosenfeld Deposition: September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052
Rosenfeld Deposition: July 2009

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Jay Dobrowalski
City of Oxnard
214 South C Street
Oxnard, California 93030

18 October 2022

RE: Temporary Outdoor Vehicle Storage

Dear Mr. Dobrowalski,

I write to reply to the Final Environmental Impact Report's (FEIR's) responses to my 9 February 2022 comments on the Draft Environmental Impact Report (DEIR) in support of a proposed temporary outdoor vehicle storage facility on 33.7 acres of open space at the southeast corner of Hueneme Road and Perkins Road.

The FEIR assigns comment numbers throughout my letter, to which responses are likewise numbered. I disagree with the splitting of certain paragraphs into separate comments, but this splitting is unimportant to me. Thus, I replied according to the numbering the FEIR assigns to my comments. What is important, however, is that the responses characterized many of the numbered comments as statements or as introductions to comments to follow. In all of these instances, the FEIR concludes that no further response is required. In other words, many of my comments, which were acknowledged as such by the FEIR's numbered labels, were then disqualified as comments in order to avoid having to respond to them. Except for two or three introductory paragraphs, which the FEIR should not have assigned comment numbers, the paragraphs I wrote were comments on the DEIR, and as comments, they merited serious responses. To many of my comments, City of Oxnard fails to provide good-faith, reasoned analyses in their responses.

My replies mostly follow the numbered responses in the order they appear in the FEIR. I consolidated a few of those that the FEIR address redundantly.

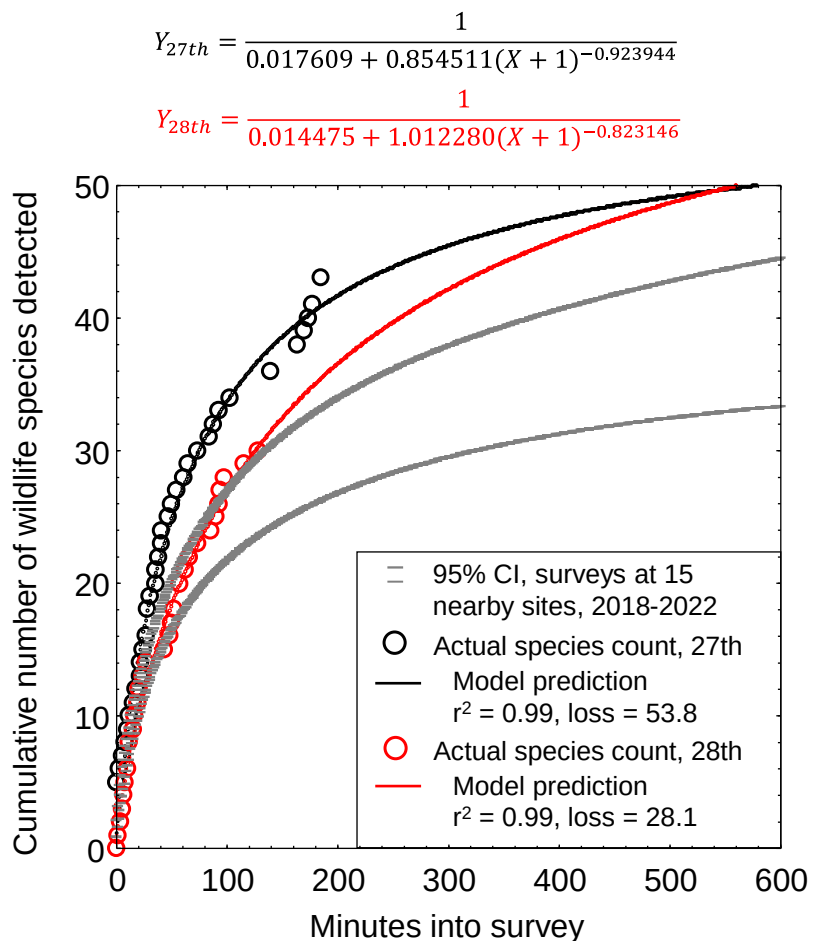
Response 206-94: "The project site is not topographically diverse and can be characterized as flat. ... the site is regularly disturbed through tilling and mowing activities... As a result, the reconnaissance-level surveys conducted by Rincon in the spring of 2018 and fall of 2020 were general in nature." And, "the site visit and conditions suggested that no special-status plant species were expected due to the disturbed nature of the site, high degree of urbanization in the vicinity of the project site and project site's soil profile"

Reply: In other words, a determination was made in advance that the site would provide no biological value. A grossly inadequate survey effort was then directed to wildlife at the project site, thereby confirming the pre-determination that a flat, often-disturbed site does not support wildlife. My survey demonstrates otherwise. I did not

survey for very long, as I was only there during one evening and the following cold-and-windy early morning. Despite my brief time there and the less-than-ideal conditions, I detected 47 species of vertebrate wildlife, including 12 with special status.

The number of species I saw at the project site was about twice the number I usually detect during reconnaissance-level surveys. Furthermore, that 26% of the species I detected were special-status species was unusually high in my experience. For greater context, I updated Figure 1 from my comment letter so that it includes the 95% confidence interval based on reconnaissance surveys that my daughter and I (my daughter works for me) have completed at 15 other proposed project sites in the area between Ventura and Burbank (Figure 1). Note that the data and model predictions representative of the project site exceed the upper bound of the 95% CI. In other words, the project site supports more species of wildlife than do most other project sites I have surveyed in the area.

Figure 1. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my visual-scan surveys on 27-28 January 2022. This version of the Figure also includes 95% confidence intervals (CI) based on reconnaissance surveys my daughter and I completed at 15 other sites between Ventura and Burbank.



Response 206-94: “Reconnaissance surveys document existing conditions and assess the habitat suitability for special-status species, which informs whether or not further surveys are necessary. The survey’s site visits were timed for performing a general reconnaissance survey, which can be performed any time of the year.”

Reply: According to the response, the surveys were timed to achieve the standard of general reconnaissance surveys being completed at any time of year; in other words, the survey timing met no standard at all. In fact, no standard for the timing of general reconnaissance surveys exists as they apply to wildlife, just as no protocol or guidance exists for general reconnaissance surveys directed to wildlife. The scientific literature is silent on general reconnaissance surveys, because such surveys have been invented by the environmental consulting industry and lack scientific vetting. These surveys have been contrived to achieve objectives that are scientifically indefensible. Below I explain why these surveys are inappropriate to the purpose that City of Oxnard applies them.

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, it helps for both the analysis and the public to be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

There are three types of survey for wildlife at a project site that are typical of CEQA review. One is known as a species-specific **detection survey**, which follows a methodological protocol formulated by experts on the species. The protocol balances cost against a reasonable likelihood of detection should the species be present. If the protocol is followed, but the species is not detected, then the negative outcome of the detection survey can serve as support for an absence determination, i.e., the species at issue can be determined absent from the site for however long the protocol specifies. It is therefore important that the details of the detection survey be reported so that the reader can compare these details to the minimum standards of the detection survey protocol. In this case, no detection surveys were completed for any special-status species.

Two other types of survey for wildlife at proposed project sites are known as **reconnaissance survey**, otherwise known as **general survey**, and **habitat assessment**. The typical objective of reconnaissance survey is to inventory the species that compose the wildlife community, whereas that of habitat assessment is to assign occurrence likelihoods to special-status species based on documented associations between each species and environmental settings. Unlike the carefully formulated protocols of detection surveys, reconnaissance surveys and habitat assessments lack formal standards of implementation and interpretation. The outcome of a 5-minute reconnaissance survey should not be afforded the same credibility as that of a 5-hour reconnaissance survey, but no guidance is available on how long a reconnaissance survey should last or what its findings should mean. It is therefore very important that the methodological details of reconnaissance surveys and habitat assessments be reported. It is just as important that the standards of interpretation be reported, along with sources of uncertainty and bias.

Sources of potential uncertainty and bias abound in reconnaissance surveys for the purpose of wildlife species inventory. Biologists vary in their skill at detecting wildlife species, and all are imperfect observers. After all, some species are large, loud, colorful

or abundant, and can readily be seen during diurnal surveys, whereas others are tiny, quiet, cryptic or rare, or are detectable only by night or by trapping or use of remote-sensing technology. In my experience, some species typically do not reveal themselves until I have been on the survey station for 20 minutes, 30 minutes, or for hours. The inventory will be the product of the amount of survey time and the range of survey methods invested. As examples, because nocturnal surveys and trapping with live bait are rarely implemented as part of reconnaissance surveys, bats and shrews rarely find their places on species inventories at proposed project sites. Membership on an inventory can also carry different meanings based on how each species occurs at the site. Whereas some species are resident year-round, others can be seasonal or ephemeral in their occurrences at a site. Should a species be included on an inventory depends on the analyst's standard of what counts as presence, but that standard should be reported so that the public can decide whether to agree with it. (The DEIR reports no such standard.) In short, reconnaissance survey can only sample the true suite of wildlife species of a site, and most often, the sample will be biased against the rare, sensitive and threatened or endangered species that CEQA is most concerned about.

Reconnaissance surveys occasionally reveal the presence of special-status species, sometimes due to the skill of the observer but often due to luck of survey timing. What these surveys cannot reveal is the absences of any species whose geographic ranges overlap the site and whose habitat associations at all resemble conditions of the site. And it is habitat associations that consulting biologists often rely upon to determine likelihoods of occurrence of special-status species. Unfortunately, habitat associations often poorly comport with the habitat concept, which is that habitat is that part of the environment that is used by a species (Hall et al. 1997), and which is described by scientists through measurement (Smallwood 2002). Habitat associations defined by consulting biologists typically lack foundation in actual measurements of habitat use, and are therefore speculative and prone to error. One source of error is to map vegetation complexes as habitat types, to which consulting biologists assign species by association without concern for the unrealistically hard boundaries that divide the mapped habitat types (see Figure 2 of Rincon 2018). Another source of error is to pigeon-hole species into unrealistically narrow portions of the environment, which can then be said not to exist on the project site (for examples, see wildlife habitat descriptions in Appendix FA Follow-Up Biological Resources Inventory – 2022). A third source of error is to assign functions to habitat for the purpose of dividing habitat into unrealistic functional parts, such as between breeding habitat versus foraging habitat (for examples, see wildlife habitat descriptions in Appendix FA Follow-Up Biological Resources Inventory – 2022). Primacy is assigned to breeding habitat, which often can be said not to exist on the project site. In reality, all parts of an animal's habitat are essential to breeding success, regardless of where breeding opportunities occur.¹

¹ Animals unable to find sufficient forage, refugia, or travel opportunities are just as unable to reproduce as those unable to find sufficient nest-site opportunities. Per the precautionary principle of risk analysis and consistent with the habitat concept, CEQA review should be based on the broadest of available habitat characterizations, which should be interpreted on the whole rather than contrived functional parts. Any detections of a species on or over a site, regardless of time of year, should be interpreted as that species' use of habitat, any part of which is critical to breeding success.

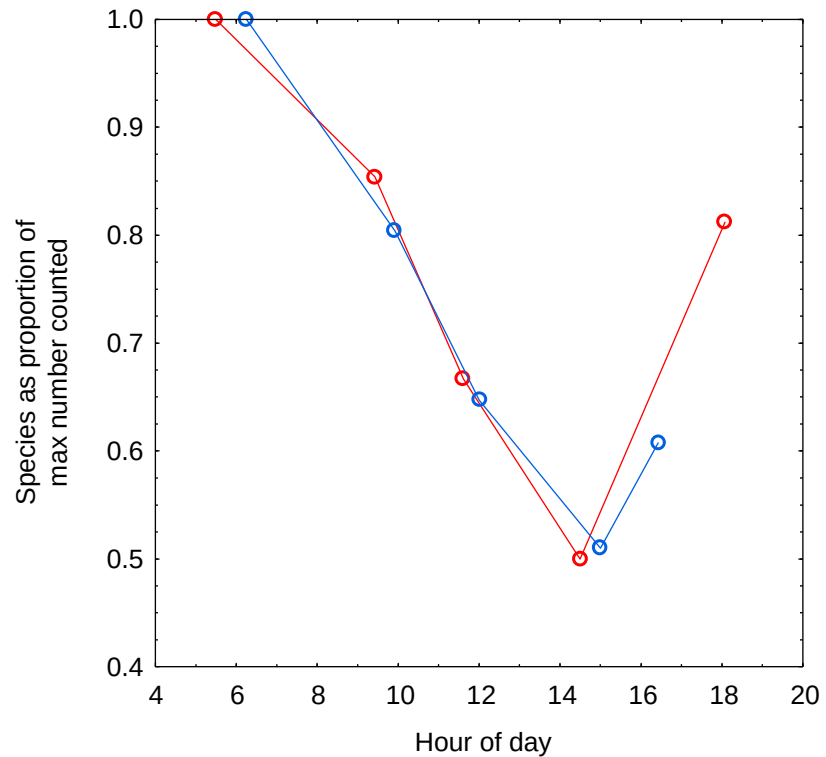
Given the true cost of species inventory, the temptation to shortcut the analysis of occurrence likelihoods is understandable. In the spirit and intent of CEQA, a reasonably feasible sampling of the species inventory should be the first objective of reconnaissance surveys. Several approaches to sound interpretation of the sampled inventory are defensible. One is to commit to a survey effort that results in the detection of a sufficient number of species to accurately estimate the number of species yet to be detected, which is the approach I applied in my comment letter. A second approach is to honestly report the uncertainties and biases of the characterizations of the species inventory and of the likelihoods of occurrence of special-status species. In the third approach, the analyst can assume species are present until suitable evidence is acquired in support of an absence determination. This last approach would be consistent with the precautionary principle of risk analysis directed toward rare and precious resources (National Research Council 1986) and with the tenets of protocol-level detection surveys formulated by experts on each special-status species. Regardless of the approach, most important is to refrain from determining species are absent before sufficient survey has been completed, and to refrain from asserting certainty in the species inventory when that certainty is unjustified.

Returning to the response's point that reconnaissance surveys can be performed any time of the year, I concur. One can perform a reconnaissance survey any time of year or any time of day. I have completed hundreds of wildlife surveys in all seasons of the year and all times of day and night. But I also quantify the effects of survey timing, because survey timing bears strongly on survey findings. The scientific literature is full of seasonal patterns of occurrence and abundance of many wildlife species. Recently I tested for time-of-day effects on the outcomes of reconnaissance-level surveys. To compare the data between surveys at two sites, I normalized the number of species detected as a proportion of the maximum number detected across all 5 surveys per site. Figure 2 shows a mirrored relationship between number of species detected and time of day when each 2-hour visual-scan survey began. Temperature could explain some of the variation in survey outcomes, but the effect of time of day was strongest and appears robust. Although one can perform reconnaissance surveys at any time of year and any time of day, one needs to interpret the survey outcomes in light of seasonal and time-of-day patterns of species detection likelihood.

Response 206-97: "...site conditions are unlikely to support sustained ground squirrel populations or associated burrowing owl populations."

Reply: This response does not comport with the ground squirrels I saw and photographed in the middle of the project site (see Photo 4 of my comment letter). Ground squirrels inhabit burrow complexes at the rate of 1.89 adults per burrow complex on average (Smallwood unpublished data), and burrow complexes support many generations over long periods of time. That ground squirrels occur in the middle of the project site is evidence of a sustained ground squirrel population despite disturbances to the site.

Figure 2. Numbers of species detected as proportion of the maximum number detected among the 5 surveys per project site, and as a function of start time during the day. The red symbols represent Greentree and the blue symbols represent the comparison project site.



Response 206-97: “As described in the updated assessment, burrowing owls are only known to winter in the Oxnard Plains.”

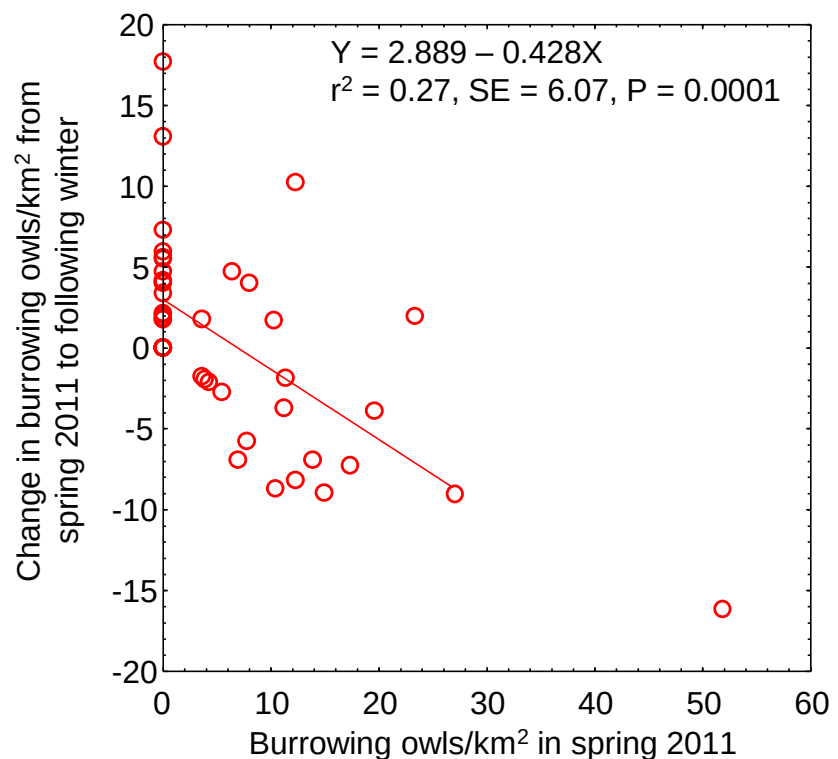
Reply: As I commented in my 9 February comment letter, records of burrowing owl occurrence are “very close” to the project site. The blue teardrop symbols in Figure 3 represent locations of 29 burrowing owl occurrence records within only 1 mile of the site. That the records are winter occurrences qualifies them as no less important to burrowing owl nest success than had they represented nest sites. Burrowing owls that cannot acquire sufficient forage over winter, or cannot survive the winter, cannot successfully breed.

Burrowing owls naturally shift locations between breeding and non-breeding seasons. I studied the phenomenon over one full year of repeat surveys across a large study area in Alameda and Contra Costa Counties (Smallwood et al. 2013), where I found that the relocation of burrowing owls from nesting colonies to over-wintering sites was density-dependent (Figure 4). The negative density-dependent relationship suggest that burrowing owls need to rest their prey-base in breeding areas, or they need to find more abundant prey where they did not breed, or they need to escape predator or parasite loads, or all of the above. Whatever, the reason, winter sites are of high importance to burrowing owls, and should not be minimized as they are in the FEIR.

Figure 3. eBird occurrence records of burrowing owl within 1 mile of the project site. The blue teardrop symbols are where 29 sightings have been reported.



Figure 4. Among 46 sampling plots across a 167-km² study area in the Altamont Pass, burrowing owl density in winter was a negative function of density in the breeding season, meaning that burrowing owls needed to leave breeding-season locations to winter where fewer burrowing owls nested in spring.



Response 206-97: “the California Natural Diversity Database (CNDDDB) (August 2022) and eBird.org (August 2022) occurrences suggest that burrowing owls utilize Ormond Beach and the game preserve, areas with little disturbance and higher quality habitat for this species.”

Reply: The CNDDDB and eBird records provide no such evidence. Twelve of the eBird records were at the beach, where disturbance is a defining feature of the beach. Sixteen of the eBird records were located along Edison Drive, bordered on both sides by agricultural fields – fields mostly used for sod production. Photos of the owls depict bare ground and packed earth indicative of disturbance. The conditions where these burrowing owls were reported mirror conditions I myself have many times found and recorded burrowing owls. Burrowing owls are often characterized as disturbance-adapted species.

Furthermore, the CNDDDB and eBird records are based on locations where volunteer reporters of the records happened to visit. They do not represent any sort of scientific survey of the project area. As noted by CNDDDB, “*The CNDDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present.*”² The conclusion drawn in Response 206-97 cannot be supported by species occurrence databases, and therefore is purely speculative. Without completion of detection surveys that meet the standards of CDFW (2012), the FEIR cannot defend a conclusion of absence nor even of low likelihood of occurrence.

Response 206-97: “Although the site may support a small temporary population of insects and small rodents in between disturbance activities, the site is unlikely to support sustained and abundant prey populations due to the disturbances. In addition, prey resources are likely more abundant in the adjacent open space areas which would likely attract any burrowing owl traversing across the region.”

Reply: The response is speculative; it is unsupported by evidence. The site supports ground squirrels, which are not small mammals that come and go between disturbances. Considering that ground squirrels persist through disturbances of the site, it is reasonable to conclude that many other species of wildlife, include arthropod populations, also persist through disturbances.

Response 206-97: “The preconstruction wildlife survey would similarly be sufficient to document any wintering burrowing owls or California horned lark, should they occur on-site.”

Reply: The response is incorrect. As I commented in my 9 February 2022 letter, wintering burrowing owls are difficult to detect. At minimum, the surveys would need to

² State of California Department of Fish and Game, California Natural Diversity Database, CNDDDB Data Use Guidelines, p. 12. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=27285&inline>.

achieve the standards of CDFW (2012), but more realistically, the surveys carry about a 10% chance of detection of wintering burrowing owls. I will add that horned larks can also be missed during preconstruction surveys.

Response 206-105: “Given the temporary use of the site for outdoor vehicle storage for a maximum of 5 years and that the proposed project does not include permanent structures, the proposed project does not preclude future non-industrial uses.”

Reply: After 5 years of cover by gravel and cars, the soils would be dead, meaning the living constituents of soil would be dead. All animal burrow would be destroyed. The biologically productive capacity of the site would be severely depleted.

Response 206-107: “...no special-status species are expected to be present on site.”

Reply: Special-status species are already present on site, as documented in my comment letter. On and over the site I observed Vaux’s swift, California gull, western gull, double-crested cormorant, turkey vulture, red-tailed hawk, American kestrel, merlin, and either Belding’s or Large-billed savannah sparrow. Just off site I observed Allen’s hummingbird, northern harrier, and loggerhead shrike. But these are not the only special-status species occurring at and next to the site (most likely, those I saw next to the site also use the project site – I just did not see them do so while I was there). Using an analytical bridge to a large research effort I completed in Northern California, I predicted in my comment letter that over the course of a year or longer, repeated visual-can surveys would eventually detect at least 158 species of vertebrate wildlife. Assuming my ratio of special-status to non-special-status species was to hold with through the detections of all 158 species predicted by my analytical bridge between my survey outcome and the larger research effort in Northern California, then continued surveys would eventually detect 41 special-status species of vertebrate wildlife.

Response 206-110 and Response 206-313: “The project proposes to establish 20-foot tall security lighting around the perimeter of the site. The placement of the lights is intended to minimize lighting impacts to the natural habitat south of the project site.”

Reply: Even so placed, the security lighting would add light pollution to the protected habitat area to the south. If the project goes forward, minimization of impacts should be implemented, but as I commented in my letter of 9 February 2022, I recommend reducing the number of lights. Compensatory mitigation would be warranted for the impacts of artificial lighting that could not be avoided despite minimization measures.

Response 206-111 and Response 206-314: The response opines that landscaping along the fence would prevent bird-fence collision and entanglement mortality.

Reply: The response provides no evidence that landscaping would accomplish the impact minimization it asserts. I am not aware of any evidence that would support the FEIR’s response. In fact, I do not see any reason why landscaping along the fence would not increase bird-fence collision and entanglement mortality. While recently visiting a proposed project site not far from this one, my daughter came upon yet another

collision/entanglement victim (Photo 1). My prediction remains. Based on empirical evidence from fatality monitoring along fences, I predict 26.5 (95% CI: 20–37) bird fatalities per year. Adult birds killed on the fence could also leave behind chicks on the nest, which would be at greater risk of dying on the nest. As the FEIR stands, these fatalities would not be mitigated, and in my opinion, they would qualify as a significant impact to birds.

Photo 1. *Fledgling house finch that fatally collided with a perimeter security fence in Oxnard, California, 26 June 2022. Photo by Noriko Smallwood.*



Response 206-112: “During this temporary project, the project site will not offer any foraging habitat except for the perimeter vegetation, and it will be unlikely that wildlife would utilize the interior of the site. The probability that wildlife would utilize the project site or the immediate area is unlikely given the urban nature of the project site and the surrounding vicinity.”

Reply: Even with cars and gravel covering what was once productive soil, wildlife would use the site, just not in all the same ways nor at the same level. The airspace over the site composes part of the aerosphere (Kunz et al. 2008). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate (Davy et al. 2017, Diehl et al. 2017). The aerosphere is habitat (Kunz et al. 2008). Birds would continue to fly over the site, and some would perch on security lights, the security fence, on the office structure, and on cars.

Response 206-112: “The project includes fencing around the perimeter of the site and fencing will function to redirect birds such as raptors to fly higher if they are flying near the road.”

Reply: Again, demonstrating the hazard of speculation, the response mischaracterizes how birds react to fences and other structures when passing over them. I have long studied this phenomenon, including how birds react to powerlines, wind turbines and fences. Birds typically flap hard to ascend high enough to pass over the barrier, and then once cleared, immediately drop in altitude on the other side of the barrier (Photo 2). (I have many photos of this behavior, but Photo 2 was the easiest to find and present.) This behavior contributes to how birds often collide with auto traffic. After clearing a structure such as powerlines, a fence, or even a large shipping truck, birds temporarily lose some flight control and have difficulty avoiding secondary obstacles.



Photo 2. *White-faced ibises flap hard to ascend to avoid colliding with distribution lines before descending after having cleared the lines. Photos by Shawn Smallwood.*

Response 206-114: In response to the issue raised about the DEIR’s flawed analysis of whether the project would interfere with wildlife movement, the FEIR writes “Please refer to response in comment 206-111. Also, as discussed on page 5.10-12 of the Draft EIR, through implementation of Standard Conditions SC HYD-1 through SC HYD-4, the project would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit requirements which is consistent with the Clean Water Act. In addition, as stated on page 5.10-17 of the Draft EIR, the project would adhere to the NPDES requirements for the Construction General Permit and implement a Stormwater Pollution Prevention Program that includes required best management practices (BMPs) and good housekeeping practices, for the protection of the adjacent wetlands.”

Reply: Response 206-111 bears only on the security fence allowing small mammals to pass through gaps left in the fence, but otherwise has not bearing on the issue. The remainder of the response, which refers to various permits the project applicant would obtain regarding pollution discharge and construction, has no bearing on the issue of

wildlife movement. It would seem the preparers of the FEIR put this part of the response in the wrong place.

Response 206-120: “The project will have a negligible effect on adjacent wetlands due to the temporary nature of the project...”

Reply: I suggest revising the EIR to more convincingly assure that the project would be temporary. The surest way to assure of the temporary nature of the project is to add a mitigation measure to restore the soils of the site to full productive capacity, including the capacity to support native vegetation, fossorial mammal burrows and species of wildlife appropriate to the area.

Response 206-285: “The City acknowledges the comment as a statement.”

Reply: My comment was a comment. And my comment posed implications for the accuracy of the DEIR’s characterization of the project’s environmental setting. Only 3 person-hours of reconnaissance-level survey were committed to the project site, during which time only 7 species of vertebrate wildlife were reportedly detected. I detected 6.7 times the number of species at 3.5 times the number of species per hour than did Rincon (2018). My comment noted that I consider my own survey effort as merely a starting point toward characterizing the environmental setting, which means that Rincon’s (2018) survey effort had yet to reach any sort of starting point. Of the 158 species of vertebrate wildlife my comment letter predicts as a minimum number of species using the project site, Rincon (2018) detected 4.4%. From this level of sampling of the species inventory, the EIR is incapable of accurately characterizing the wildlife community as part of the existing environmental setting.

Response 206-286: “The City acknowledges the comment as a statement.”

Reply: My comment was for the need to appropriately interpret reconnaissance survey results. Rincon (2018) and then the DEIR treat the Rincon (2018) survey results as if they were determinant regarding the likelihoods of occurrence of many species of wildlife. For example, Response 206-306 includes the assertion, “Reconnaissance surveys documented existing conditions and assessed the habitat suitability for special-status species.” The surveys did not accomplish either of these outcomes. Seeing only 7 wildlife species did not document existing conditions. The results of the Rincon (2018) surveys are treated as if they were protocol-level detection surveys, which they were not. The DEIR is misleading in its interpretation of Rincon’s (2018) survey results.

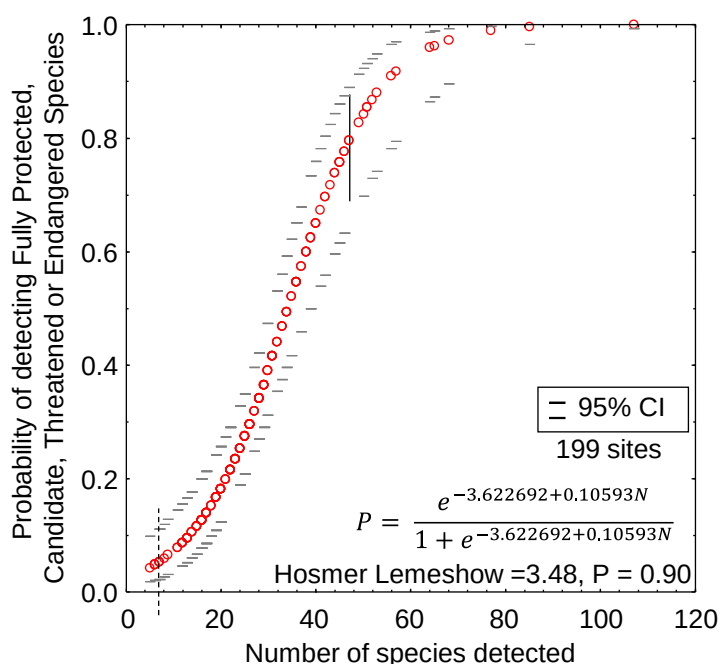
Response 206-288: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. My analysis led to a predicted number of species of vertebrate wildlife likely to use the site over the long-term – much longer than the very brief surveys completed by both Rincon (2018) and myself. The DEIR presents no similar analysis, which leaves the reader with the false impression that the 7 species seen by Rincon (2018) were all the species to be seen on the project site.

Response 206-289: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. This analysis goes to the probability of detection of special-status species, which the DEIR does not address. A brief survey is unlikely to detect many of the special-status species that use a particular site, but an empirical foundation is available to calculate the probability of detection of a special-status species based on a survey outcome. My comment provided an example that was directed toward listed species including California Fully Protected species. Since my comment letter, I updated my analysis based on a larger data set. My larger data set predicts an 80% probability of detecting a listed species at the project site based on my survey effort, but only a 5% probability of doing so based on the survey effort of Rincon (2018). If the savannah sparrows I saw on site were Belding’s savannah sparrows, then I beat the odds. It probably would have taken many surveys by Rincon (2018) to detect a listed species, due to their relatively unproductive survey, but the point of my comment is that Rincon’s failure to detect a listed species is likely more of a reflection of their insufficient survey effort than it is of wildlife species occurrences.

Figure 5. Probability of detecting ≥1 Candidate, Threatened or Endangered Species of wildlife listed under California or federal Endangered Species Acts, based on survey outcomes logit-regressed on the number of wildlife species I detected during 199 site visits in California. The dashed vertical line represents the number of species detected by Rincon and the solid vertical line represents the number I detected.



Response 206-291: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. Henceforth, I will not reply to responses that mischaracterize my comments as statements.

Response 206-292: “According to the most recent CDFW Special Animal’s List (July 2022), the red-tailed hawk is not designated as a special-status species, and double-crested cormorants are a Watch List species for nesting colonies.”

Reply: The response warrants a review of which species need to be considered as special-status species. §15380 of the CEQA Guidelines defines special-status species as Endangered, Rare, or Threatened, and it further defines each of these terms. Rare is defined as “(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in the Federal Endangered Species Act.” Thus, rare species need not be listed species.

Importantly, CEQA Guideline 15125(c) provides that in describing the environmental setting “special emphasis should be placed on environmental resources that are rare or unique to the region and would be affected by the project.”

The California Resources Agency’s Guidelines for Implementation of CEQA includes Appendix G, which requires that the proposed project be evaluated for whether it may have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife and US Fish and Wildlife Service.

The California Department of Fish and Wildlife in turn defines a Species of Special Concern to be a species that:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

The species I identified as special-status species are consistent with how CEQA defines special-status species.

The meanings of CEQA’s defining terms for a species’ special status differ, but their differences also broaden the suite of species that CEQA intends should be considered as special-status species. The meanings of the terms Rare and Sensitive also often underly the inclusions of species on special-status species lists compiled by resource agencies. Rareness can apply to species that have been diminished in abundance or geographic extent, or it can apply to species that are naturally scarce owing to their position at the top of the food-chain or to some other ecological factor. Rareness can also apply to species that are endemic to a region, even though such species can be abundant within their limited geographic range, e.g., yellow-billed magpie and Nuttall’s woodpecker. Sensitive can apply to species that respond more adversely than other species to changes

to their environment, often due to susceptibility to pollutants or pathogens or to the loss or degradation of a narrow portion of the environment on which the species relied. For example, burrowing owls often but not always depend on ground squirrels for the squirrels' provisions of burrows as nest sites and for their mutual predator-alarm calling. Therefore, burrowing owls are sensitive to human changes to the environment that diminish ground squirrels.

The CEQA definition is consistent with how I identified special-status species in Table 2 of my comment letter. I rely on the status assigned each species in California's Special Animal List (California Department of Fish and Wildlife, Natural Diversity Database, November 2021, Special Animals List, Periodic publication) – a list that is updated annually and often relied upon for CEQA reviews. The Special Animals List compiles designations of special status to species from various agencies and for various reasons. According to policy of the California Department of Fish and Wildlife regarding species of special concern (SSC) (<https://www.wildlife.ca.gov/Conservation/SSC#394871319-how-are-sscs-addressed-under-the-california-environmental-quality-act>), “SSCs should be considered during the environmental review process. The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from “projects” in the State. Section 15380 of the CEQA Guidelines clearly indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein. Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning “impact significance” to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.”

The US Fish and Wildlife Service circulates a list of Birds of Conservation Concern. This list is of “all migratory nongame birds that without additional conservation action are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” Factors contributing to this list are “population abundance and trends, threats on breeding and nonbreeding grounds, and size of breeding and nonbreeding ranges.” I rely on this list.

Raptors are protected by California Fish and Game Code 3503.5, otherwise known as the Birds of Prey Code. Raptors are protected by this Code because raptors are top predators wherever they live. Their positions in the food chain naturally require that they are rare, which is one of the key conditions – and one of the key words – that meets the CEQA definition of special-status species. Species that are naturally rare, such as species of raptor, are more likely identified as special-status species, e.g., California condor, bald eagle, peregrine falcon, burrowing owl, spotted owl, whereas fewer of the naturally abundant species are so identified, such as songbirds. I consider raptors protected by CFG Code 3503.5 to be special-status species.

Some species of bat are listed or designated as California Species of Special Concern, but others are assigned conservation priority rankings the Western Bat Working Group (WBWG), which California Department of Fish and Wildlife relies upon and which CDFW tracks in its list of California' special animals. I consider bats with WBWG conservation priority rankings of medium and high to be special-status species.

And then there are the bird species assigned to the Taxa to Watch List in California. These assignments are again assignments of special status; otherwise, there would be no point to assigning them to the Taxa to Watch List. Specifically, they are species that were earlier assigned special concern, but which did not rank as high as those species currently on the list of Species of Special Concern (Shuford and Gardali 2008). Nevertheless, CDFW commissioned the development of this list, and would not have done so without concern for the rarity and sensitivity of the species listed. I rely on this list.

For the reasons summarized above, the FEIR response relies on a flawed premise for its scope of analysis of potential impacts to biological resources, and for its accusation that I defined special status too broadly.

Response 206-294 and Response 206-295: “An updated biological assessment considering special-status species potential to occur was performed and is provided as Appendix FA to the Final EIR. This updated assessment expanded the database review for the USGS quadrangles including the project site and surrounding eight quadrangles (“nine-quad search”).”

Reply: Appendix FA of the FEIR screens out species from further consideration if CNDDDB occurrence records do not exist within USGS 7.5-minute topographic quadrangles including and adjacent to the site. By relying on CNDDDB records to determine species' absences, the DEIR misapplies CNDDDB. CNDDDB was not designed to support absence determinations or to screen out species from characterization of a site's wildlife community.

Response 206-296: “An updated biological assessment considering species potential to occur was performed and is provided as Appendix FA to the Final EIR.”

Reply: The response does not address my comment, which was about the need to complete an adequate survey effort. My comment was not suggesting more database review and speculation about species occurrence likelihoods, but it instead suggested more visits to the project site to actually survey for wildlife.

Response 206-300: “The City acknowledges the comment as an introduction to comments that follow.”

Reply: My comment was not an introduction to comments that followed. It was a stand-alone comment, pointing out that based on years of experience studying

burrowing owls, the occurrence of ground squirrels is a good precursor to finding burrowing owls. The response does not address my comment.

Response 206-301: “The reconnaissance-level surveys conducted by Rincon were general in nature. Reconnaissance surveys document existing conditions and assess the habitat suitability for special-status species, which informs whether or not further surveys are necessary.”

Reply: With ground squirrels on the project site, protocol-level detection surveys are warranted. Presence of ground squirrels is just the sort of finding that typically prompts implementation of the CDFW (2012) survey guidelines. However, I am the one who found and reported ground squirrels on the project site. Rincon (2018) did not report having detected ground squirrels, and the DEIR makes no mention of ground squirrels occurring on site. In other words, the reconnaissance surveys missed an easily detectable species, which was also an ecological keystone species, the presence of which typically prompts implementation of the burrowing owl survey guidelines. This outcome goes to show that the premise of Response 206-301 is grossly flawed. The general reconnaissance survey failed to accurately assess the site’s habitat potential for burrowing owls.

Response 206-301: “Burrowing owls are opportunistic feeders and primarily feed on insects (e.g., grasshoppers, crickets, moths, beetles) and small mammals; and pursue other prey as opportunities arise.” And “the site is unlikely to support sustained and abundant prey populations due to the disturbances. ... Therefore, the proposed project is not anticipated to significant affect burrowing own [sic] foraging habitat or significantly affect prey populations.”

Reply: This characterization of foraging behavior is inaccurate. I have studied burrowing owl foraging behavior for years, during both day and night. At night, burrowing owls actively forage at specific locations for specific types of animals. Burrowing owls will also prey on species as opportunities arise, but their principal foraging strategy is targeted, active hovering over specific locations. They often travel 400 m and farther from their burrows to forage.

Response 206-302: “The comment states that Rincon (2018) per the Draft EIR offers no survey findings of wildlife on adjacent properties, such as the property to the south that is undergoing habitat restoration by The Nature Conservancy. At the closest point, the Ormond Lagoon Waterway is located approximately 110 feet of the very southeast edge of the project parcel. However, as shown on Exhibit 5.1-5 of the Draft EIR (Photometric Plan), the proposed lighting will not directly spill into the adjacent open space.”

Reply: The comment addressed by the Response had nothing to do with lighting. My comment was directed toward the adequacy of the characterization of the existing environmental setting; I had not even gotten to potential project impact yet.

Response 206-303: “Please refer to response to comment 206-302.”

Reply: My comment about Belding's savannah sparrow (or possibly large-billed savannah sparrow) had nothing to do with the potential impacts of lighting at this point in my letter. I was addressing the adequacy of the characterization of the existing environmental setting.

Response 206-308: "Please refer to response to comment 206-111."

Reply: I fail to understand what Response 206-111 has to do with my comment on the impact of habitat loss to total bird nesting density.

Response 206-308: "following project operations, the proposed vehicle parking area, guard house, portable restroom, perimeter site lighting, and gravel surface would be removed, allowing for other types of development to be proposed."

Reply: I fail to understand how preparation of the site for its next stage of development is going to do anything to avoid, minimize, rectify or compensate for the impact of habitat loss on total bird nest density.

Response 206-308: "For the aforementioned reasons, because impacts are less than significant, mitigation measures are not required."

Reply: Nothing about the response indicates that my impact prediction would be any less than I presented in my comment.

Response 206-310: "Please refer to response to comment 206-308."

Reply: Response 206-308 does not address my predicted annual loss of 1,907 birds that would be caused by the project. Since my comments of 9 February 2022, my method for estimating total bird density and the number of birds that would be denied California due to habitat loss was peer-reviewed and published (Smallwood 2022).

Response 206-311 and Response 206-312: "Please refer to response to comment 206-308."

Reply: Response 206-308 does not address my comment, especially my comment on specific species likely to lose habitat as a result of the project. Also, I must point out that Response 206-308 is confusing and therefore of little informative value. According to the Response, "...following project operations, the proposed vehicle parking area, guard house, portable restroom, perimeter site lighting, and gravel surface would be removed, allowing for other types of development to be proposed. Given the temporary use of the site for outdoor vehicle storage for a maximum of 5 years and that the proposed project does not include permanent structures, the proposed project does not preclude future non-industrial uses." The Response says that the proposed project would clear the way for a subsequent develop project, which does not preclude non-industrial uses. In other words, anything can happen. What would not happen, however, is a return to the

productive capacity for wildlife that the site provides now. The soil would be dead after being covered by gravel and cars for 5 years.

Response 206-315: “The City acknowledges the comment as a statement. No further response is required.”

Reply: My comment was a comment. I identified special-status species of birds that I witnessed flying over the project site. I photographed some of these birds and inserted the photos to my comment letter as substantial evidence in the record. The FEIR does not seriously address my comment.

Response 206-316: “Please refer to response to comment 206-308.”

Reply: The FEIR provides no response specific to my comment that the DEIR adopts a false CEQA standard to analyze potential project interference with wildlife movement in the region.

Response 206-317: “During this temporary project, the project site will not offer any foraging habitat, and it will be unlikely that species would utilize the site. The project includes fencing around the perimeter of the site and fencing will function to redirect species such as raptors.”

Reply: The impact of which I commented – wildlife-automobile collision mortality – would not take place on the project site, but rather on the roads traversed by traffic generated by the project. The response is misdirected and entirely misses the meaning of my comment.

Response 206-317: “The additional biological analysis will take all potential impacts into consideration.”

Reply: The meaning of this response is lost on me. I found no additional biological analysis in the FEIR, nor did I find any analysis of automobile collision mortality.

Response 206-319: “The City acknowledges the comment as an introduction to comments that follow. No further response is required.”

Reply: My comment was not an introduction to comments to follow. It presented an analysis leading to a prediction of vehicle miles traveled (VMT) for the purpose of predicting wildlife mortality that would result from project-generated traffic. I included my analysis because VMT is an important predictor variable in my analysis of wildlife-automobile mortality caused by project-generated traffic. The DEIR failed to report a prediction of VMT, so based on my experience with reviewing VMT predicted for other proposed projects, I predicted VMT based on the average miles attributed to commuting employees and based on daily vehicle delivery mileage reported in the DEIR.

In response to comments on the DEIR, the FEIR (pages 12-13 and 12-14) reports a prediction of 475 daily VMT attributed to vehicle deliveries to and from the project site.

The FEIR does not report VMT attributed to employee commute, so I will continue to rely on my assumption of my original analysis to again predict 219,000 annual VMT for employee commute. This latter rate added to the revised 173,375 annual VMT for vehicle deliveries yields 392,375 annual VMT for the project, which is a larger VMT than I had predicted in my 9 February 2022 comment letter. I therefore update my wildlife mortality prediction. Based on the methods summarized in my comment letter, I predict 215 wildlife fatalities per year caused by project-generated traffic. In my opinion, based on the evidence provided by the Mendelsohn et al. (2009) study and my prediction of the project's annual VMT on local roads, it is my opinion that the project's toll on wildlife due to wildlife-vehicle collision mortality would qualify as an unmitigated significant impact to wildlife.

Response 206-320: “The City acknowledges the comment as a statement. No further response is required.”

Reply: An analysis resulting in an impact prediction is not merely a statement in the context of comments on an DEIR.

Response 206-322: “The City acknowledges the comment as a statement. No further response is required.”

Reply: I commented on a major flaw of the DEIR's analysis of cumulative impacts. My comment was not a mere statement.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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POLICY PERSPECTIVE

Aeroconservation for the Fragmented Skies

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Airspace; aerial habitat; habitat connectivity; habitat classification scheme; habitat fragmentation; IUCN; status assessment.

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Abstract

From birds to bacteria, airborne organisms face substantial anthropogenic impacts. The airspace provides essential habitat for thousands of species, some of which spend most of their lives airborne. Despite recent calls to protect the airspace, it continues to be treated as secondary to terrestrial and aquatic habitats in policy and research. Aeroconservation integrates recent advances in aeroecology and habitat connectivity, and recognizes aerial habitats and threats as analogous to their terrestrial and aquatic counterparts. Aerial habitats are poorly represented in the ecological literature and are largely absent from environmental policy, hindering protection of aerial biodiversity. Here, we provide a framework for defining aerial habitats to advance the study of aeroconservation and the protection of the airspace in environmental policy. We illustrate how current habitat definitions explicitly disadvantage aerial species relative to non-aerial species, and review key areas of conflict between aeroconservation and human use of the airspace. Finally, we identify opportunities for research to fill critical knowledge gaps for aeroconservation. For example, aerial habitat fragmentation may impact biodiversity and ecosystem function similarly to terrestrial habitat fragmentation, and we illustrate how this can be investigated by extending existing methods and paradigms from terrestrial conservation biology up into the airspace.

Introduction

The airspace provides essential habitat for an enormous array of biodiversity including microorganisms, wind-dispersed seeds, fungal spores, arthropods, bats, and birds (Kunz *et al.* 2008; Womack *et al.* 2010; Diehl 2013). Migratory aerial species rely on a clear path through the airspace to move between summer and winter habitats, while aerial insectivores rely on the airspace to forage. Insects such as the Ephemeroptera (mayflies) rely on aerial swarms for mating (Brodskiy 1973), and the Alpine Swift (*Tachymarptis melba*) can remain airborne for months, foraging, sleeping, and mating in the air (Liechti *et al.* 2013). At higher altitudes, aerial microorganisms exhibit strategies, such as increased UV resistance, which allow them to survive in the high reaches of the atmosphere (Yang *et al.* 2008; Womack *et al.* 2010).

Aerial species represent a substantial portion of global biodiversity. Twenty-eight percent of vertebrate species

assessed by the International Union for the Conservation of Nature (IUCN) fly or glide, and rely to some extent on the airspace (Figure 1). This proportion may be much higher for insects, spiders, and plants that produce wind-dispersed seeds.

Unfortunately, a growing number of anthropogenic threats are intruding into the “crowded airspace” (Lambertucci *et al.* 2015; Table 1). Collisions with human infrastructure and aircraft result in billions of wildlife deaths each year (Longcore & Rich 2004; Womack *et al.* 2010; Diehl 2013; Baxter-Gilbert *et al.* 2015; Lambertucci *et al.* 2015; Arnett *et al.* 2016; Figure 2). Moving vehicles kill billions of flying insects (Baxter-Gilbert *et al.* 2015), wind turbines kill millions of bats (Arnett *et al.* 2016), and aircrafts kill thousands of birds (Dolbeer *et al.* 2015). In Canada alone, an estimated 44.6 million adult birds die each year from collisions with buildings, wind farms, communication towers, and other sources of aerial fragmentation (Calvert *et al.* 2013). Global use of unmanned

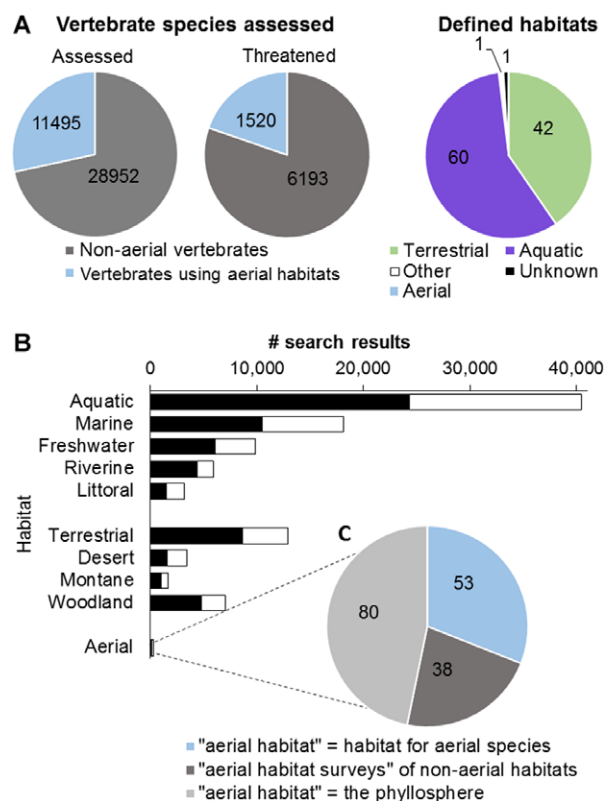


Figure 1 Despite many threatened species relying on aerial habitats, assessments of species' conservation status and research on habitats and habitat conservation focus heavily on terrestrial and aquatic habitats. (A) Proportion of vertebrates assessed and listed as threatened by the IUCN that use aerial and nonaerial habitats. (B) Disproportionate representation of select habitat types in the scientific literature, based on Google Scholar search results (September 6, 2015). Bars show the number of hits that reference each search term; black subsections represent the results that also reference "conservation." (C) "Aerial habitat" actually refers to habitats other than the airspace in most of the 248 unique documents referencing this term.

aerial vehicles (UAVs) by law enforcement, researchers, hobbyists, and military organizations is increasing, and commercial UAV-based delivery services are in development in some countries. Substantial overlap between the flight altitudes of UAVs and aerial species (Figure 2) suggests that growing UAV activity will increase UAV-wildlife collisions. The three-dimensional nature of aerial habitats creates the illusion that flying, soaring, or gliding organisms can simply circumnavigate anthropogenic structures, aircraft or UAVs. Yet, empirical data clearly demonstrate that this is often not the case.

Here, we identify a critical gap in conservation ecology and policy that sits at the intersection of four key, current topics (Figure 3). The growing field of aeroecology (Kunz *et al.* 2008) is revealing how flying animals use the airspace. The airspace was recently defined as habitat

(Diehl 2013), complete with heterogeneous resource distribution and the potential for anthropogenic activities to create impacts analogous to those documented in fragmented terrestrial habitats. Alongside compelling evidence that terrestrial habitat fragmentation significantly reduces biodiversity (Haddad *et al.* 2015), it has become increasingly clear that anthropogenic structures and transportation are a major source of mortality for flying wildlife (Calvert *et al.* 2013; Lambertucci *et al.* 2015; Arnett *et al.* 2016). The intersection of these policy issues and research areas represent a major conservation gap: targeted conservation of aerial species and habitats. We propose a new field, "aeroconservation," to integrate these important research areas and develop effective conservation tools for aerial habitats and biodiversity.

The skies are not simply "crowded" by human activities (Lambertucci *et al.* 2015) – they represent critical but undefined habitats that have little policy support. Long-distance migrants must fly a gauntlet of threats (Movie S1) through habitats that are not effectively protected, in part because these habitats are not clearly defined. Substantial effort has been made to conserve wildlife corridors and mitigate the barrier effects of infrastructure in terrestrial habitats. It is time to consider similar mitigations for aerial habitats. To meet the challenge of aeroconservation, we propose: (1) defining aerial habitat types clearly in international policy, (2) articulating responsibility for aerial habitat conservation in environmental legislation, and (3) targeting conservation research to support the urgent needs of threatened aerial species and habitats.

Explicit definitions for aerial habitat

Habitat definitions vary among jurisdictions, but are often based on those used by the IUCN. We therefore use the IUCN's current Habitat Classification scheme here, to illustrate our concern. The IUCN scheme recognizes only terrestrial and aquatic habitats (Figure 1B). A flexible third category, "Other," could be applied to aerial habitat but typically is not (e.g., 0.2% of 1,150 IUCN assessments of bat species list "Other" habitat, but do not refer to airspace). The IUCN assessment of the Globe Skimmer dragonfly (*Pantala flavescens*) considers 14 terrestrial habitat types, but does not list the airspace used for dispersal or intercontinental migrations (Hobson *et al.* 2012; IUCN 2015). Thus, status assessments based on the current habitat classifications consider only terrestrial and aquatic habitat types, incorrectly implying that aerial species rely only on their nonaerial habitats such as migratory stopovers, roosts, or nests for survival.

In contrast, many assessments of nonaerial species include habitats connecting nonbreeding and breeding

Table 1 Aerial threat typology and potential effects associated with anthropogenic impacts on aerial habitats

Threat type		Examples	Potential effects
Direct collisions	With stationary structures	Buildings, transmission lines, solar panels, fences	Increased mortality; injury
	With moving structures	Cars, trains, ships, moving turbine blades, aircraft	Increased mortality; injury Range expansions of microorganisms or seeds dispersed by aircraft.
Physical barriers	From stationary or moving structures	Buildings, vehicles, fences, aircraft	Physical fragmentation of aerial habitat Effective habitat fragmentation through barrier effects (e.g., through individuals avoiding high-traffic aerial routes) Modified airflow affecting dispersal of microorganisms, wind-dispersed seeds, ballooning spiders, etc.
Pollution	Chemical pollution	Emissions from manufacturing or mining operations Smoke billows from wildfires	Increased UV radiation through ozone depletion, particularly for high-altitude microorganisms Reduced visibility from particulate suspended in the air, leading to increased collision risk and disrupting celestial navigation
	Heat pollution	Emissions from transportation Solar flare at solar power installations Urban heat islands Heat plumes from cooling towers or wildfires	Physiological impacts on organisms exposed to toxic doses. Increased mortality Modified local climate
	Light pollution	Airport and urban lighting	Modified airflow patterns, affecting dispersal of microorganisms, wind-dispersed seeds, ballooning spiders, etc. Disrupted celestial navigation through reduction of visible starlight or through attraction toward artificial light Increased risk of collisions (i.e., for night-flying insects).
	Noise pollution	Vehicle and aircraft traffic, manufacturing activities, natural resource extraction	Disrupted acoustic communication (insects, birds, bats) Disrupted acoustic navigation (e.g., echolocating bats).

areas (IUCN 2015). As an illustration, the IUCN assessments of the European and American Eel (*Anguilla anguilla*; *A. rostrata*) both include habitat types used for “passage” from breeding to nonbreeding areas, analogous to the airspace used by migrating or dispersing aerial species. This approach acknowledges that boundaries among habitat types are ecologically permeable, and that most species rely on the protection of multiple habitat types for survival (Burke & Gibbons 1995; IUCN 2015).

The absence of aerial habitat recognition extends to international policy. For example, the Convention on the Conservation of Migratory Wild Species of Animals defines a species’ range as “the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.” Aerial habitats are excluded despite an explicit acknowledgment in the text that some species fly. Thus billions of birds, bats, insects, and other organisms rely on undefined and therefore unprotected aerial habitat to complete critical life processes.

To facilitate the incorporation of aerial habitats into habitat classification schemes, we propose habitat subdivisions for the troposphere (0–15 km altitude; Table S1,

Figure 2). Adopting these habitat definitions would allow more complete assessments of the habitat requirements of aerial organisms. We have based the proposed scheme loosely on the existing definitions of marine pelagic habitats, which are also three-dimensional and therefore challenging to define. Pelagic habitats are defined in part by the amount of light penetrating from the surface, and whether it is sufficient for photosynthesis. For aerial habitats, we defined biologically meaningful categories based on temperature and oxygen levels in the airspace.

Basoaerial habitat includes the airspace extending from the top of the adjacent terrestrial habitat, upward to an absolute altitude of 1 km, at which the temperature has dropped 10°C below that of the air directly above the adjacent terrestrial or aquatic habitat. Thus, movement within the basoaerial layer requires relatively little physiological adjustment to tolerate the increased altitude. The basoaerial layer will be thicker above grasslands or water bodies, and thinner above high forest canopies. Threats to organisms in basoaerial habitat include collisions with vehicles, aircraft, wind turbines and buildings (Baxter-Gilbert *et al.* 2015; Dai *et al.* 2015; Lambertucci *et al.* 2015), and light pollution (Longcore & Rich 2004). Mesoairial

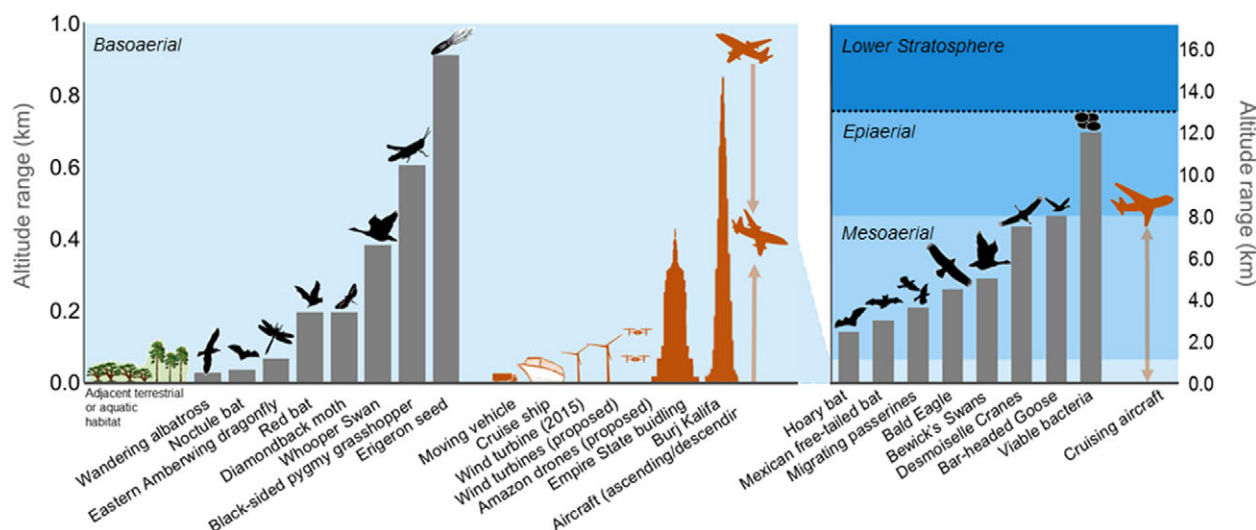


Figure 2 Aerial species fly a gauntlet of threats as they navigate fragmented aerial habitats. Gray bars in the left panel show flight altitudes reached by selected aerial species in the basoerial; altitudes of selected threats in each aerial habitat type are shown in red. The indicated (dashed line) altitude of the tropopause (upper limit of the troposphere) is approximate because the height of the troposphere varies according to latitude. The troposphere encapsulates the basoerial, mesoerial, and epiaerial layers (blue shading).

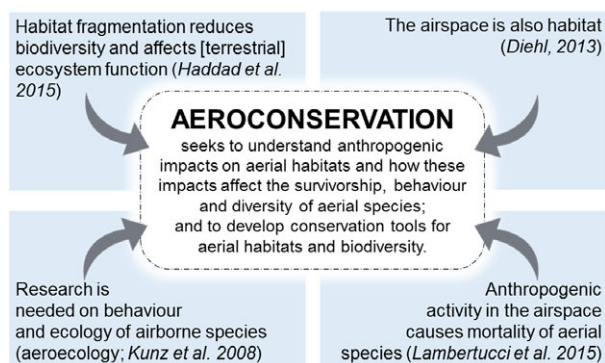


Figure 3 Aeroconservation integrates four key research areas related to habitat and species conservation, illustrated in this schematic by a major contribution from each area.

habitat (1–8 km altitude) is characterized by steadily decreasing temperatures ($-10^{\circ}\text{C}/\text{km}$) and decreasing oxygen levels as altitude increases. At approximately 8 km in altitude, there is insufficient oxygen for typical human survival (the so-called “death zone” described by high-altitude climbers; Krakauer 1997). Birds flying near or above the upper limits of mesoerial habitats exhibit physiological adaptations to these extreme conditions (Scott 2011). Anthropogenic threats in mesoerial habitats (1–8 km) include light pollution and collisions with aircraft. Finally, temperatures in epiaerial habitat plunge toward -56°C at the tropopause. The altitude of the tropopause, which defines the upper limit of epiaerial habitat, varies with latitude. Thus, epiaerial habitat begins at 8 m in altitude and rises to between 9 and approx-

imately 17 km in altitude, depending on latitude. Threats to species in epiaerial habitat include cruising aircraft and light pollution. Epiaerial microorganisms exhibit adaptations to high altitude (Yang *et al.* 2008), but their biology and diversity are not well understood (Womack *et al.* 2010).

Crowded skies: conflicting priorities in management of aerial habitats

Aerial species cross a range of altitudes (Scott 2011; Figure 2) and jurisdictional boundaries. Thus, aeroconservation will require interagency coordination within a jurisdiction, and transboundary cooperation among jurisdictions. This poses a challenge because ensuring human safety and economic growth can conflict with protection of aerial biodiversity. For example, the International Civil Aviation Organization encourages elimination of birds and bird habitat from airports because these species pose a threat to aircraft safety (Kelly & Allan 2006). The U.S. Federal Aviation Administration further recommends exclusion of habitat for “hazardous wildlife” within an 8 km radius of each airport’s air operations area. With over 13,000 airports in the United States, this area of exclusion not only impacts more than 2.6 million km^2 of terrestrial habitat – twice the total of all protected areas in the United States – but also more than 2.6 million km^3 of basoerial habitat through which planes ascend and descend, creating a network of high-risk areas for aerial organisms.

We also face novel conflicts between our desire to protect biodiversity in the Anthropocene, our need to mitigate climate change (in part to protect biodiversity), and our current, insatiable demand for energy. Renewable energy technologies developed to provide sustainable alternatives to fossil fuels can have substantial impacts on baso-aerial habitats. Wind energy installations increase mortality of local and migratory birds and bats, and solar energy installations that include solar power towers can incinerate flying birds or arthropods that cross the “solar flux” (Dai *et al.* 2015; Walston *et al.* 2016). Although the impact of each individual installation on threatened aerial species is likely negligible, the long-term, cumulative impacts of the growing number of installations may not be. Thus, decreasing the impacts of renewable energy on aerial wildlife represents a major challenge in aeroconservation. An associated challenge is the conversion of estimated mortality rates from these threats to projected, population-level impacts. Currently, such impacts are unclear because mortality estimates are highly variable among studies (Calvert *et al.* 2013; Arnett *et al.* 2016) and baseline data on population trends are unavailable for many aerial taxa (Baxter-Gilbert *et al.* 2015; Arnett *et al.* 2016).

The final ecological frontier?

The airspace also remains poorly represented in ecological and conservation research, despite recent interest in aeroecology (Kunz *et al.* 2008; Womack *et al.* 2010). To illustrate this on a broad scale, we conducted a Google Scholar search for the terms “aquatic habitat” and “terrestrial habitat,” which returned ~40,000 and ~13,000 records, respectively. In contrast, our search for the term “aerial habitat” returned 171 records, and only 31% of these used the term to describe habitat for aerial taxa (Figure 1C). We are not suggesting that there is no interest in the airspace among ecologists, or that it has never been considered. Instead, we hope to catalyze progress in aeroconservation by highlighting: (1) a critical, persistent gap in conservation biology and (2) an opportunity to extend paradigms and research methods from terrestrial ecology upward into the airspace. We explore one example below: the fragmentation of aerial habitat.

Fragmented skies – applying paradigms from terrestrial ecology to the airspace

Diehl (2013) proposed that aerial habitat could also be “fragmented,” but the implications of aerial habitat fragmentation have not yet been studied. Fahrig (2003) defined habitat fragmentation as the “breaking apart of

habitat,” a process that can cause chronic changes in species diversity and ecosystem function (Andren 1994; Lindenmayr & Fischer 2013; Haddad *et al.* 2015). Describing the airspace as “fragmented” may be counterintuitive to ecologists accustomed to visualizing this process in two-dimensional, terrestrial landscapes. Nevertheless, we propose that anthropogenic intrusions into aerial habitats can create barriers to movement, functionally dividing baso-aerial habitat into isolated fragments.

The multidimensionality of the airspace can complicate our perception of its connectivity. In discussing aerial habitat fragmentation and aeroconservation with colleagues, we have repeatedly heard the argument that flying wildlife can surely avoid obstacles as large as buildings. For organisms such as ballooning spiders or aerial microorganisms that do not control their aerial trajectory (Womack *et al.* 2010; Blandenier *et al.* 2014), obstacle avoidance may simply be impossible. However, we acknowledge that many obstacles encountered by aerial species appear easily surmountable from our perspective. For example, transmission lines are not *that* high – surely birds can simply fly over them? In many cases they do, but expecting aerial species to consistently increase flight altitude in response to habitat fragmentation discounts the constraints of the altitudinal niches to which they are adapted (Scott 2011, Finn *et al.* 2012), and may raise the potential energetic and fitness costs of flight. Exposure to aerial predators and energetic costs of flight may increase with flight altitude, especially for species that are not adapted to high-altitude gliding (Niskanen *et al.* 2014), while increased altitude also increases the length of the total flight path. The challenges of obstacle avoidance in the airspace are clearly illustrated by the millions of aerial vertebrates and arthropods that collide with anthropogenic features every year.

As a thought experiment, imagine a population of passerine birds (or damselflies, or hemipterans). Picture a species that can meet its habitat requirements in an urban area, and that typically flies within a few meters of the ground to reduce energetic costs of flight (Finn *et al.* 2012), or to avoid predation. In urban areas, buildings that are taller than the preferred flight height of this species create functional barriers, analogous to those documented in terrestrial species that avoid roads that they are physically able to cross (D’Amico *et al.* 2016). Our hypothetical aerial species can fly around buildings where gaps exist, but this increases the distance of their journey from one point to another, potentially increasing predation risk and energetic costs, and further decreases the functional connectivity of their habitat.

Aeroconservation can benefit not only from the paradigms of terrestrial ecology, but also the tools. For example, connectivity analyses could identify critical

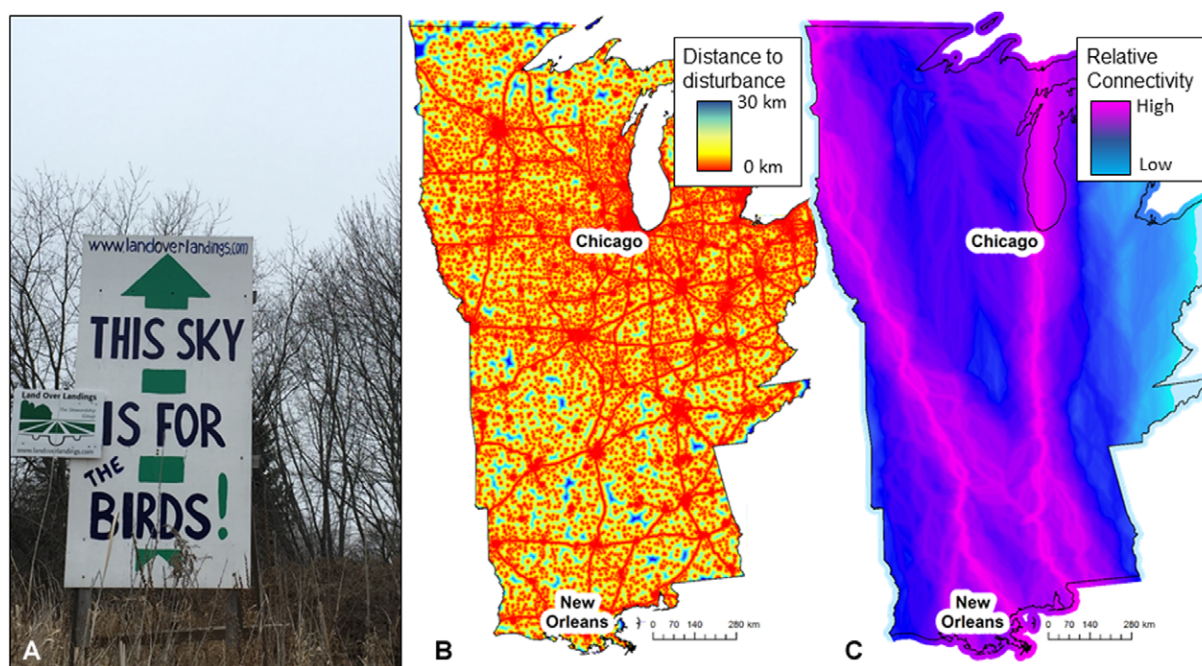


Figure 4 Conservation of aerial species requires protection of aerial habitats. There is growing awareness of the need to conserve airspace for wildlife, illustrated here by a sign in Ontario, Canada, that was posted in response to a proposed airport (A). Yet, conservation policy lags behind public awareness, limiting effective management of aerial habitats (Table 1). Tools used to quantify fragmentation of terrestrial habitats can also be used for the conservation of airspace, such as (B) linkage maps (Koen *et al.* 2014). Here, we quantify aerial movement corridors that have the lowest cumulative exposure to aerial habitat fragmentation in the Mississippi flyway. Most points in the eastern United States are <30 km from sources of fragmentation (B). As a result, baso-aerial habitat connectivity is low, shown in (C). We define fragmentation as proximity to airports, cities, highways, wind farms, or communication towers, although we acknowledge that further sources of aerial habitat fragmentation also exist. Termini for the corridors are the Yucatan Peninsula (Mexico), Hudson's Bay (Canada), and Wood Buffalo National Park (Canada), approximating avian migration through the United States and Canada. See online supplemental material for further details of this analysis.

corridors for aerial habitat connectivity, an approach we illustrate in Figure 4. Such corridors could be overlaid with habitats essential to terrestrial or aquatic habitat connectivity, allowing identification of “connectivity hotspots.”

In addition to anthropogenic impacts on aerial vertebrates and arthropods, potential human impacts on microorganisms adapted to aerial habitats provide rich research opportunities (Yang *et al.* 2008; Womack *et al.* 2010). Selective pressures on aerial microorganisms are likely altered by climate change, pollution, and human activity. Shifting temperature or precipitation patterns could affect survival of aerial microorganisms, potentially altering community structure. Altered wind patterns and aircraft movements could influence microorganism dispersal, modifying the biogeography of aerial microorganisms with unpredictable effects. Although we consider it unlikely that the facilitated movement of aerial microorganisms would cause a major ecological catastrophe, the rapid increase in emerging infectious diseases (Jones *et al.* 2008) serves as an illustration that invasive microorganisms can have unpredictable effects on naïve ecosystems.

Reaching for the sky

Effective aeroconservation requires effective solutions and tools for the conservation of aerial habitats and biodiversity. Substantial efforts are already underway, supported both by the development of new technologies, and the implementation of common-sense solutions. These include installation of new types of window glass that are less likely to cause bird collisions, and mandated temporary shut-downs of wind energy installations during peak bird or bat migration periods. However, these efforts are largely limited to local mitigation of collision-based impacts on particular taxa. The recognition of aerial habitats now needs to be translated into policy, qualifying the habitats themselves for legal protection where necessary.

Flying aircraft or UAVs at low altitudes is often prohibited over some protected areas, typically to protect terrestrial species from disturbance (e.g., Otto *et al.* 2003). Such rules could be extended to protect aggregations of aerial species, and dynamic aerial reserves have been proposed to protect aerial foraging or migratory habitat (Diehl 2013; Lambertucci *et al.* 2015). While we echo

the call for protected aerial reserves, we argue that it is premature until aerial habitats are acknowledged in policy and legislation, and until the extent of legislative influence into aerial habitat is clarified (Lambertucci *et al.* 2015; Linchant *et al.* 2015). In many countries, legislation such as the U.S.A. Clean Air Act addresses the abiotic components of air quality. These types of legislation could serve as a platform to provide legal protection to aerial biodiversity. Similarly, legislation governing terrestrial and aquatic conservation (e.g., the Canadian Species at Risk Act) could be modified to include aerial habitats where required for species protection.

We acknowledge that there are substantial logistical challenges associated with aeroconservation, and we are hopeful that new technologies will emerge to meet them. For example, radar can detect mass migrations or significant ephemeral concentrations of prey for aerial insectivores (Farnsworth *et al.* 2015), enabling habitat protection when necessary and allowing human use at other times (dynamic aerial reserves). Stable isotope analyses and the increasing miniaturization of biologging tools allow identification of migratory and dispersal pathways for an increasing diversity of airborne organisms (Fraser *et al.* 2010; Stanley *et al.* 2015).

Building effective strategies for aeroconservation will not be simple or fast. It will require transboundary partnerships and creative collaborations among legislators and policy makers, conservation practitioners, researchers, and the public. We invite you to join us in lifting our conservation tools up off the ground, and developing effective protection for the thousands of species with which we share the skies.

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Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web site:

The following supplementary material is available for this article:

Movie S1. This material is available as part of the online article from: <http://www.blackwell-synergy.com/doi/full/10.1111/j.1755-263X.2008.00002.x>.

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Extending the Habitat Concept to the Airspace

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Extending the Habitat Concept to the Airspace

3

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Abstract

Habitat is one of the most familiar and fundamental concepts in the fields of ecology, animal behavior, and wildlife conservation and management. Humans interact with habitats through their senses and experiences and education to such a degree that their perceptions of habitat have become second nature. For this reason, it may be difficult at first to accept the airspace as habitat, an area that is invisible, untouchable, highly dynamic, and its occupants difficult to see. Nonetheless, the habitat concept, by definition and in practice, applies readily to the airspace. Some ecological and behavioral processes including habitat selection, foraging, and reproduction are operational in the airspace, while others, particularly those mediated by resource limitation such as territoriality, are likely uncommon if present at all. The behaviors of flying animals increasingly expose them to anthropogenic hazards as development of the airspace accelerates. This exacerbates the need to identify approaches for managing these human–wildlife conflicts in aerial habitats, especially where human safety or at-risk populations are concerned. The habitat concept has proven useful in shaping environmental law and policy to help

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mitigate these conflicts. It remains to be seen whether current law can bend to include a more expansive concept of habitat that includes the airspace.

1 What Is Habitat?

Consider an organism moving through a vast and apparently featureless yet dynamic fluid medium. Its behavioral and physical phenotype is designed for life in this medium, and its survival contingent upon its ability to seek out favorable currents in which to move about, find food, sleep, and avoid predators. This might describe the rudimentary natural history of countless pelagic fish species and we would not hesitate to call the open water they occupy a habitat. This might also describe the natural history of numerous bird species and the airspaces they occupy, yet most would claim a bird in flight is not in habitat. The notion of habitat is firmly linked to terrestrial or aquatic places, yet nothing about the ecology of habitats excludes the airspace which shares many ecological parallels with its terrestrial and aquatic counterparts.

Ecologists have struggled to define habitat. Linnaeus (1754), his mind on plants, informally referred to “the native places” (where one finds a given species of plant) as “station,” his nascent term for habitat. This concept was developed with principles that apply to sessile plants and which have continued to influence scientific understanding of habitat; however, highly mobile organisms defy our attempts to discretely categorize their habitats by plant communities (e.g., forest, grassland) and/or geological formations (e.g., river, alpine). Linnaeus’ general perception of habitat remains widely accepted today, even as a persistent dissatisfaction surrounds a precise definition. Odum’s (1959) definition of habitat as “the place an organism lives, or where one would go to find it” is perhaps the most familiar to ecologists. A few years later, perhaps dissatisfied with this and other definitions, Elton (1966) stated that, “definition of habitat, or rather lack of it, is one of the chief blind spots in zoology,” and efforts to define it continue. Many of the more generalizable definitions of habitat offer some reference to occupancy or resources that promote occupancy (e.g., Hall et al. 1997; Dennis et al. 2003, 2006; Morrison et al. 2006). Of these, Morrison et al.’s is among the more precise and generalizable, calling habitat an “area with a combination of resources and environmental conditions that promotes occupancy by individuals of a given species that allows individuals to survive and reproduce.” More context specific definitions usually involve additional criteria and represent special cases and are therefore less broadly applicable to the life history of organisms as a whole (e.g., by requiring the presence of vegetation). The airspace satisfies criteria set forth in these and other broadly defined conceptions of habitat in that it contains resources that promote occupancy. These include food, mates, opportunities to avoid predators, and a low friction, relatively uncluttered medium enabling efficient travel. The idea that the airspace should be considered habitat (Diehl 2013) is gaining acceptance and is a fundamental tenet of the emerging field of aeroecology (Kunz et al. 2008).

It was unclear how long airborne resources could sustain life during flight, particularly of a vertebrate, until Alpine and Common Swifts (*Tachymarptis melba* and *Apus apus*) were documented remaining aloft for several months without landing (Liechti et al. 2013; Hedenström et al. 2016). The airspace alone provided all the resources required to sustain the swift's biology, including food and sleep. Much as a terrestrial amphibian uses the water only to breed, these swifts appear to need land only to support their nests and eggs. (The word "amphibious" means "leading a double life" in Greek, and had early taxonomists not applied this word exclusively to animals that exist between the land and water, we might also label swifts as "amphibious.") In addition, recent research shows that the microscopic biological flotsam of the air is composed not only of inert cells and bits of feathers but also of life: pollen, bacteria, fungi, and protists (Deprés et al. 2012). The airspace is teeming with microbial communities that spend generations aloft before settling back to the surface after metabolizing, undergoing selection, and reproducing (Womack et al. 2010). Such phenomena challenge biologists to accept that the airspace is habitat. The alternative—that such organisms are sustained through large proportions of their lives outside habitat—suggests that the current habitat model be rejected altogether, although it is unclear what might replace it (Dennis et al. 2003). A revised understanding of habitat that includes the airspace offers a new context to consider the habitat concept. Relative to its terrestrial and aquatic counterparts, the airspace is highly dynamic yet presumably lacking in much of the structure and organizational complexity that comes with higher plant and animal abundances, species diversity, and physical substrates typically associated with habitat.

Despite a strong ecological basis that the airspace should be considered habitat, the notion remains counterintuitive and references to the airspace as habitat are vague where they exist at all (e.g., Cadenasso et al. 2003). Through formal education and personal experience, we learn about habitat strictly in terms of land and water. Indeed, among all vertebrates and macroinvertebrates, humans and a relative handful of other species are actually unusual for their inability to fly. Our perceptions shape how we understand and apply the habitat concept in ways that may have consequences for wildlife conservation and management and the education of future generations.

Early hunter-gatherer societies likely cultivated a deep understanding of the natural history of plants and animals, so the awareness of habitat (in the sense that certain resources can be found in certain places at certain times) predates scientific recognition and definition by millions of years. The knowledge of when and where to gain access to resources was critical to survival throughout evolutionary history and therefore linked to resources that were accessible (that is, by land and water, but seldom through the air). As such, perceptions of habitat may be deeply ingrained, possibly even codified in our DNA, and indeed, a genetic basis for habitat preference is well documented among some species (Jaenike and Holt 1991).

Evolution shaped our senses for survival on land and water to a degree that almost certainly influences our perceptions of what constitutes habitat, so considering the airspace as a habitat poses several challenges. The airspace is largely

invisible as are many of the features that give it structure (e.g., wind, temperature, pressure, geomagnetism). Even those features which are detectable to humans through nonvisual channels (e.g., wind) likely do not carry the same meaning as they do with flying animals. We lack certain sensory receptive organs (e.g., cilia) and the neurological infrastructure that interprets signals from those organs. Moreover, certain characteristics of aerial habitat seem to defy common sense. That a habitat could be invisible or is capable of being present one moment and gone the next is far outside most personal and professional experiences. For example, the convective thermals used by raptors represent aerial habitats that are both invisible and highly ephemeral. Despite these limitations, extensions to our senses offered by access to the airspace through manned and unmanned aircraft and advances in remote sensing technology are beginning to reveal the intricacies of an ecological airspace (Helms et al. 2016; Bridge et al. 2011; Robinson et al. 2009).

2 The Nature of Aerial Habitat

The term “aerial habitat” has been used more in reference to plants than flying animals, specifically in relation to the phyllosphere where the ecology of epiphytes and other arboreal organisms plays out, usually high in the trees (e.g., Lindow and Brandl 2003). What constitutes aerial habitat in the context of aeroecology remains a somewhat open question. In atmospheric terms, aerial habitat includes those parts of the troposphere where aerobiological activity occurs, within the planetary boundary layer and lower parts of the free atmosphere (Davy et al. 2017). Typically, most activity occurs within the first several hundred meters above ground level. In biological terms, aerial habitat occurs when and where an organism’s presence indicates use of an airborne resource (e.g., for food or as a movement corridor).

Many properties of the airspace give rise to variability in the structure of aerial habitat. These include wind speed and direction and their diverse manifestations (e.g., convection, shear, turbulence); various forms of moisture including humidity and cloud; precipitation; temperature; pressure and air density (see Chap. 2); magnetic and gravitational field strengths; odor; light conditions (e.g., polarized light, also Van Doren et al. 2017); and natural and anthropogenic gases, chemicals, and particulate matter. Other properties that may not be considered structural in relation to the airspace itself but are nonetheless influential include aerial predators and prey, topography, and anthropogenic structure (Lambertucci et al. 2015; Shipley et al. 2017). These characteristics influence the likelihood of occupancy for a given species within the occupiable airspace, which has vague upper and lower boundaries.

Animals occupying aerial habitats respond primarily to conditions aloft and are often behaviorally decoupled from land and water surfaces. However, at low altitudes, aerial habitat segues into terrestrial or aquatic habitat and animal behavior aloft is increasingly influenced by surface features. A large literature exists concerning the ecology of habitat interfaces, usually between patches of vegetation (Cadenasso et al. 2003). Where obvious transitions between the primary physical

habitat types (land–water, land–air, air–water) have received some attention, the ecology of land–water interfaces dominates. Land–air and air–water interfaces are considered hard boundaries with comparatively abrupt transitions. Research on these boundaries focuses primarily on the physics and chemistry of gas exchange and microbial communities (Belnap et al. 2003) with little attention given to higher trophic levels. In these areas, the airspace may be a functional extension of surface terrestrial or aquatic habitat rather than aerial habitat *per se*, and time spent aloft by vertebrates and macroscopic invertebrates can be brief and usually occurs irrespective of conditions in the interstitial airspaces (e.g., nectar feeding bats, terrestrial territoriality in birds).

As altitude increases, conditions supporting buoyancy and powered flight diminish and the upper limit for a particular species is determined by the extent to which its behavior, anatomy, and physiology have adapted to decreasing air density, temperature, oxygen, and increasing radiation. Where these upper boundary conditions lie for most species is unknown owing to the difficulty of tracking small organisms. Winds are capable of lifting and dispersing invertebrates, seeds, and numerous microorganisms including pollen, spores, and fungi to altitudes exceeding 50 km (e.g., Drake and Reynolds 2012; Westbrook and Isard 1999; Womack et al. 2010). Among high-flying vertebrates, the bar-headed goose (*Anser indicus*) may be the most well-studied and most extreme. These geese routinely reach altitudes exceeding 6000 m when transiting the Himalayan Mountains of the Tibetan Plateau (Hawkes et al. 2011, 2013), although these geese and other species have been documented at higher altitudes, including a Ruppell's Vulture (*Gyps rueppellii*) which was struck by an aircraft at >11,000 m (Laybourn 1974). At 6000 m, air density and the partial pressure of oxygen is approximately half that at sea level under standard atmospheric conditions. Therefore, oxygen availability to power aerobic flight is considerably reduced just as the demands of flight increase as a result of reduced lift from low air density. Despite these constraints, bar-headed geese are not known to benefit from supportive winds in their trans-Himalayan migrations, instead relying on physiological adaptation to altitude and favoring calm atmospheric conditions (Hawkes et al. 2011).

3 Ecology of the Airspace

Terrestrial and aquatic habitats are home to a long list of ecological and behavioral processes including predation, competition, reproduction, and territoriality. The extent to which many of these processes are operational in the airspace is poorly known and, even if present, may be uncommon, ephemeral, or difficult to detect and observe. Certain behaviors are unambiguously at work including habitat selection, reproductive behavior, and predator–prey interactions. Others, especially those that partition resources such as exploitative competition and territoriality, even when operational, may be too short-lived or ambiguous to be useful.

Persistent resource defense territoriality generally occurs only when resources are defendable, limited, and predictable. In most cases, the energetic cost of

occupying the airspace may be high relative to that in terrestrial and aquatic habitats as the airspace has no substrate and offers little unassisted buoyant support (at least for most vertebrates). Flying animals must power movement using their own energy reserves or by harvesting energy conveniently available from the wind (Sachs 2016; Pennycuik 1998), either of which limits the defendability of airborne resources. Also, most properties of the airspace that might serve as airborne resources (e.g., favorable wind, airborne invertebrates as food) may be both unpredictable and effectively unlimited at any given place and time. As a result, resource defense territoriality of airspaces is likely either uncommon or assumes an alternative form than that which has been previously recognized. For example, instead of defending a particular static area bounded in three dimensions, perhaps territoriality manifests as competition in space relative to other individuals (e.g., location in a flock or breeding swarm), which may be more spatially dynamic than the traditional view of a territory. Flying animals, particularly some invertebrates, do use the airspace to defend underlying terrestrial or aquatic habitats and their associated resources. We regard this use of airspace as an extension of surface territoriality as opposed to strict defense of an aerial resource.

Like other difficult-to-study habitats, the airspace offers a relatively unexplored context for examining the generality of ecological theory. If a given ecological process is present because the airspace and organism meet known criteria required for that process to be operational, then the durability of that concept is reinforced. Alternatively, an ecological process that is present despite the absence of expected criteria may call the generality of theory into question. Similar reasoning applies for ecological processes not present in the airspace. We discuss the occurrence of some of these ecological processes to emphasize the point that the airspace functions as habitat and that the ecology of the airspace in many ways differs little from the ecology of the land and the water.

3.1 Habitat Quality, Use, and Selection

Aerial habitats, like their terrestrial and aquatic counterparts, vary in quality in ways that influence survival and reproductive success (Jones 2001). Organisms react to this variation, although reactions differ among species. Microorganisms may be limited in their ability to “select” habitat, but distinct microbial communities exist in the airspace. Community composition is influenced by adjacent source terrestrial/aquatic habitats (Bowers et al. 2011; Brodie et al. 2007), weather (Harrison et al. 2005), and microhabitat differences in the airspace (Womack et al. 2010). Winds aerosolize microorganisms upward from the land (especially from plants; Väitilingom et al. 2012) or water and then can horizontally transport the larger microbes and pollen, sometimes for long distances (e.g., from the Sahara to the Alps; Meola et al. 2015), mixing communities. Once they have been passively dispersed, species differ in their ability to survive extreme temperature shifts, radiation, osmotic shocks, and desiccation (Joly et al. 2015), conditions that vary spatially and temporally (Womack et al. 2010). Eventually microorganisms return

to earth due to wind drift, sedimentation, or precipitation (Deprés et al. 2012). Adaptations to the harsh life of the atmosphere (e.g., pigments to reduce the stress from radiation, cold shock proteins; Joly et al. 2015) have likely contributed to the successful inoculation of life in some of its most extreme aquatic and terrestrial habitats (e.g., polar ice sheets; Gonzalez-Toril et al. 2009).

In contrast to microorganisms' passive habitat use, flying animals often select habitats because they provide resources in support of some critical behavior such as foraging, reproduction, or migration. For example, migrating birds choose routes and weather conditions (e.g., Fig. 3.1) that allow them to manage the often conflicting goals of minimizing travel time, energy expenditure, and risk (Alerstam and Lindström 1990); these birds often respond to wind support more than temperature and humidity when selecting the routes and altitudes for their movements (Liechti et al. 2000). For instance, to assist their long-distance migrations over the ocean, bar-tailed godwits time departures from Alaska to coincide with weather likely to produce tailwinds (Gill et al. 2009). In contrast, some migratory insects choose their altitudes primarily based on atmospheric turbulence rather than tail wind assistance (Aralimarad et al. 2011). Diurnal soaring birds, such as the golden eagle, restrict their flight to a narrow band of low-altitude airspace as wind speeds increase (Lanzone et al. 2012). These and other forms of aerial habitat selection appear to be non-density dependent, since the resources being selected (e.g., favorable winds) are not thought to be limiting so as to create conditions for competitive exclusion.

A feature of habitat selection that distinguishes it from mere habitat use is that it results from the relationship between the costs and benefits of occupancy. For instance, during nocturnal migration, birds appear to select the lowest altitude where they first encounter supportive wind conditions even if "better" winds occur at higher altitudes (Mateos-Rodríguez and Liechti 2012). Presumably birds are unwilling to cross a cost barrier to seek out potentially more advantageous flying conditions suggesting that frequent altitude changes in search of optimal flying conditions may be costly (but see Bowlin et al. 2015).

3.2 Reproduction

The airspace provides many resources supporting reproduction, ranging from the concrete (space for asexual division, gamete dispersal, or copulation; protection from predators) to the abstract (a clear channel for communicating with potential mates). Many plants are pollinated through the action of the wind either directly or indirectly by affecting the flight paths of their pollinators. Bacteria have shorter reproductive cycles than their typical residency times in the air column and may have multiple generations between their ascents and descents (Burrows et al. 2009; Sattler et al. 2001).

Most aerial reproductive behavior in flying animals occurs among invertebrates. Insect mating swarms can take many forms. Under seasonally appropriate weather conditions, Diptera form highly localized mating swarms and may maintain

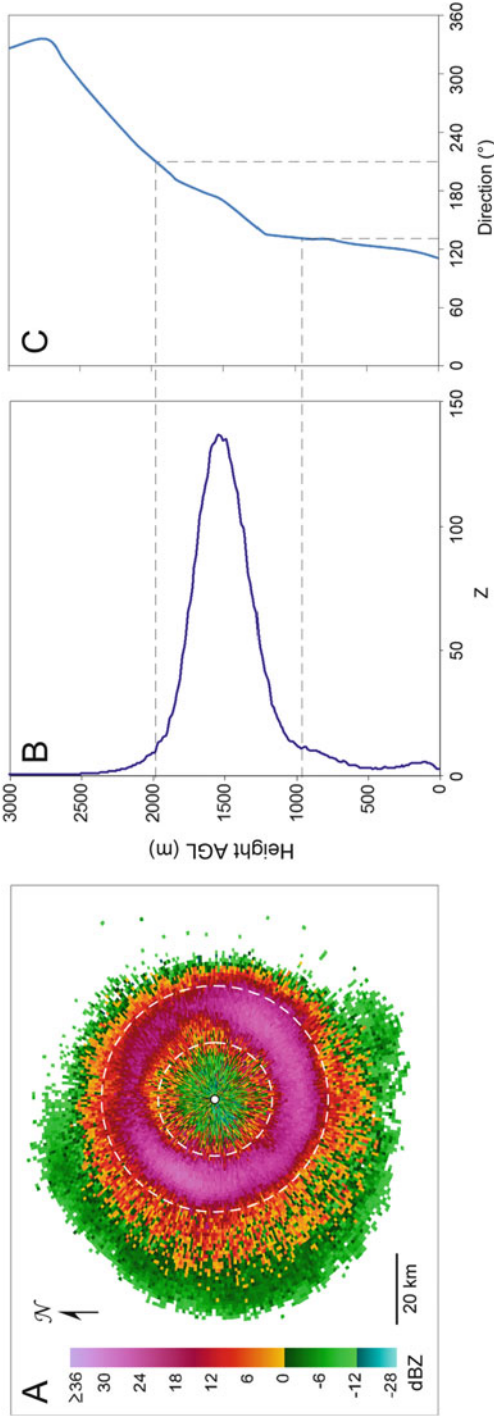


Fig. 3.1 (a) Weather radar reflectivity at 3.51° antenna elevation from Brownsville, TX (KBRO) showing layered bird migration on 12 May 2006, 2330 CST. A white dot shows the location of the radar. (b) The vertical profile of reflectivity computed from the radar reflectivity volume scan on this day, and the (c) associated wind profile showing the direction from which the wind was blowing that day at 1900 CST. The dashed circles in (a) represent 16 and 32 km range rings and correspond to the ~1000 and ~2000 m height AGL dashed lines, respectively, in (b) and (c)

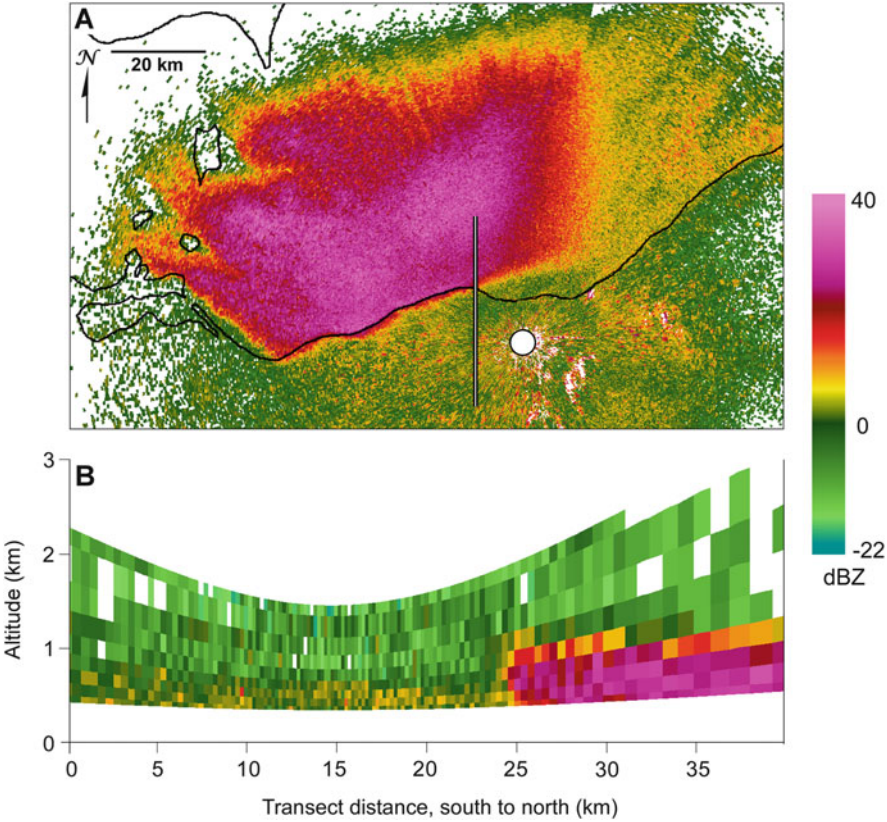


Fig. 3.2 Emergence of *Hexagenia* mayflies from western Lake Erie on 18 June 2015, 2204 CST as captured by Cleveland, Ohio weather radar, KCLE (white dot). Radar reflectivities (dBZ) show varying mayfly densities aloft. The line segment in the upper image (a) west of the radar identifies the south-to-north cross section through the radar’s volume scan shown below (b)

consistent locations with respect to conspicuous “swarm markers” in the landscape (e.g., a geographic feature or patch of sunlight; Sullivan 1981). Alternatively, mating swarms may occupy enormous areas (Dublon and Sumpter 2014). The mayfly swarming event depicted in Fig. 3.2 occupies more than 3000 km² of Lake Erie’s surface, at least 12% of its total area. Emergence generally occurs when both water temperatures exceed 20 °C (Corkum et al. 2006) and winds are moving toward the shore, as molting occurs on land after emergence; therefore, aerial habitat selection affects reproductive timing. Aerial reproductive swarming of this magnitude also serves as predator defense, as the massive pulse of food for local predators overwhelms the predator community to the point of satiation (Sweeney and Vannote 1982; but see Allan and Flecker 1989). Aerial copulation is common among invertebrates (e.g., Scott 1972; Allan and Flecker 1989), but appears to be rare among vertebrates. However, there is some evidence that red bats

(*Lasiurus borealis*) and hoary bats (*Lasiurus cinereus*) copulate in flight (Cryan and Brown 2007).

The airspace is an important area for mating displays across taxa. Aerial lekking has been described for some insects (e.g., Lepidoptera, Andersson et al. 1998). Eusocial insects, particularly the Hymenoptera and Blattodea (e.g., termites), often make nuptial flights, although many of these occur close to the ground, where the role of the airspace may be limited (e.g., Dial and Vaughan 1987). Some bats may respond to turbulence when choosing mating display locations; this hypothesis has been suggested as an explanation for why bats congregate in the lee of wind turbines, a behavior which unfortunately often results in mortality (Cryan et al. 2014). Many birds have song flights and elaborate aerial displays, including the roding display of the Eurasian woodcock (*Scolopax rusticola*; Hoodless et al. 2008), the dive and shuttle of Anna's hummingbird (*Calypte anna*; Stiles 1982), and the sky dancing of the Montagu's harrier (*Circus pygargus*; Arroyo et al. 2013).

In addition to visual displays, many acoustic and olfactory breeding signals are transmitted through the air, including an assortment of vocalizations, stridulations, airborne pheromones, and pollinator attractors. Many of these signals evolved characteristics that allow them to travel efficiently through the air to receivers, taking forms that propagate with minimal degradation (Morton 1975). The signals themselves compete for airspace, or at least clear transmission through it, by varying in ways that minimize overlap within a community (Nelson and Marler 1990). This variation can either be an adaptive characteristic of a species- or population-specific signal (e.g., a distinct floral scent; Wright and Schiestl 2009) or the result of an individual modulating its signal in real time in response to current acoustic or olfactory "clutter" (e.g., modulating a bird song frequency to avoid overlap with noise; Goodwin and Podos 2013).

3.3 Foraging, Competition, and Resource Partitioning

The airspace supports considerable foraging habitat for many aerial specialists and obligate insectivores (e.g., swallows, flycatchers, insectivorous bats). Other flying animals depend upon predictable seasonal resource pulses (Yang et al. 2008). Usually these occur as the invertebrate mating swarms described above, but some aerial predators have adapted to exploit seasonal songbird migrations as a food source. The giant noctule bat (*Nyctalus lasiopterus*) will opportunistically switch diets to prey almost exclusively upon migrating songbirds (Popa-Lisseanu et al. 2007; Fukui et al. 2013). Eleonora's falcon (*Falco eleonorae*) also takes migrating songbirds in flight and appears to synchronize its reproduction with the seasonal availability of this food source (Wink and Ristow 2000). Similarly, peregrine falcons (*Falco peregrinus*) and red-tailed hawks (*Buteo jamaicensis*) hunt outside the large breeding colonies of insectivorous Brazilian free-tailed bats (*Tadarida brasiliensis*; Lee and Kuo 2001), which in turn prey on migrating noctuid moths. This sets up an aerial tritrophic interaction (raptors > bats > noctuid moths) that occurs each summer and is mediated by abiotic conditions in the airspace that

determine the favorability of conditions for moth migration (McCracken et al. 2008).

Intra- and interspecific competition over aerial food resources also occurs in the airspace, although the difficulty in defending airborne resources together with limited niche overlap among competitors reduces the likelihood that such competition will arise (Mills 1986). Bats and common nighthawks (*Chordeiles minor*) have been observed in competitive interaction over insects at a human light source (Shields and Bildstein 1979). Altitudinal resource partitioning is hypothesized to explain differences in niche breadth among some avian aerial insectivores, wherein physical adaptations have allowed certain swift species to forage at higher altitudes and take advantage of larger and higher flying insects, thus reducing competition with swifts at lower altitudes (Collins 2015). Several species of desert bats differed in the locations and timing of foraging bouts over water sources in the Central Negev Highlands of Israel, suggestive of aerial resource partitioning due to competition for a shared insect resource (Razgour et al. 2011).

4 Anthropogenic Impacts

Even as human encroachment into the airspace advances, it is difficult to know whether certain taxa experience non-compensatory levels of mortality (Drewitt and Langston 2006; Kunz et al. 2007) which complicates how development of the airspace can be managed to reduce impacts to flying animal populations. In this context, recognizing the airspace as habitat may have meaningful consequences for species conservation and management. The habitat concept is necessarily central to international species-based environmental law (e.g., US Endangered Species Act and National Environmental Policy Act, EU's Habitats Directive and Birds Directive) and influences how biologists that work for regulatory agencies interpret the law in practice. That many parts of the airspace fall within the habitat concept could change the scope of application of these laws to include vast new areas. However, regulatory references to the airspace as habitat are scant; we could find only one and it argued against recognizing the airspace as habitat. In the context of a review of New Zealand's Resource Management Act which recognizes protection of significant habitats, Wallace (2007) specifically argues against characterizing flight corridors or migration routes as habitat because those areas are "disconnected from breeding and feeding spaces." Aside from being imprecise (many organisms do breed and feed in the airspace, even if the waterbirds considered by this Act do not), the point is also irrelevant since breeding and foraging are not required characteristics of habitat and are not the only habitat-related behaviors critical to survival (e.g., hibernating, roosting; Cryan and Veilleux 2007, Mehlman et al. 2005). Even if waterbirds were the only taxon of concern for a regulatory agency, they repeatedly travel similar routes between feeding and roosting locations (Everaert and Stienen 2007; Cox and Afton 1996), so any anthropogenic disruption in their path could have negative consequences on their populations by increasing mortality and decreasing reproductive success. Recognizing the airspace as habitat

is critical for species conservation and management that consider entire life histories (Davy et al. 2017).

4.1 Threats to Aerial Organisms

The actions of society through development, commerce, transportation, policy, and resource extraction increasingly result in conflicts with flying animals that have impacts ranging from the safety of airline travel (Dolbeer and Wright 2008) to the price of corn (Boyles et al. 2011). The increasing construction of tall structures may result in long-term disruptions of aerial habitats, including wind turbines (Arnett et al. 2010); power lines (Martin 2011; Bevanger 1998); buildings, especially those using glass construction (Loss et al. 2014; Klem 1990); and some communications towers (Gehring et al. 2011; Gehring et al. 2009). One of the newest anthropogenic entrants to the airspace, unmanned aircraft systems (UAS), pose possible threats in that they may interfere with natural animal behavior and in other ways disrupt aerial ecosystems (e.g., Lambertucci et al. 2015). Current US federal guidelines allow UAS operations in all classes of airspace except those in the vicinity of airports (Class B; Federal Aviation Administration 2015a), but because proposed guidelines require operators to keep UAS within visual line-of-sight (Federal Aviation Administration 2015b), UAS use generally occurs relatively close to the ground within the region of most flying animal activity.

Anthropogenic development of the airspace creates novel challenges for flying animals, many of which are not adapted to flying in cluttered environments. Put another way, “perceptually [birds] have no prior for human artifacts such as buildings, power wires or wind turbines” (Martin 2011). In addition, not only may organisms lack the sensory capabilities to avoid development, but their senses may trick them into responding inappropriately to it. Ecological traps occur when rapid changes in the environment produce misleading cues about the quality of habitats. Based on these cues, organisms may select lower quality habitat which leads to lower survival or reproductive success, even though higher quality habitat may be available. Numerous examples of ecological traps have been documented for terrestrial habitats, and anthropogenic factors are usually responsible (Robertson and Hutto 2006; Schlaepfer et al. 2002). The airspace is no exception. Migrating birds drawn into circling illuminated communications towers, particularly those with guy wires, in low cloud conditions die in large numbers (Gehring et al. 2009; Larkin and Frase 1988). Under these conditions, airspace in the vicinity of lighted towers might be considered low-quality aerial habitat. Nonetheless, birds in these circumstances remain in flight, presumably because the hazy glow of a lighted tower in cloud is in some way attractive. Similarly, bats that die in the vicinity of wind turbines may select this aerial habitat, perhaps as a mating location or because turbines concentrate insects as food (Cryan et al. 2014).

Anthropogenic structures and machines in the airspace are not the only threat to aerial organisms. Chemicals and particulate matter as air pollutants also degrade aerial habitats, and the impacts of air pollution on animals in flight are poorly understood. Is the health of flying animals disproportionately affected owing to

their relatively high metabolic rates during flight? Does air pollution interfere with olfactory or visual cues necessary for foraging, reproduction, and orientation? Might pollution that impacts aerial invertebrates have a trophic effect on their aerial predators? Does extreme air pollution impede visibility enough to increase risk of collisions with structure? Does pollution interfere with the composition and metabolic processes of aerial microbial communities in ways that affect climate and human health?

Anthropogenic structures that intrude upon aerial habitats can be designed, refitted, or adapted to limit their impacts on flying animals. Communications towers can be designed with lighting and structural support that reduces collision risk (Gehring et al. 2009). Curtailment of wind turbines has been shown to reduce bat mortality (Arnett et al. 2010), and current research is exploring ultraviolet (UV) illumination of turbines as a way of dissuading bats from approaching altogether (Gorresen et al. 2015). Combination camera/acoustic detection and deterrence systems are being explored as a means of reducing eagle mortality at wind facilities (Sinclair and DeGeorge 2016). A variety of markers are now available which increase the visibility of powerlines to birds in flight (e.g., Sporer et al. 2013). UV reflecting patterns on glass, which are visible to birds but not humans, may be effective at deterring birds from colliding with glass structure (Klem 2009).

Where technological deterrents are impractical or otherwise ineffective, the airspaces themselves may require protection. Airspace reserves may be needed to support the conservation of species as human development of aerial habitats continues and populations face compounding pressures across all phases of their life cycle (e.g., terrestrial habitat loss, mismatched phenology through climate change, predation and competition from nonnative species). Such reserves might focus on regulating development of the airspace near traditional movement corridors or in other areas where high densities of aerial organisms commonly occur or where species of concern are prone to fly (Diehl 2013; Lambertucci et al. 2015). Aerial reserves may be appropriate in areas where human–wildlife conflicts become a human safety concern or development presents a population-level risk to flying organisms or the ecological services they provide.

The preservation of aerial habitats may be quite different than traditional approaches for terrestrial and aquatic habitats. Most terrestrial and aquatic habitat preservation focuses on particular areas of concern and is intended to be continuous and long term, as disturbance can have lasting effects. In contrast, many human–wildlife conflicts are temporally dependent. Where animal use of aerial habitat is predictable, preservation may involve the timing of human activities rather than permanent restrictions on a particular area. For instance, proper lighting and curtailment of wind turbines when flying animals are most active can reduce or eliminate systematic impacts (Arnett et al. 2010; Duerr et al. 2012). Turbine curtailment could conceivably occur over even short timescales such as when fog or low cloud interferes with animals' ability to avoid structures (Kirsch et al. 2015). Many North American cities participate in seasonal lights-out programs, turning off the lights of large city buildings during peak bird migration times. These examples

illustrate how anthropogenic hazards to flying animals can be reduced by timing the use of airspaces to complement animal phenology.

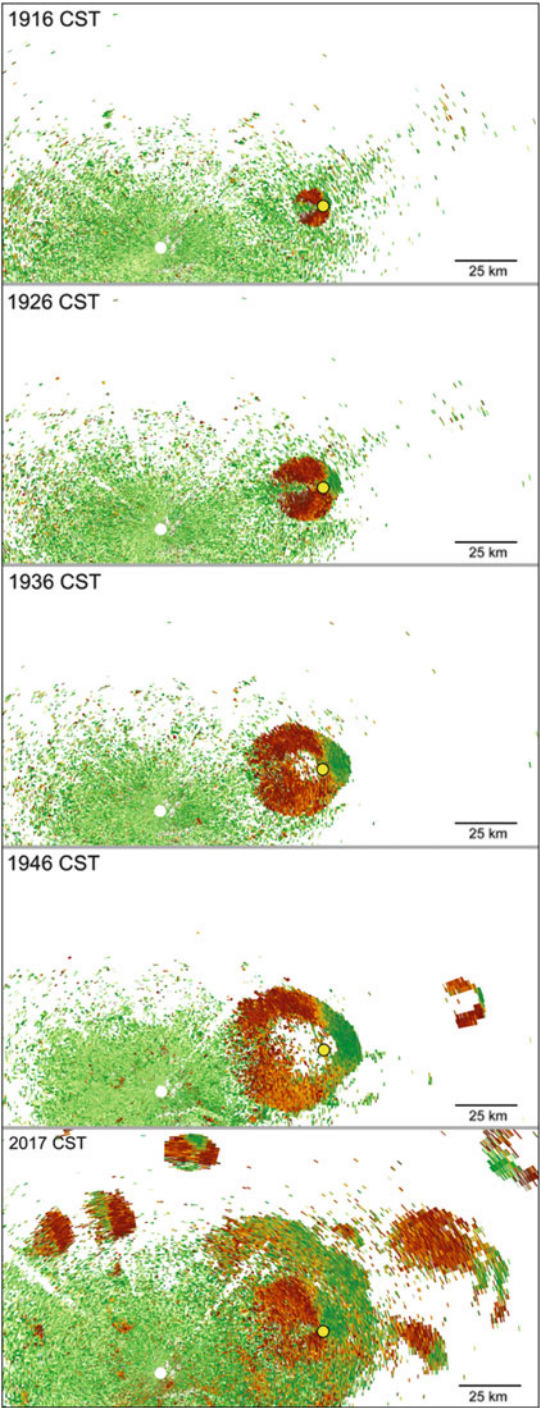
Brazilian free-tailed bats offer an interesting conservation case study. Brazilian free-tailed bats are migratory and roost during summer in caves across the southern tier of the continental USA, with exceptionally large concentrations in central Texas (Wilkins 1989). Bracken, Frio, and other caves in this region host summer maternity colonies containing millions of these bats; the colony in Bracken Cave is one of the largest single bat colonies in the world (McCracken 2003). In the evenings, they depart the caves *en masse* to forage on noctuid moths and other insects near the planetary boundary layer (Westbrook 2008; Fig. 3.3).

Conservation organizations acquired land to protect terrestrial habitat in the immediate vicinity of the cave entrance. Protecting these areas from human development indirectly offers overlying airspaces some associated protection by excluding potentially hazardous anthropogenic structures (e.g., wind turbines, communications towers) from the immediate area. Protection of Bracken Cave and its airspace preserves the phenomenon of mass exodus (*sensu* Brower and Malcolm 1991), the biological integrity of its populations (e.g., Allee effects, Langwig et al. 2015), the ecological services these bats provide to agriculture (Boyles et al. 2011; Davidai et al. 2015), and the educational opportunities afforded by these conspicuous movements (Pennisi et al. 2004). Even though Bracken and other caves in the region are occupied only half of the year (March through October), protecting the integrity of the cave itself from any form of development or even routine visitation is a year-round necessity as the cave represents a nonrenewable resource for bats. The immediate overlying airspace is also critical habitat as millions of bats transit this space when moving to and from foraging habitat. In contrast to the protection of the cave, aerial habitat in the vicinity of the cave could be considered renewable and its preservation seasonal.

The reserve concept is often oriented toward nonhuman species protection, but understanding and perhaps regulating airspace use with respect to flying animals has financial and human safety implications as well. From 1990 to 2007, bird strikes by civilian aircraft accounted for the overwhelming majority of monetary losses associated with wildlife strikes (~\$125 to ~\$625 million annually in the USA) and resulted in 10 fatalities and 164 injuries (Dolbeer and Wright 2008). After US Airways Flight 1549 struck a flock of Canada Geese (*Branta canadensis*) and crash landed into the Hudson River, there were calls for improved monitoring of bird movements (Marra et al. 2009).

Bird-avoidance models exist that combine both historic and current data to identify times and places of increased risk of bird strikes for low-flying aircraft (Shamoun-Baranes et al. 2008). These warning systems forecast hazards using near real-time feedback from biological data collected from weather radar. However, classification algorithms designed to identify and extract biological data from weather radar data streams are rudimentary at best. Currently, no published algorithms exist that can differentiate among types of biological echoes (i.e., taxa) on weather radars, although some effort has been made to distinguish biological from nonbiological radar echoes (Park et al. 2009; Bachmann and Zrnić 2007).

Fig. 3.3 Series of weather radar sweeps showing the evening exodus of Brazilian free-tailed bats from Frio Cave (yellow dot) near Concan, Texas, during the evening of 22 July 2014. The white dot shows the location of the weather radar (KDFX) at Laughlin AFB, Texas. Colors show differential phase, a radar polarimetry measure used here because it best distinguishes emerging bats (browns, yellows, and dark greens) from other radar bioscatterers (light green). The first four sweeps are separated by 10 min; the fifth sweep occurred 30 min after the fourth and shows the movement more developed and bats emerging from other roosts in the vicinity



Identifying radar echoes to taxon is critical to the operational usefulness of any near real-time warning system, since large birds pose the greatest hazard to manned aircraft (Dolbeer and Wright 2008). Reliable information on the passage of large birds would enable responders to manage aircraft altitudes and approach and departure times and directions as needed. Figure 3.4 shows a typical autumn

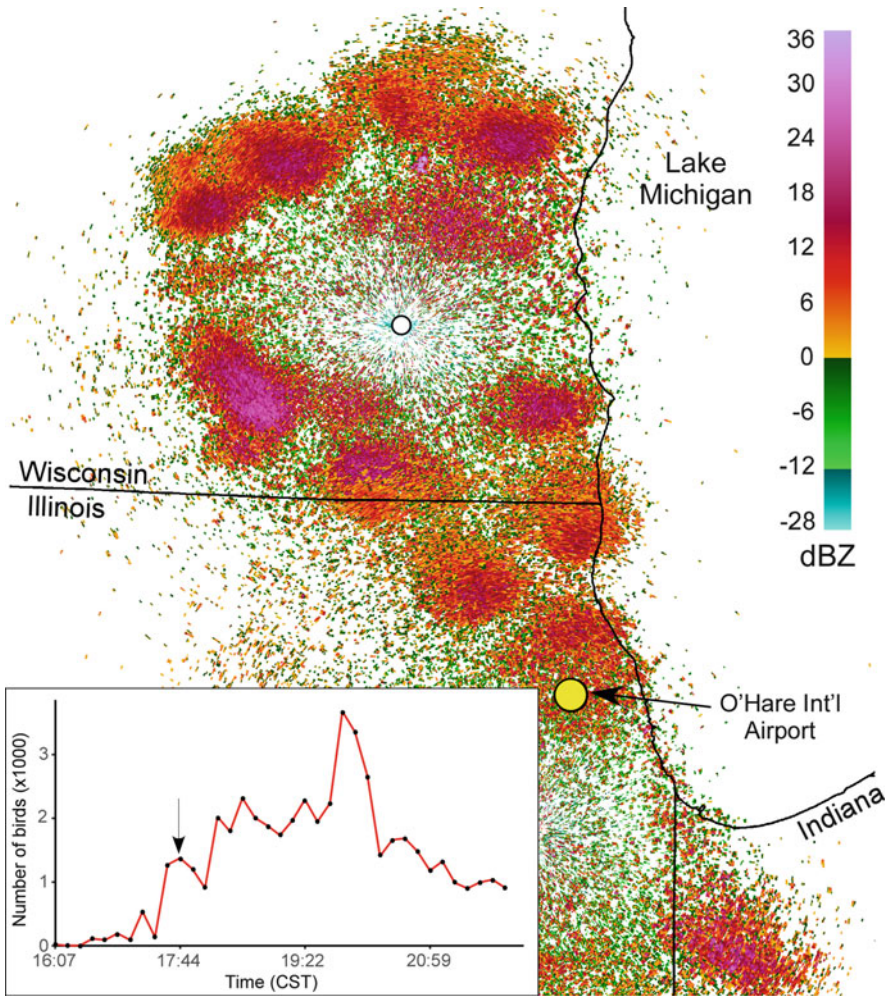


Fig. 3.4 Weather radars capture a moment during the onset of waterfowl migration toward the SSE across southeastern Wisconsin and northeastern Illinois on 22 Nov 2010, at ~17:45 CST. A 10 km diameter airspace centered on O’Hare International Airport is represented by a yellow circle. The inset shows changes in the estimated number of birds within this circle as the migration begins and progresses. (The abundance calculation assumes mallard-sized birds for simplicity and because good estimates of radar cross section are available for Mallards (*Anas platyrhynchos*) to convert radar reflectivity to bird numbers (O’Neal et al. 2010; Chilson et al. 2012b); the likely presence of larger birds such as geese and perhaps some cranes reduces these estimates of bird abundances.). The arrow indicates when in the time series this radar capture occurred

waterfowl migration toward the SSE with ducks, Canada Geese, and some Sandhill Cranes (*Grus canadensis*) departing habitats throughout southeastern Wisconsin and northeastern Illinois. Waves of waterfowl passed through the airspace of O'Hare International Airport, near Chicago, Illinois (Fig. 3.4, time series). In this image, the northern-most band of waterfowl radar echoes running west of the "Lake Michigan" label passed through O'Hare airspace at ~19:50 and was responsible for the large pulse of waterfowl seen in the time series. These migratory pushes out of southeastern Wisconsin occur routinely each autumn, so during this time O'Hare becomes both heavily used commercial airspace and seasonally predictable waterfowl aerial habitat.

5 Conclusions

Definitions matter. How habitat is defined influences law, policy, and the actions of resource managers in interpreting policy. Frequent efforts to redefine habitat in ways that capture perceived shortcomings testify to the continuing importance of the habitat concept. The airspace easily satisfies widely recognized definitions of habitat and shares many ecological properties of other more familiar habitat types. Considering the airspace as habitat also encourages new perspectives on the habitat concept. For example, airspace lacks many of the familiar visible cues we associate with habitat such as vegetation, substrate, or topographic relief. The energetic costs of occupying aerial habitats are often high, and critical aerial resources can be simultaneously abundant, ephemeral, and unpredictable with respect to any one location. Identifying properties shared across all major habitat types—terrestrial, aquatic, and aerial—clarifies our understanding of habitat by focusing our attention on its most fundamental and essential elements.

Considering the airspace as habitat also reminds us that time as much as place is a critical component of habitat, since many of the airspace's resources for flying animals depend upon the weather and are therefore highly dynamic. Yet, many widely recognized definitions of habitat explicitly refer only to place and tend to reinforce a rather static notion of habitat (but see Dingle 2014; Southwood 1977). This conforms with human perception of habitats as generally stable through time, at least in the manner we are accustomed to instinctively experiencing them, even if academically, we might recognize that the suitability of nearly any habitat for a given species varies through time, often seasonally if not through ecological succession or some other biotic or abiotic process. In short, that habitat is "where one would go to find it" (Odum 1959) is no more important than *when* one would go to find it.

The habitat concept has proven to be influential in shaping and informing environmental law and natural resource management in many countries. It is unknown whether aerial habitat represents an expansion of the habitat concept that is applicable under existing law, for example, if the need should arise to create airspace reserves or otherwise regulate the airspace to ensure human safety or protect animal populations. Accelerating human occupancy and development of

aerial habitats has created a greater need for regulation of the airspace, and clarification of the habitat concept is critical for developing or interpreting laws and regulatory practices that protect species when and where they are present.

We have much to learn about the ecology of the airspace. The dynamism of aerial habitat leads to dynamism of aeroecological processes generally, making them challenging to study, even with the aid of contemporary technology (Chilson et al. 2012a; Bridge et al. 2011). Recognizing that the airspace is habitat allows the known ecology of terrestrial and aquatic habitats to serve as models for predicting the conditions required for a wide range of ecological and behavioral processes to be operational in the airspace.

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Habitat Models Based on Numerical Comparisons

K. Shawn Smallwood

Habitat Model Types and Analysis

Habitat analysis typically involves either a comparison of used versus not used environmental elements or a test for disproportionate *use* of environmental elements from a measured set of *available* environmental elements. This chapter will focus on the latter approach (Table 6.1). The measure of use can include numerical spatial patterns (distributions) based on an individual's locations or on collections of individuals (Fig. 6.1). Using estimates of density or the number of individuals to perform habitat analysis also involves the use of pattern analysis, because density and spatial distribution are interlinked (Taylor 1961; Taylor et al. 1978). If organisms were patterned uniformly or randomly across a landscape or region, then habitat analysis would not be informative. The species would be considered as simply ubiquitous. However, species do not distribute themselves this way. Numbers vary spatially, and implicit in most habitat models is the assumption that numerical peaks coincide with locations where habitat is of the highest quality (but see Van Horne 1983 for warnings against this assumption).

Using densities or numbers of individuals for habitat analysis, the measurement units for the response side of the analysis can range in demographic organization from subpopulations and populations to megapopulations (*sensu* Garshelis and Visser 1997)

and metapopulations (*sensu* Hanski and Gilpin 1997). These response units are measured on geographic areas that encompass at least several home ranges to regions (Fig. 6.1). Many habitat models include the term *N* to represent number of individuals, *D* to represent density, or some other term representing number or spatial intensity in the environment. The terms *N* and *D* are explicitly represented in some habitat models (e.g., Table 6.1, Equations 6.1, 6.5, 6.11, 6.12, 6.13) and are needed for frequency counts and ratios used in the other models. Therefore, habitat analysis is scale-dependent because *N* and *D* are scale-dependent (Verner 1981; Blackburn and Gaston 1996; Smallwood and Schonewald 1996). Furthermore, these models do not specify which demographic unit is being represented by *N* or *D*, nor the contexts of demography, season, interannual variability, or condition of the landscape, all of which can affect *N* or *D* (Cyr 1997; Smallwood *in press*).

Habitat models using numerical comparisons have been reviewed already (e.g., Morrison et al. 1998). Van Horne (1983) pointed out that density is a misleading indicator of habitat quality, mainly because density estimates are frequently too narrow in their representation of a population's success. According to Van Horne (1983), habitat studies are often spatially and temporally inadequate for including areas occupied during all seasons, nor do they include the full

TABLE 6.1.

Habitat models based on numbers or densities.

Equation Number and Model Name	Model Structure	Explanation
<i>Measures of effect, no P-value</i>		
6.1. Edge index (Helle and Jarvinen 1986)	$E = \frac{D_i}{D_j} * 100\%$	D_i and D_j are densities at sites i and j
6.2. Index of selection (Paloheimo 1979)	$S = \frac{r_i}{p_i}$	r_i is the percentage of the i th element used, and p_i is the percentage available in the measured set
6.3. Index of electivity (Ivlev 1961; Jacobs 1974; Gordon 1989)	$E = \frac{r_i - p_i}{r_i + p_i}$	
6.4. Usage-availability rank difference (Johnson 1980)	$t_{ij} = \text{rank } r_i - \text{rank } p_i$	
<i>Hypothesis tests with P-values</i>		
6.5. Isodar Theory of habitat selection (Morris 1990)	$D_1 = \frac{a_1 - a_2}{b_1} + \frac{b_2}{b_1} * D_2$	in the i th habitat, a_i = maximum fitness, b_i = per capita reduction in fitness
6.6. χ^2 test with Bonferoni Z test (Pearson 1900; Neu et al. 1974)	$\chi^2 = \sum \frac{(O - E)^2}{E}$	O = observed, and $E = p_i * N$ = expected number of observations
6.7. Log-likelihood ratio criterion (Fisher 1924, 1950; Everitt 1977)	$\chi^2 = 2 \sum O * \log_e \frac{O}{E}$	
6.8. Measure of aggregation (David and Moore 1954; Pielou 1977)	$\chi^2 = \left(\frac{1}{n\bar{x}} \right) \sum_{i=1}^n (x_i - \bar{x})^2$	x_i = number of occurrences in i th element; $\bar{x}$ = mean of occurrences among n elements
6.9. Ecological order (Smallwood 1993)	$M_i = \frac{O}{E}$	M_i = the number observed as a multiple of the number expected in the i th element
6.10. Negentropy (Fisher 1924; Shannon and Weaver 1949; Rothstein 1951; Phipps 1981)	$H' = \sum_{i=1}^s O \log_e \frac{O}{E}$	Use of information; use of the measured set of choices; deviation from uniform association indicates negative entropy
6.11. Surface regression model (Rotenberry 1986)	$D = b_0 + \sum_i^h b_i X_i + \sum_i^h b_{ii} X_i^2 + \sum_i^h \sum_j^h b_{ij} X_i X_j$	X_i = the i th habitat, h is the number of habitat variables, and b s are fitted coefficients
6.12. Correlation (Wiens and Rotenberry 1981)	$d = ah_i$	In a strip transect, h_i is the i th habitat attribute expressed as a continuous variable, e.g., percent cover
6.13. Patch shape/Type (Otis 1998)	$\ln\{E(D_{ij})\} = \beta_0 + \ln(A_{ij}) + \beta_1(S_{ij}) + \sum \beta_i P_{ijk}$	A_{ij} = area of the j th patch in the i th environmental element; S = shape, which is a function of the patch perimeter and its area; P = patch perimeter

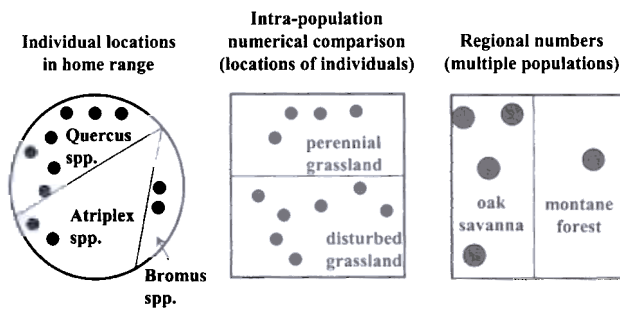


Figure 6.1. Numerical data in habitat models can include individual locations within a home range or any number of individuals with or without reference to a demographic unit. The grain of the measured set of environmental elements typically grades from micro- to macro-habitat representation as the numerical data grades from individual locations to regional in scope.

range of numerical responses to environmental changes, nor do they address the social interactions leading to occupation of both source and sink areas. Vickery et al. (1992) found density to be a poor predictor of nest success among three species of passerine bird species, although they did not account for the effect their variable plot sizes had on density (Smallwood 1999). Nevertheless, unburdened by any possible effect of variable plot sizes on density, Morris (1989) found mean litter size of the white-footed mouse (*Peromyscus leucopus*) to decline with increasing density. Alldredge et al. (1998) discussed faulty assumptions underlying various habitat models, such as the assumption that the sample of animals is random (rather than belonging or not belonging to a population), that each observation is independent of the next, that each animal's habitat selection was independent of others in the sample, that the availability of environmental elements is known rather than estimated, that availability is constant over the period of the study (rather than changing seasonally or for other reasons), and that detectability of animals is constant among the environmental elements sampled. Smallwood (1993) began a discussion on the theoretical foundations of these models, focusing on the role of thermodynamics in resource selection models.

In this chapter, I will frame habitat analysis within the larger context of world-views on how and why animals distribute themselves and how and why analysts apply experimental design principles and statistical tests to habitat studies based on relative number or

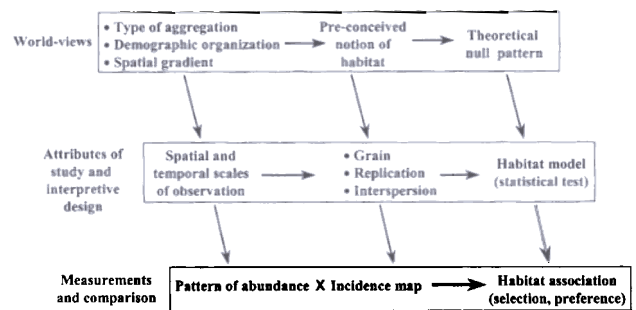


Figure 6.2. The effectiveness of numerically based habitat models and the measurements of use and availability ultimately depend on the attributes of the field studies and the world-views of the analyst, which have primacy over the actual measurements of use and availability.

density. Figure 6.2 depicts a hierarchical framework for discussing habitat analysis, first considering world-views (paradigms), then attributes of study and interpretive design, and finally the measurements and comparisons, the results and interpretation of which depend on world-views, and study and interpretive design. I intend to demonstrate that the available habitat models are inadequate by themselves for characterizing habitat of animal species; these models are no substitute for long-term research experience, although their predictions can be used as testable hypotheses. Just as habitat analysts need operational terms with which to work (Morrison and Hall, Chapter 2), they also need a larger framework with which to interpret applications of the habitat models based on numerical comparisons.

The Theoretical Null Pattern

The significance of a measured numerical pattern (spatial distribution) to habitat use is decided largely by its comparison to a theoretical null pattern. Measured numerical patterns can be uniform, random, aggregated, or regular, and null patterns can be uniform, random, or both (Fig. 6.3). Deviation of a measured pattern from the null pattern is assumed to be caused by a relationship between the species and the energy or material resources composing the environmental elements (Smallwood 1993). The theoretical foundations of the null pattern are therefore critical for interpreting the association. The null pattern in thermodynamics is uniformity, which connotes the equilibrium cold state, or

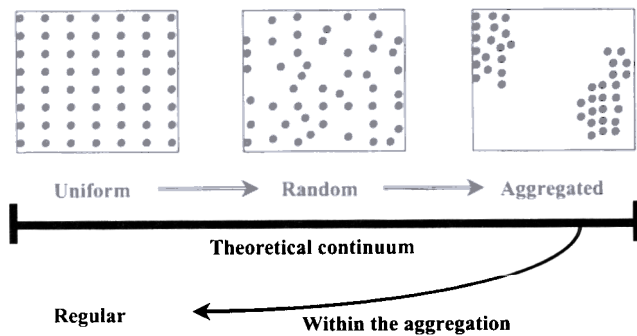


Figure 6.3. Random patterns occur somewhere along a gradient ranging from uniformity (regularity) to aggregation, thereby reducing the distance that can be measured between an observed aggregated pattern and the null pattern of randomness.

lack of energy relationships (Hutchinson 1953). The null pattern in information theory is also uniformity, which connotes no use of the available information (Shannon and Weaver 1949; Kullback 1959; Phipps 1981). Uniformity is the state of maximum entropy in both thermodynamics and information theory. The null pattern in ecology is randomness, which connotes lack of influence from the locations of other individuals (Fisher 1950; Taylor 1961). The null pattern chosen by the habitat analyst identifies the world-view of the analyst regarding how and why nature is organized, and it determines the set of alternative results.

Habitat analysts usually explicitly or implicitly assume that spatial distributions are determined by some form of energy relationship(s) between the organisms and their environment (Hall et al. 1997b; Morrison et al. 1998). Although rarely discussed explicitly, many ecologists hold the world-view that biological processes are governed ultimately by the laws of thermodynamics (Hutchinson 1953). The measures of effect used in Equations 6.6–6.10 are derived from these laws, and all the other models in Table 6.1 (except Equation. 6.5) are theoretically and mathematically related to Equations 6.6–6.10 (Smallwood 1993). Many aspects of habitat are assumed to be energy-related, and the goals of wildlife are usually assumed to be resource acquisition and total fitness (Southwood 1977; Rosenzweig 1985; Wiens 1989b,c), which are energy-related and energy-dependent, respectively. Habitat elements other than energy are recognized as important, such as water, nutrients, refugia, travel corridors, nest sites, and so on. However,

even the response variable, density, has its conceptual origins in the physical sciences and is energy-dependent. High-quality habitat is said to have greater levels of energy available (Hall et al. 1997b).

However, if the laws of thermodynamics largely govern the spatial distributions of animals, then assuming randomness as the null pattern is not only inappropriate on theoretical grounds but also reduces the analyst's capacity to recognize meaningful aggregations and selection of environmental elements (Smallwood 1993). Random patterns occur somewhere along a gradient that ranges from uniformity (regularity) to aggregation (Fig. 6.3). This gradient is represented by probability values of the χ^2 distribution, the lower-tail values of which correspond with uniformity and increasingly upper-tail values grading through randomness and eventually aggregated patterns. The distance that can be measured between an observed aggregated pattern and the null pattern of randomness is less than between the aggregated pattern and the null pattern of uniformity. Therefore, assuming the null pattern is random instead of uniform washes out some of the potential significance that can be attributed to an observed aggregated pattern. The world-view of the analyst is at least implicitly expressed by the types of habitat model and statistical test used, because these models and tests are structured either on the assumption that the null pattern is uniform (e.g., χ^2 tests) or random (e.g., ANOVA tests).

Only aggregated patterns of animals can lead to inferences about habitat use. Purely uniform or random patterns of use will fail to reveal any selection of environmental elements from a measured set because no disproportional patterns will be evident (Fig. 6.4). A regular pattern of distribution might indicate that the study area included territories of individuals numbering fewer than occurred in the larger population (Fig. 6.5). In other words, the study area was smaller than the area occupied by the population, which often arranges itself into regularly spaced home ranges or territories held by its members. Similarly, random patterns have been observed when progeny (of insects) dispersed passively in air or water (Taylor et al. 1978), or when occurrence was scarce or at the edge of a larger aggregation (Fig. 6.5).

Recognizing whether the spatial pattern is uniform, random, aggregated, or regular depends on both the

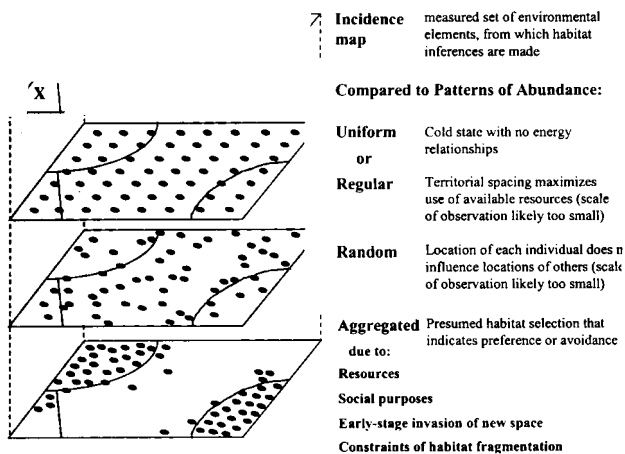


Figure 6.4. To interpret meaningful associations, patterns of distribution are compared to a map of the measured incidence of environmental elements, composing a measured set. The meaning of an association ultimately depends on the world-view of the analyst and on the theoretical foundations of the statistical test or measure of effect being used. It also depends on the type of aggregations that are being compared to the measured set of available environmental elements.

spatial scale of observation and knowledge of the species' demographic organization. Examining the spatial relations of individuals from a portion of a population can mislead an analyst into thinking the pattern of distribution is random or uniform, when it is more likely regular at the scale appropriate for measuring the population and aggregated at the regional scale. For example, prairie dog (*Cynomys* spp.) burrows occur fairly regularly within colonies (Tilston and Lechleitner 1966), which are themselves aggregations in the region (Koford 1958). Of course, information about the spatial distribution is lost when transforming the locations of individuals into numerical estimates and then to densities. Comparing N or D for habitat analysis cannot lead to conclusions about demographic organization unless the spatial areas are included in the comparison (Smallwood 1999).

Types of Aggregation

Aggregations can form for several reasons (Fig. 6.6), and each of these reasons poses a unique implication for interpreting the habitat association. These reasons bear on the choice of the theoretical null pattern and the habitat model. It will be important for wildlife biologists to determine the relative occurrence frequen-

cies of each of the following four types of aggregation: resource, demographic, early-stage, and constrained.

Individuals may aggregate around a centralized or patchy resource, forming a *resource aggregation*. Competition for a limited resource can force some animals to live on the fringe of the resource patch, or even to spill over into ecological sinks. Such an aggregation can extend beyond the boundary of the resource patch just because off-patch individuals get sufficient access to the resource or because those exploiting the resource generate progeny that disperse

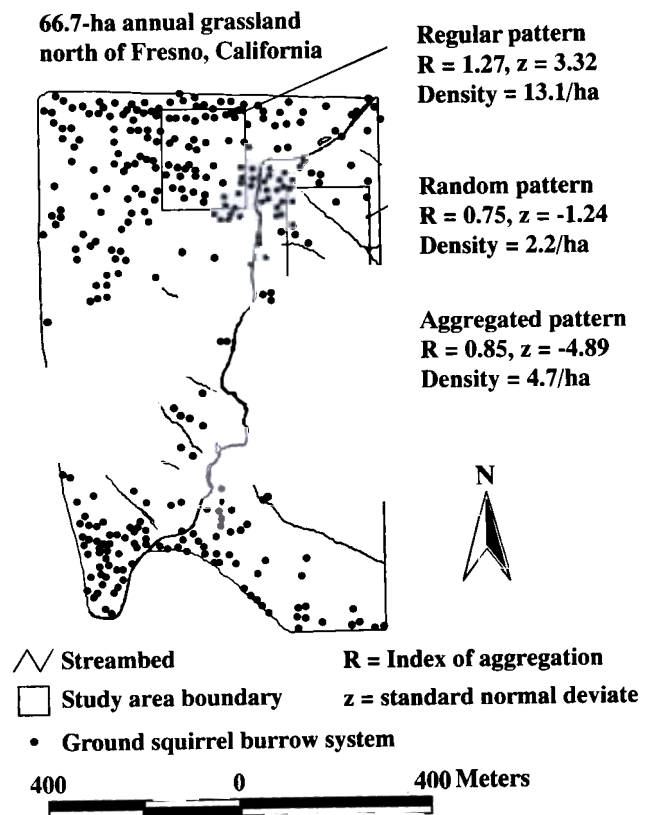


Figure 6.5. The size and position of study areas inform of different spatial patterns among burrow systems of California ground squirrels (*Spermophilus beecheyi*). Using the pacing method for mapping burrow systems of pocket gophers (Smallwood and Erickson 1995), I mapped the approximate centers of ground squirrel burrow systems on 66.7 hectares of annual grassland in the low-elevation foothills north of Fresno, California, during April and May 2000. A nearest-neighbor-distance method (Clark and Evans 1954) indicated that ground squirrel burrow systems were regularly distributed within a larger aggregation and randomly distributed at the edge of the aggregation. The larger aggregation was only recognizable within the boundary of the largest (66.6 hectares) study area. The density of burrow systems was also greater within the aggregation compared to the edge.

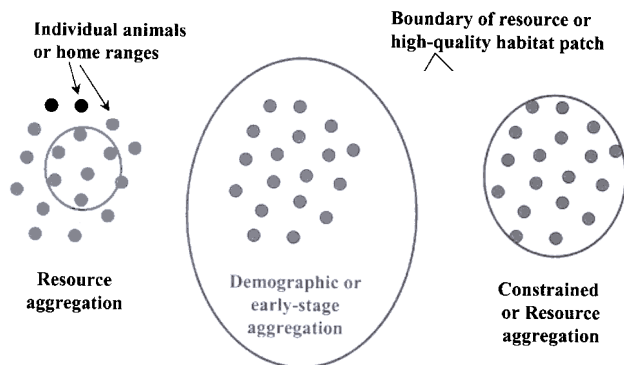


Figure 6.6. The types of aggregations observed largely determine the pattern of distribution and the association with the measured set of environmental elements. Demographic, resource patchiness, habitat fragmentation, and early-stage filling of ecological space can affect our perception of use and availability.

outward, beyond the patch. In either case, and in the case of other possible explanations, the number of individuals associated with the resource-based aggregation need not be bound within the resource patch.

Individuals also aggregate with conspecifics to improve fitness through reproduction, rearing of young, and group cooperation such as foraging and predator avoidance. They may choose places to live based on the momentum of the congregation rather than the energetic or nutrient accessibility of the habitat patch (Alatalo et al. 1985). *Demographic aggregations* may have spatial limits that are imposed by behaviors or by uncertainties of habitat quality outside the aggregation (Stamps 1991). Demographic aggregations conceivably could be confined to space that is smaller in extent than the resource patch (Taylor and Taylor 1979). Social constraints could therefore limit our observed use of an environmental element (resource) to less than that expected based on its availability. Dasgupta and Alldredge (1998) devised a behavioral dependency parameter for use with χ^2 tests, involving situations where multiple individuals are observed together. However, aggregations can occur without individuals being observed together, per se (e.g., *Puma concolor*, Smallwood 1997), but which may have formed to serve social and demographic needs nevertheless (Lloyd 1967).

An early-stage aggregation can also form while immigrants invade previously unoccupied habitat, which could have been cleared of former occupants, or

which was recently discovered or became available to the species. An invasion of pocket gophers (*Thomomys* spp.) into new stands of alfalfa (Smallwood and Geng 1997) is a good example. Early-stage aggregations are combined resource and demographic aggregations but temporarily give different results when analyzing habitat selection based on use and availability methods. Such aggregations provide the best opportunity to observe preference of the available environmental elements because they are relatively free of demographic constraints (e.g., competition and territoriality). However, as numbers increase due to continued immigration, social mechanisms such as territoriality force later arrivals into less-preferred locations, thereby affecting our perception of use (Fig. 6.7). An example of early-stage aggregations can be found in "Intrapopulation Numbers," later in this chapter.

Constrained aggregations result from habitat fragmentation (sensu Wilcox and Murphy 1985) or the division of previously contiguous habitat patches (Addicott et al. 1987). They may also result from intolerable environmental conditions occurring naturally outside the aggregation, including the occurrence of competitors or predators (Hutchinson 1953; Koford 1958). Patches of low-quality habitat are occupied by constrained aggregations because the species is left with no other place to go (du Toit 1995). Low-quality habitat can appear to be high-quality habitat when loss of habitat constrains individuals to fragmented habitat patches or to peripheral habitat areas. Habitat analysis using constrained aggregations can be misleading due to packing of individuals into the habitat fragment or the inclusion of the intolerable areas in the measured set of environmental elements. Unfortunately, many special-status rare species are found only in fragmented habitat, or in habitat at the boundary of their tolerable conditions (e.g., Scott et al. 1986), so their constrained aggregations should not be used alone to interpret habitat associations. For example, giant garter snakes (*Thamnophis gigas*, federally endangered) occur in marshes and adjacent irrigation canals where marshes in the Central Valley of California have not been converted entirely to agricultural fields and houses. The study of historical data and taxonomically and functionally similar species might help investigators interpret habitat associations for special-

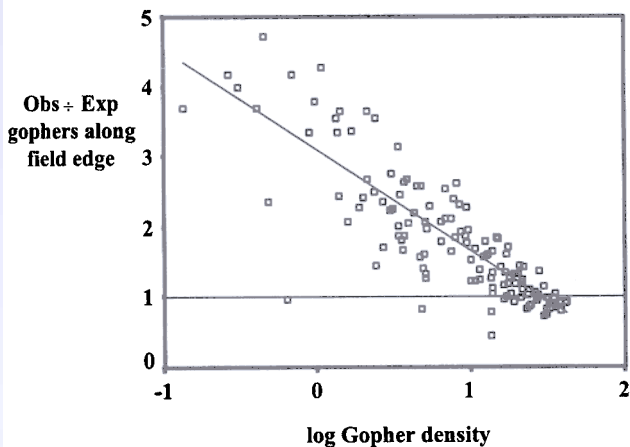


Figure 6.7. The relationship between selection for the field edge and pocket gopher (*Thomomys bottae*) density across alfalfa fields (*Medicago sativa*). The observed value divided by the expected value of 1.0 indicates the edge was used in proportion to its availability.

status rare species. For example, habitat descriptions of *T. sirtalis*, *T. couchi*, and *T. elegans* might provide insight into the historical habitat of *T. gigas*.

The prevailing view among those using the models in Table 6.1 appears to be that resource aggregations result in our measurements of disproportionate use of environmental elements. For example, Rotenberry et al. (Chapter 22) present a habitat selection model for which they assume that most wildlife observations are made where these animals want to be—where they derive some benefit from resources. However, the models in Table 6.1, and that of Rotenberry et al., can yield the same measures of disproportionate use when applied to aggregations that were forced by habitat fragmentation or the need to congregate. Applied to *T. gigas*, these models will indicate that *T. gigas* selects irrigation canals, probably because the landscape matrix is annual field crops where the snake cannot live. The models in Table 6.1 will not discriminate among aggregations influenced by various disparate factors, so they cannot be relied upon to measure habitat quality.

Demographic Organization

The demographic units represented by the numbers compared also bear on habitat analyses (Van Horne 1983). Whether or not demographic organization can be related to use of environmental elements, it affects the pattern of distribution observed. I recently discov-

ered a range in size of study areas in which the number of individuals might be given some meaning in terms of demographic organization (Smallwood 1999). As I had also found for mammalian carnivora (Smallwood 1999), nearly half the numerical estimates of northern goshawk (*Accipiter gentilis*) increased proportionally with increases in the sizes of their corresponding study areas (scale domain A, Fig. 6.8). Given that species of carnivora and northern goshawk typically space themselves at fairly even distances due to territory maintenance, I interpreted the aforementioned pattern as an indication that these estimates were made at areas smaller than those occupied by the “population.” Each species in Smallwood (1999) appeared to have what I termed a *threshold area*, at which the number of individuals ceased to increase proportionally with increasing study area size (as in Fig. 6.8). The threshold area was the low end of a spatial scale domain (B), in which the number of individuals varied considerably but did not regress on study area size with a slope significantly different from zero. I interpreted the numerical estimates within scale domain B to represent populations because no other demographic units have been defined for the clusters of twenty-five to sixty adults that are typical of this scale domain (Smallwood 1999).

Regardless of whether the estimates in scale domain B represented distinct populations, the theoretical foundation of animal ecology includes the population as a key demographic unit with functional, goal-directed significance. Odum (1959) and Dasmann (1981) defined a population as some collection of organisms of the same species occupying a particular space and sharing a suite of attributes representing a unique organizational structure. Yet our use of *N* (number of individuals) and *D* (density) in habitat and other analyses is usually given no meaning with respect to the population concept. Usually, no demographic unit is attributed to *N* or *D* in habitat models. In conducting habitat analysis using a measured set of environmental elements, what does it mean to compare three individuals in element X to fifty in element Y and to four hundred in element Z, when the three individuals are a small portion of a population, the fifty compose an entire population, and the four hundred are from six populations? The three in element X

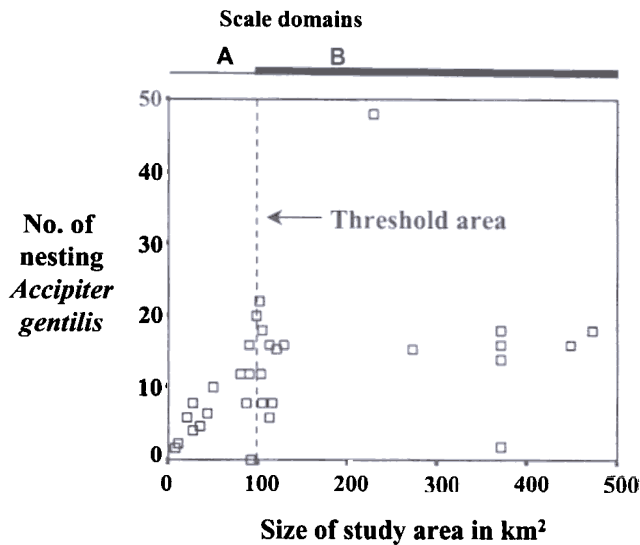


Figure 6.8. Based on the published estimates (summarized in Smallwood 1998), the number of nesting pairs of northern goshawks (*Accipiter gentilis*) increases proportionally with increasing size of study area until the study area is at least 100 square kilometers (scale domain A). Study areas larger than 100 square kilometers include aggregations that no longer increase with increasing study area size (scale domain B).

may occur in an ecological sink after having been forced there by the fifty, which themselves occur in element Y out of proportion to Y's availability but well within the space needed to support a population.

That the number of individuals in spatial scale domain B did not correlate with study area size also revealed a mathematical artifact in measuring animal density (Smallwood 1999). The number of individuals in domain B is relatively similar in magnitude to those in larger-area domains (see Smallwood 1999). Regressing density on its corresponding study area size will force a slope of -1 when density was calculated by dividing a constant number by a variable area. Similarly, regressing density on its corresponding study area size will force a slope of 0 when density was calculated using the numbers that increased proportionally with study area size, such as those in scale domain A and those forming the transitions between scale domains B and larger. Therefore, density appears to be a continuous variable only in the absence of demographic organization, and its discontinuity can confound habitat analyses based on the models in Table 6.1.

Spatial scale (extent) domains of distribution pro-

vide habitat analysts with a means to attribute social meaning to the frequency counts used in the habitat models. These domains revealed a possible demographic context against which frequency data can be compared. I lack the directed field research evidence needed to conclude that the numerical estimates in spatial scale domain B were distinct populations. However, the population concept can still be used to discuss the intent of habitat analysts and the meaning of their results.

Home Range

Habitat analysis within the individual's home range fails to reveal the significance of the location of the home range. Differential use of areas within the individual's home range is interesting at the microhabitat level, but the location of the home range itself can be influenced by the location of the population and the social and demographic status of the individual (Van Horne 1983). An individual's home range can encompass low-quality habitat simply because it was forced to live there in order to participate as a member of the population (Stamps 1991). Leger et al. (1983) found that California ground squirrels (*Spermophilus beecheyi*) adjust their behaviors to access microhabitats that would otherwise pose increased risks of predation. Animals do not always go to a place because it provides the highest-quality habitat, but once at the place, they make the best of it. Reports of habitat studies based on telemetry locations of individuals often provide no information of the demographic status of the individual or of the individual's spatial relationship to the population.

Intrapopulation Numbers

Comparing numerical estimates made at the subpopulation level (scale domain A) can confound the habitat analysis with the proportional relationship between the estimated number of individuals and study area size (Smallwood 1999), unless study sites (plots) were chosen randomly or systematically from a region, used and unused sites were compared, or long-term observations were used. Habitat analysis at this numerical level risks observing proportional patterns of use simply because individuals or their home ranges are regularly distributed among microhabitat elements due to

territoriality or other social interactions that partitioned the resources at this level. Habitat analysis at this level of organization may or may not contribute useful inference regarding habitat, as social interactions are driving the spatial distribution within a larger area of habitat. Unless home range size can be related to habitat quality, habitat identified from a home range or from within the bounds of a population was pseudoreplicated (Hurlbert 1984; Aebischer et al. 1993).

As an illustration of apparent habitat use based on intra-population numbers, I compared a measure of resource selection (Equation 6.9 in Table 6.1) to Botta's pocket gopher (*Thomomys bottae*) density to test whether measured selection for the edge of alfalfa (*Medicago sativa* L.) fields was density-dependent:

$$\frac{\text{Observed gophers at edge}}{\text{Expected gophers at edge}} = \frac{\text{gophers along edge}}{\text{gophers in field} \cdot \left(\frac{\text{ha along edge}}{\text{ha of field}} \right)}$$

The density estimates were from 134 counts of burrows across thirty-seven alfalfa fields in Yolo County, California, during 1992 through 1994 (Smallwood and Geng 1997).

At low density, gophers occurred along the field edge at nearly five times the number expected by chance (Fig. 6.7). However, increasing density reduced my ability to quantitatively represent gopher selection for the field edge ($r^2 = 0.71$, Root MSE = 0.49, $P < 0.001$):

$$\frac{\text{Observed gophers at edge}}{\text{Expected gophers at edge}} = 3.09 - 1.43 \log \text{Density}$$

The obvious preference for the edge grew increasingly hidden as gophers invaded the interior of the field and approached a regular distribution due to saturation of territorial space, represented by a ratio of 1.0 between the observed and expected gophers at the field edge. I do not think that gophers favored the edge any less as density increased, but rather their preference for the edge grew increasingly less recognizable as the overall density in the field increased (Fig. 6.7). As gophers saturated the field interior, the clustering along the edge became hidden, just as

Hansen and Remmenga (1961) found a clustered gopher distribution to vanish as the increasing density shifted the gopher population to a regular distribution. This density-dependence of distribution was recognized before (Taylor et al. 1978), but the density-dependence of measuring selection preference or avoidance will require habitat analysts to reconsider current reliance on measures and statistical tests based on use and availability of resources. Measured selection of environmental elements will be density- and therefore area- and time-dependent (also see Smallwood 1995), just as information theoretical measures (e.g., H' , the composite index of species richness, $\log_2 S$ and evenness, J) are dependent on sample size (Cousins 1977) or on the spatial scale at which these measurements are derived.

This density- or scale-dependence also bears on the timing of habitat analysis. Measures of resource use will vary depending on the stage of ecological succession of a site or the stage at which a site is being colonized. Preference can be clearly observed during the early stages of colonization, but during the later stages the preferred resources can be hidden by overflow of individuals into relatively less-preferred conditions.

Interpopulation Numbers

Comparing numbers (densities) between populations poses two potential obstacles to recognizing true patterns of habitat association. The spatial shifting of aggregations summarized by Taylor and Taylor (1979) involves clustering at a subset of the available high-quality habitat patches. Taylor and Taylor (1979) proposed four hypotheses to explain the frequently observed spatial shifting of aggregations: (1) populations must move once they deplete their most limiting resources; (2) population members shift locations innately so as to prevent the exhaustion of resources; (3) dispersal and territory establishment of the next generation also establishes the location of the next aggregation, while the previous aggregation senesces; and, (4) a combination of hypotheses 1–3. Occupied habitat patches are either not different from many of those that are unoccupied at the time of the analysis or they are ephemeral in their quality. In the latter case, the results of habitat analysis are ephemeral. In the former

case, habitat analysis might measure use as less than availability, and a strict adherence to the numerical comparison might mislead the investigator to conclude that the occupied habitat patches are less preferred.

Today's absence at a site can be tomorrow's presence, as the spatial distribution is unique for each generation (Taylor and Taylor 1979). Habitat measured at time t_1 can represent the species' habitat at times t_2 and t_3 only if the same generation and the same environmental conditions span times t_1 through t_3 . If the species shifted locations between generations, as is common according to Taylor and Taylor (1979) and den Boer (1981), or if environmental conditions changed between times t_1 , t_2 , and t_3 , then the analysis at time t_1 will be inadequate and misleading if the goal is to describe the species' habitat; it will contribute to a belief that the species relies on a narrower range of environmental conditions than it actually does. The exception will be constrained aggregations, which will be at the same locations at all times, so long as none of the aggregations go extinct. However, habitat analyses using constrained aggregations are predisposed to mislead simply due to the constraints on availability of suitable environmental elements.

An additional obstacle is the meaning we attach to numerical variations of each population. Population number can vary greatly, with increases and decreases lagging behind changes in conditions of resources. Interannual variability in N typically cannot be characterized adequately until monitoring has been conducted spanning multiple generations (Cyr 1997). Therefore, when comparing N or D from population X to that of population Y, and N or D differs, can we really conclude that habitat quality differs between the sites occupied by populations X and Y?

Presumably, sociality and energy and material resources maintain a carrying capacity just below which exists an optimal density. Within the spatial bounds of a population, density can vary somewhat but must be constrained by territoriality or the habitat element in most limited supply. Comparing locations occupied by populations, density might be nearly the same within the bounds of each population (Smallwood 1999). Comparing density within the spatial bounds of a population or between high-density populations is un-

likely to reveal meaningful differences and is therefore relatively uninteresting. In other words, density needs to vary considerably to reveal possible differences in habitat quality, but intrapopulation regularity of distribution and mutually high-density populations will not vary sufficiently in N or D to provide inference regarding habitat selection.

The terms N and D in habitat models can be representative of whole populations, and the occurrence frequency or spatial areas occupied by these populations compared to the measured set of environmental elements within a region or the species' range. The N or D representing a whole population can simply be replaced by a 1 to denote presence or a 0 to denote absence, and little information would be lost so long as the populations are discrete and easily bounded. Representing whole populations, presence or absence might be just as informative as N or D . If this step were taken, then the boundary of the area that is occupied by the population would need to be identified. The area occupied by the population might be more reliable as a measure of use than either N or D .

Megapopulation or Regional Numbers

Demographic organization is again implicitly ignored by habitat models that compare densities to measure use and availability of elements between regions. Regions are usually large-enough areas to include multiple populations. Garshelis and Visser (1997) termed the collective abundance from regions as megapopulations because they did not know what else to call it. Metapopulations, on the other hand, theoretically organize within regions (Hanski and Gilpin 1997), but empirical evidence is lacking for knowing the bounds of a metapopulation or how many populations might compose a metapopulation. Regional patterns of distribution are still largely theoretical, and the term megapopulation indicates that this theory is weak.

Comparing densities or use of regions poses the additional problem of comparing the availability of disparate measured sets of environmental elements (Wiens and Rotenberry 1981b). For example, Smallwood and Fitzhugh (1995) compared the number of puma track sets to represent use of available vegetation complexes and topographic categories across all the sampled areas of California, which included areas

spanning the full north-south and east-west extents of the state within the species' range. The topographic categories were common across the state, consisting of ridges, mountain peaks, basins, canyons, and so on. These macrohabitat categories were fairly comparable across California, much like Anderson's (1981) use of vegetation structural elements across the United States. However, sage-juniper forests are limited to north-central and eastern California, and chaparrals occur more to the west; they are not interspersed. Comparing use to availability of vegetation categories seemed uninformative on a statewide level, especially when puma populations occurred in both sage-juniper and chaparral. Knowing the range of environments used by pumas in California is useful, and knowing that pumas are more rare in the Mojave Desert than in the Klamath Mountains is also useful, but habitat analysis involving use and availability comparisons is probably best conducted within regions, within which key elements are more likely to be naturally interspersed.

Gradient of Abundance

Animal density is often represented with contours, which illustrate relatively smooth gradations in density from high to low across landscapes or regions (e.g., Taylor and Taylor 1977; Wiens and Rotenberry 1981b; Cody 1985a,b; Scott et al. 1986; Root 1988a,b,c; Price et al. 1995; Morrison et al. 1998). These gradients are mathematically derived using averaging and interpolation, whereas the actual spatial distribution may not be smoothly graded. This transformation of field observations into density contours expresses a world-view of distribution that acknowledges aggregation as the norm for animal species but also facilitates the potentially erroneous idea that animal density corresponds to habitat quality. Habitat quality is assumed to be energy-related, as discussed previously, so it is related to the world-view that the laws of thermodynamics govern the spatial patterning of animal species, also previously discussed. However, this world-view, that density grades smoothly across the landscape, can be supported by few examples, just as sharply bounded aggregations can be supported by few examples (Morrison et al. 1998). It may be that spatial distributions of

animals can be better represented by categories, including population occurrence, trace activity (i.e., a few individuals in a large area), and absence. Lidicker (1995) also summarized categorizations of habitat quality, which were thought to bear directly on densities. Habitat analysts need to test whether animal aggregations are discrete or graded, whether population boundaries can be identified, and whether densities are categorical in correspondence with habitat quality. Empirical evidence should be the foundation of theory, and theory that bears on gradients of abundance also bears on habitat analysis.

It is well documented that individuals can occur in what are regarded as ecological sinks for the species. In fact, numerical estimates in ecological sinks can always be greater than zero just because dispersing animals are forced into the sink where the rates of recruitment outpace mortality. Habitat models based on numerical comparison will thus give ecological sinks some positive habitat value in such cases, whereas the true value should be negative (less than zero) with respect to the functionality of the population. Density estimates alone cannot inform of sink conditions (Lidicker 1975, Van Horne 1983), because density estimates cannot be negative—they range from zero to some presumed carrying capacity. Learning of sink conditions requires intensive study, making use of more information than numerical estimates (e.g., Morris 1989).

Preconception of Habitat

The map of available environmental elements is made by the habitat analyst. Some *a priori* notion of habitat inevitably goes into construction of the incidence map and will affect the typology of the map and its spatial grain (Austin, Chapter 5). For example, Smallwood and Fitzhugh (1995) used typical home range size of puma to decide on the quadrat size and transect lengths for counting track sets in California. The volunteer biologists who selected the exact locations of the transect segments believed that roads along ridgetops would produce more tracks. We later learned that roads along streams were most productive. If we were to start a new sampling program for puma track sets, it would differ markedly from the

1985 design, and the results would likely differ as well.

Preconceived notions of habitat influence the study's location, spatial extent, grain of mapping, and ultimately the replication and interspersions of the environmental elements in the map. Habitat analysts often collect the use and availability data from locations where the species was known to occur, often in abundance. By siting habitat studies this way, analysts may often force results that conform to preconceived notions of habitat. Experimental design principles should be applied to mensurative as well as to manipulative studies (Smallwood 1993). The spatial extent and grain of the study should be appropriate to measuring the species' differential use of the environment. Replication and interspersions of treatments (i.e., environmental elements considered to be available to the species) also must be incorporated into mensurative studies (also see Otis 1998; Austin, Chapter 5). Along a transect or within a defined study area, replication of available elements is achieved through multiple occurrence of each environmental element in the measured set of elements (e.g., vegetation complexes). Those elements occurring once are pseudoreplicated (*sensu* Hurlbert 1984) and association of the species with that element should be considered dubious pending further research (e.g., environmental elements X and Z in Fig. 6.4 are pseudoreplicated, while Y is measured as two replicates). Interspersions are achieved by each element's occurrence between other elements in the measured set, such that gradient effects do not cause spurious relationships between measured use and availability. Thus, replication and interspersions of various environmental elements can be achieved when the program of observation includes two or more patches of each environmental element within the study area or along the transect.

Given that the analyst is constrained by observing extant environmental conditions, the observed use of the environment by an individual, population, or larger social unit need not reflect the species' perception of what constitutes habitat or high-quality habitat (Morrison et al. 1998). Much of what analysts may perceive as a numerical response to extant environmental conditions actually may be responses to the combination of both relic and current habitat and de-

mographic conditions. Habitat models implicitly assume that deviations from the theoretical null patterns of distribution are immediate responses of individuals to resources that are available in the measured space. However, demographic organization can represent a long-term response to energy and material resources in the environment experienced by the species, and it can pose much of the information useful to the individuals. If a suite of environmental and demographic conditions typified the success of the species over long time periods, then the species likely developed perceptions of habitat and demographic organization that are relatively reliable evolutionarily. Such stability could be achieved by building the responsible neurons early in ontogeny (Coss and Goldthwaite 1995). How such perceptions would be manifested in the changed landscapes of modern times can affect our interpretations of habitat.

Habitat analysis is bound to include plenty of noise caused by conserved use of information from relic environments, which today may be missing from the studied environment. For example, after Hutto (1990) experimentally reduced food supplies from under the bark of specific trees, he found no difference in visits per tree or time spent at the tree by birds that depend on this food supply during the winter months in the boreal forest. In another example, the carrying capacity of pocket gophers in alfalfa fields is determined not by the food source, which is plentiful, but by the home range size. The home range size was established by natural selection in past environments where food supplies were typically more limited. Pocket gophers in alfalfa are so constrained by evolutionarily designed perceptions of space that they cannot fully exploit alfalfa stands, which are perhaps the most abundant food source these animals have ever encountered. Management or policy decisions should acknowledge a reasonable level of uncertainty in habitat analysis or assessment and should be very conservative.

Conclusions

Comparing numerical terms for use and availability cannot reliably characterize habitat without considering the environmental and demographic contexts of the numbers. The measurements and resulting associa-

tions are determined largely by the attributes of the field study design, as well as those of the analytical, interpretive design. These attributes are themselves determined largely by the analyst's preconception of habitat, demographic organization of the species, how the species is patterned spatially and temporally, and the reasons for animals to congregate or associate with environmental elements out of proportion to the element's availability (Fig. 6.2). At our current state of knowledge, world-views may bear more heavily on habitat analysis than does the procedure for measuring occurrence frequencies in environmental elements. Some of these world-views can be tested as hypotheses by directed field research. For example, how often do animals aggregate for reasons that do not bear directly on the availability of a food resource? Are all aggregations truly populations? How sharply bounded are animal populations? Answers to these and other related questions can provide habitat analysts with meaning for numerical comparisons that the models do not provide.

The effectiveness of habitat analysis based on numerical comparisons is largely dependent on knowing how and why animals distribute themselves. The models in Table 6.1 will be prone to inappropriate application and erroneous interpretation until analysts largely agree on the extent to which animal species respond numerically to energy availability, information pre-

sented by the past and current environments, or to predators and competitors. Each model has a theoretical root or history, and we need to decide whether the theoretical foundation is consistent with what we are attempting to measure and how we should interpret the resulting patterns.

Van Horne's (1983) argument that density is a misleading indicator of habitat quality remains valid, and based on recent research on density, it is all the more clear that numerical comparisons are currently of dubious utility to habitat analysis. Density estimates are sensitive to whether they are derived from population "isolates" or from sampling of the statistical universe (Preston 1962a), and they are sensitive to the size of the study area examined (Smallwood and Schonewald 1996). Until much more basic research on animal distribution has been conducted, the models in Table 6.1 should be used cautiously because their use can translate into inappropriate management decisions, sometimes with possible dire consequences for the species.

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Predicting Species Occurrences

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and Scale*

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Aeroecology: probing and modelling the aerosphere

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Synopsis Aeroecology is a discipline that embraces and integrates the domains of atmospheric science, ecology, earth science, geography, computer science, computational biology, and engineering. The unifying concept that underlies this emerging discipline is its focus on the planetary boundary layer, or aerosphere, and the myriad of organisms that, in large part, depend upon this environment for their existence. The aerosphere influences both daily and seasonal movements of organisms, and its effects have both short- and long-term consequences for species that use this environment. The biotic interactions and physical conditions in the aerosphere represent important selection pressures that influence traits such as size and shape of organisms, which in turn facilitate both passive and active displacements. The aerosphere also influences the evolution of behavioral, sensory, metabolic, and respiratory functions of organisms in a myriad of ways. In contrast to organisms that depend strictly on terrestrial or aquatic existence, those that routinely use the aerosphere are almost immediately influenced by changing atmospheric conditions (e.g., winds, air density, precipitation, air temperature), sunlight, polarized light, moon light, and geomagnetic and gravitational forces. The aerosphere has direct and indirect effects on organisms, which often are more strongly influenced than those that spend significant amounts of time on land or in water. Future advances in aeroecology will be made when research conducted by biologists is more fully integrated across temporal and spatial scales in concert with advances made by atmospheric scientists and mathematical modelers. Ultimately, understanding how organisms such as arthropods, birds, and bats aloft are influenced by a dynamic aerosphere will be of importance for assessing, and maintaining ecosystem health, human health, and biodiversity.

Introduction

The biosphere has been traditionally viewed as being composed of the lithosphere, hydrosphere and atmosphere, each of which interact dynamically with the other. In an ecological context, the Earth's lower atmosphere or troposphere has long been considered an important functional component of the biosphere through the exchange of nutrients, water, and gases in the form of local, regional, and global climate variation and biogeochemical cycles. However, to our knowledge, the aerosphere—the relatively thin substratum of the troposphere closest to the Earth's surface that supports life—has rarely been considered beyond

studies of meteorological conditions and functional ecosystem relationships, such as nutrient cycling and gas exchanges in the atmosphere (Oke 1987, Sorbjan 1989, National Research Council 1997). Until quite recently, ecologists with interests in organisms that depend on the aerosphere as a fluid medium for movement (e.g., dispersal, foraging, and migration), a source of food and nutrients, and ever-changing physical conditions (e.g., weather and air pollution), have worked more or less independently of atmospheric scientists. Research goals of organismal biologists who study airborne organisms have mostly focused on the behavior, ecology, and evolution of specific taxonomic groups (e.g., microbes, arthropods,

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birds, and bats), or specific physiological or behavioral functions such as thermoregulation, water balance, respiration, or flight. In contrast, research goals of atmospheric scientists and engineers have largely emphasized how severe weather and climate can affect human well-being, and thus have focused on the efficacy and efficiency of human developments, including building construction (e.g., skyscrapers), modes of transportation (e.g., sail boats, aircraft, spacecraft), design and installation of communication infrastructure (e.g., tall towers and transmission lines), and power generation (e.g., utility and residential scale wind energy facilities). Achieving these two sets of goals in large measure depends upon understanding the dynamic properties of wind and associated meteorological conditions at local, regional, or global scales, and understanding how these conditions affect movements of organisms.

To our knowledge, no organism spends its entire life in the aerosphere, yet many species spend a significant portion of their lives in this environment (Wilcove 2008). Species that spend significant amounts of time in terrestrial and aquatic ecosystems also may depend on the aerosphere for daily and seasonal locomotion, and sometimes for courtship and mating. Important selection pressures accordingly influence the biology of flight, including the size and shape of structures that comprise the flight apparatus, and sensory modalities that provide information about the aerosphere, and the active and passive systems that control locomotor movements.

On both temporal and spatial scales, the aerosphere is more variable and dynamic than the lithosphere or hydrosphere. Relative to strictly terrestrial and aquatic organisms, species that regularly occupy the aerosphere are almost immediately influenced by changing atmospheric conditions (e.g., pressure, wind, air density, precipitation, temperature), and other physical factors (e.g., solar radiation, polarized light, moon light, and geomagnetic and gravitational forces). Organisms that use the aerosphere for foraging, dispersal, and seasonal movements have evolved unique body forms and shapes, but also specific physiological traits (e.g., increased production of hemoglobin at high altitudes), thermoregulatory and respiratory responses, and the like, in response to different selection pressures. The aerosphere and the organisms that compose it not only are strongly influenced by predictable atmospheric conditions, but also by a myriad of anthropogenic conditions (e.g., lighted towns and cities, skyscrapers, air pollution, aircraft, radio and television towers, and more recently from the proliferation of wind turbines and communication towers) that increasingly have

adverse effects on such essential activities such as feeding, dispersal, migration, and courtship (Kunz et al. 2007a, 2007b; National Research Council 2007; Arnett et al. 2008; Horn et al. 2008; Fig. 1). Similarly, human-altered landscapes (e.g., forest fragmentation, agriculture, and urbanization) are rapidly and irreversibly transforming the quantity and quality of available habitats for organisms that use the aerosphere, conditions that also can affect the structure and function of terrestrial and aquatic ecosystems and the assemblages of organisms therein. Prevailing climate change and its expected effects on global circulation of the atmosphere and resultant changes on local, regional, and weather conditions may have profound effects on the historic migratory patterns of animals that use the aerosphere (Wilcove 2008).

Challenges of probing and modeling the aerosphere

Ecologists who study species that use the aerosphere face three important challenges: (1) to discover how best to detect the presence, taxonomic identity, diversity, and activity of organisms that use this space, (2) to identify ways to quantify relevant environmental variables at different temporal and spatial scales, and (3) to determine how best to understand and interpret responses of organisms in the context of complex meteorological events and patterns within both natural and anthropogenically altered environments. Efforts to address these challenges require the collaboration of scientists from diverse disciplines who have expertise and instruments needed to probe the aerosphere whether by day or night, in arid and humid conditions, at low and high altitudes, in strong and weak magnetic fields, in cold and warm climates, and during calm and windy conditions. Increasingly available tools, some originally designed for military purposes, space exploration, climate modelling, and security applications, include remote sensing and imaging devices such as radar, lidar, aircraft surveillance, weather satellites, night vision, and thermal infrared imaging cameras. Other instruments designed specifically for the study of animal movements, include radio-telemetry networks of ground-based stations and satellites, devices that detect audible and ultrasounds of birds and bats, stable isotope and DNA markers for assessing migration, which can be particularly valuable when used in combination with remotely sensed atmospheric, oceanic, and landscape conditions. Availability of these tools and methods provides rich opportunities for addressing emerging questions in ecology and environmental sciences with an emphasis on the aerosphere.

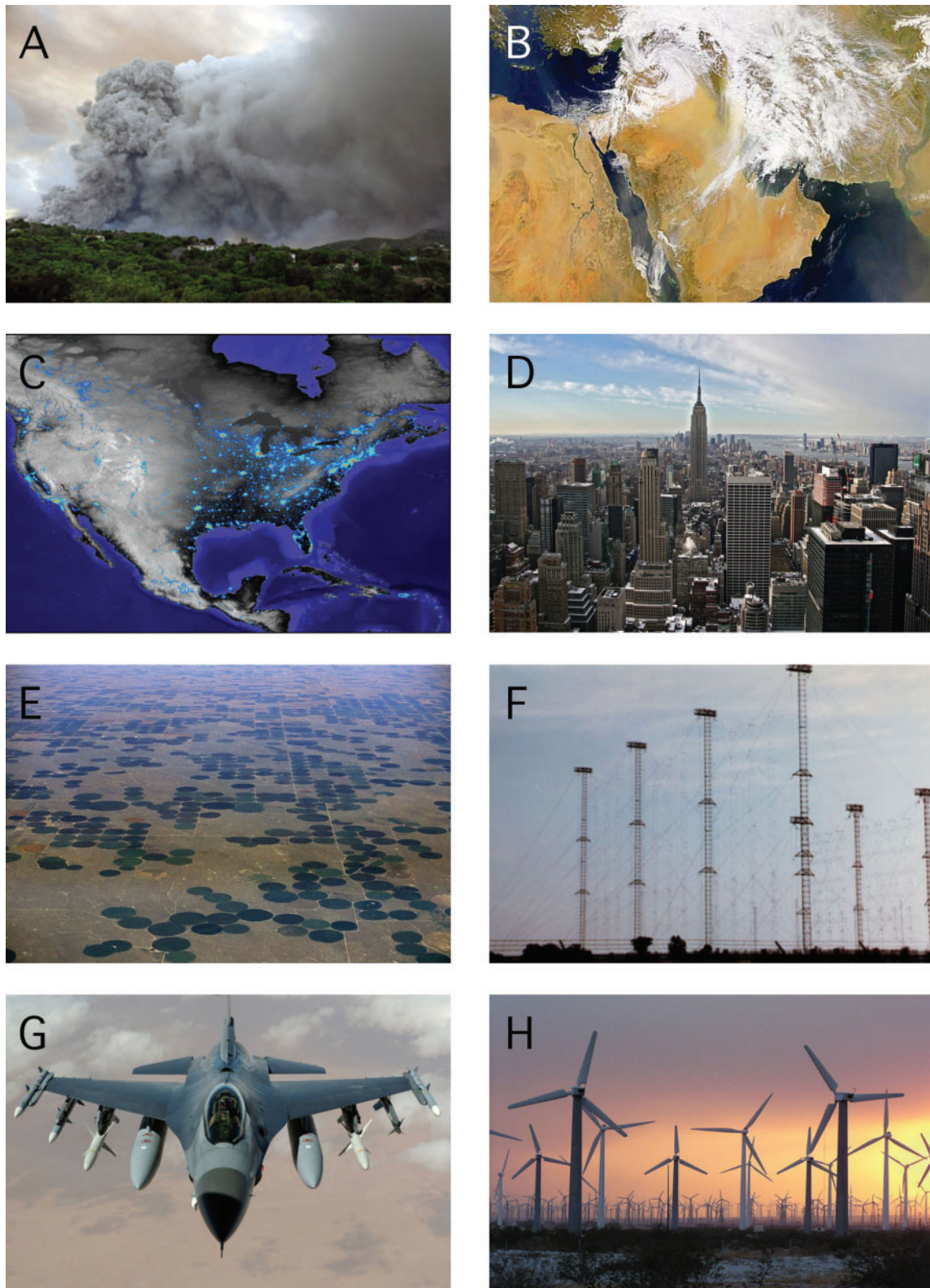


Fig. 1 The aerosphere is influenced by both natural phenomena and anthropogenic factors. (A) Aerospheric view of a volcanic eruption on the island of Montserrat (news.nationalgeographic.com); (B) Counter-clockwise swirl of clouds as a cyclone passed over Iraq, and dust being transported within the warm sector of the system (ucsu.colorado.edu/~drewsc/sandstorm/); (C) Aerial view of the North American landscape at night, showing lighted cites and towns (www.usgcrp.gov/usgcrp/images/ocp2003/8.1b-HCR); (D) Aerospheric view of skyscrapers New York City (www.justinlagace.com); (E) Aerial view of an agricultural landscape, showing the influence of center pivot irrigation in an arid region of Colorado (www.discoverlife.org/IM/EL_DP/0010/mx); (F) Aerospheric view of land-based communication towers (hawkins.pair.com/voadelano/voa_delano03.jpg); (G) Aerospheric view of a modern U.S. Air Force F-16 Fighting Falcon aircraft (galleries.fototagger.com/image/f-16_fighting_); (H) Aerospheric view of a modern, utility-scale wind energy facility in Palm Springs, California (www.planetscience.org/revisiontime/wind2.jpg).

The appropriate integration of diverse tools, technologies, and multiple databases promises to inform important ecological concerns and concepts, ranging from spread of invasive species, changes in biodiversity, and local- and global-scale animal movements in response to altered terrestrial, aquatic, and aerial environments. To date, ecologists have been hampered by a lack of technological awareness, inconsistent vocabularies, and challenges of working across different disciplinary platforms, including the complexities of establishing meaningful collaborations with atmospheric and computer scientists. Similarly, ecologists interested in proximate and evolutionary responses of airborne fauna to climate change and other anthropogenic perturbations have yet to optimally use the rich databases on landscapes assembled by earth scientists and geographers using remote sensing tools [e.g., American MODIS (Moderate Resolution Imaging Spectroradiometer), the European MERIS (Medium Resolution Imaging Spectrometer), and the Indian IRS-P6 (Indian Remote Sensing Satellite)].

Goals of the aeroecology symposium

The papers presented in this symposium address some of the limitations and challenges highlighted above, and highlight opportunities for gaining new insights that could arise from overcoming these challenges. To accomplish these goals, each of the authors considered several ecological questions that require analyses that embrace ecological and environmental sciences relevant to the aerosphere. Specifically, questions relate to animal displacements, and atmospheric and biological factors that may affect daily and seasonal patterns of prey density, foraging behavior, and migration. In addition to developing and promoting new tools and technologies to support research in aeroecology, it is important to integrate knowledge from different disciplines by encouraging the participation of scientists from varied backgrounds to develop a broader understanding of complex processes and the responses of organisms to a dynamic aerosphere. To achieve these goals, the authors share ideas with respect to novel tools, emphasize tangible and specific scientific questions, and adopt novel research paradigms. To this end, we have identified instrumentation and software tools, and discuss their applications to improve our collective understanding of the aerosphere and the interactions of airborne organisms with the hydrosphere and lithosphere. Several research areas were not included in this symposium because time was limited. Notwithstanding,

we include brief comment on these and other emerging disciplines relevant to understanding the ecology of organisms that use the aerosphere.

Historical and current research on aeroecology

Weather radar historically has been used for detecting groups of migrating birds (Able 1970; Bruderer and Steidinger 1972). Since the early 1990s, weather surveillance, NEXRAD (NEXt Generation RADar) Doppler radar has been used at various temporal scales to quantify movements of birds (Diehl et al. 2003; Diehl and Larkin 2005; Larkin 2005; Gauthreaux and Belser 2003, 2005; Gauthreaux et al. 2003, 2006; Kunz 2004), although it has become increasingly clear that many targets also include bats and insects (Westbrook et al. 1998; Kunz 2004; Cleveland et al. 2006; Cryan and Diehl in press). Similarly, tracking radar is being used to investigate foraging, dispersal, and migratory movements of flying arthropods, birds, and bats (Bruderer and Boldt 2001; Bruderer and Popa-Lisseanu 2005; Larkin 2005). Additionally, use of vertical profiler radar promises to provide new insight into the distribution and movement of air masses, and of arthropods, birds, and bats in the aerosphere (Smith et al. 1993; Eaton et al. 1995; McLaughlin 2003; Kunz et al. 2007b; T.A. Kelly, personal communication).

Advances in radio-telemetry (e.g., miniature radio transmitters for insects, small birds and bats, and satellite tracking with GPS for larger species), have advanced our knowledge of movements at smaller spatial and temporal scales than can be provided by radar. Recent developments of integrated arrays of receiving antennae and satellite tracking of small birds and bats (Cochran and Wikelski 2005; Smith et al. 2005; Wikelski et al. 2007), in addition to advanced canopy-netting techniques (Hodgkison et al. 2002), are beginning to yield new insights on animal movements, pollination of flowers by nectar-ivores, and dispersal of seeds by frugivores (Hodgkison et al. 2003; Thies and Kalko 2004; Croxall et al. 2005; Nathan et al. 2005; Thies et al. 2006)—research that also is relevant to the conservation of biodiversity (Trakhtenbrot et al. 2005) and for understanding the transmission and mitigation of emerging diseases (Chivian 2003; Epstein et al. 2003).

Radio transmitters, together with other visualization methods, also are enabling researchers to quantify energy expenditure, wingbeat patterns, respiration, and flight altitudes of small, free-ranging animals (e.g., Lord et al. 1962; Dudley 2000; Altshuler et al. 2004; Bowlin et al. 2005). Use of wind tunnels

and computer-aided visualization techniques (Srygley and Thomas 2002; Altshuler and Dudley 2003; Pivkin et al. 2005; Swartz et al. 2006; Hedenström et al. 2007; Henningsson et al. 2008; Muijres et al. 2008) also are helping to inform field ecologists in how flow dynamics and atmospheric conditions influence flight behavior of bats, birds, and insects (e.g., Dillon et al. 2006).

Measuring physiological traits of foraging and migrating animals, under different atmospheric conditions (Greenstone 1990, 1991), also has begun to advance our knowledge of how animals respond to different atmospheric conditions. Moreover, novel efforts are being made to understand how insects, birds, and bats navigate during migration (Holland et al. 2006a, 2006b). Experimental manipulations have included alteration of magnetic fields to understand how animals navigate over long distances (e.g., Cochran et al. 2004; Srygley et al. 2006; Holland et al. 2006b; Wang et al. 2007). A recent initiative to employ radio technology on a near-earth satellite to track small animals around the globe holds considerable promise for understanding migratory movements of free-ranging animals (Wikelski et al. 2007). A recent global initiative, known as the International Cooperation for Animal Research Using Space (ICARUS; www.icarusinitiative.org), also has been formed to help achieve this goal. Other initiatives, including NEON (National Ecological Observatory Network [<http://www.neoninc.org/>]), and related Research Coordination Networks, such as MIGRATE (Migration Interest Group: Research Applied toward Education [www.migrate.ou.edu]), both funded by the National Science Foundation, have been formed to help answer important questions such as the influence behavioral plasticity of migrants, drivers of population dynamics of migratory animals, determinants of individual fitness, and impacts of environmental change on migratory life-histories (JF Kelly, personal communication).

Recent developments in audible and ultrasonic acoustic detection and analysis, coupled to high-speed infrared and thermal images now make it possible to quantify three-dimensional flight trajectories of bats as they pursue airborne arthropods (Schnitzler and Kalko 2001; Holderied et al. 2005; Holderied and Jones in press; Hristov et al. 2008), and to unambiguously identify the mix of free-ranging bat species in both temperate and tropical assemblages (Parsons and Jones 2000; Brigham et al. 2004; Szewczak 2004; Parsons and Szewczak in press). This technology now makes it possible to characterize species richness and activity patterns that previously been difficult to quantify or record species have gone

completely undetected, such as many aerial insectivorous bats, especially in tropical regions (Jung et al. 2007). Night vision devices and thermal infrared cameras have become increasingly used to observe birds, bats, and insects aloft, not only for assessing foraging behaviors (Simmons 2005; Betke et al. 2007; Horn et al. 2008; Hristov et al. 2008), but also for censusing animals during nightly emergence flights (Sabol and Hudson 1995; Frank et al. 2003; Betke et al. 2007, 2008; Hristov et al. 2008). When used simultaneously with tracking radar, night vision devices and thermal infrared cameras also make it possible to distinguish between birds and bats as they respond to anthropogenic structures such as wind turbines (Gauthreaux and Livingston 2006; Kunz et al. 2007a; 2007b).

Many important aspects of the behavior of flying organisms in the aerosphere occur in groups, sometimes of immense sizes. Many collective behaviors are influenced by the three-dimensional geometry of the environment, and by the cognitive abilities of animals that interact with prevailing atmospheric conditions. Understanding the behavior of individuals in isolation does not necessarily provide information about the properties of individuals within groups (Couzin and Krause 2003). Increased focus on empirical studies, self-organization theory, and mathematical modelling of group and collective behavior of insects, birds, and other organisms promises to help advance knowledge about daily flocking behavior at the population level and group dynamics during migration (Couzin 2006a, 2006b).

Use of stable isotopes of carbon and nitrogen as dietary tracers also can provide valuable insights into trophic relationships of airborne predators and their prey (Ibáñez et al. 2001; Sullivan et al. 2006; Popa-Lisseanu et al. 2007), and isotopes of hydrogen can additionally be used for discerning geographic origins of nocturnal migrants (Hobson and Wassenaar 2001; Cryan et al. 2004; Kelly et al. 2002; 2005; Hobson et al. 2006).

Collaborations of biologists with atmospheric scientists and aerospace engineers are needed to help advance understanding of animal behavior in the aerosphere. In turn, these collaborations can help advance the technical design and function of small, unmanned aerial vehicles, as inspired by the ecology, behavior, physiology, and biomechanics of real organisms (Watts et al. 2001; Pivkin et al. 2005; Swartz et al. 2006).

The symposium

To the extent possible, each contribution from this symposium has posed several important questions

and has reviewed existing and upcoming applications that inform new answers. Interdisciplinary approaches are emphasized, particularly those designed to optimally exploit the expertise of domain scientists in behavior, ecology, biomechanics, meteorology, computer science, and geography—approaches that are central to developing meaningful cross-disciplinary collaborations.

Using Doppler weather surveillance radar, Gauthreaux et al. (2008) discuss major challenges in understanding daily and seasonal movements of airborne fauna. Reflectivity data contain information on the quantity of organisms aloft, and data on velocity and winds aloft are needed to determine the different types of organisms that use the aerosphere. The latter is accomplished by examination of statistical distributions of the maximum ground speeds of airborne fauna in the aerosphere. Because migrating birds and bats have mean velocities greater than most insects and randomly foraging birds and bats in a sample volume of the aerosphere, these data can often be used to detect and discriminate specific targets aloft.

Horn and Kunz (2008) used NEXRAD databases to explore how Brazilian free-tailed bats disperse nightly into the aerosphere, and how this information can provide insight into local population dynamics. NEXRAD radar images are georeferenced and compiled in a GIS along with colony locations and landscape features. In temporal sequences of NEXRAD images, identification of individual bat colonies is accomplished by assessing reflectivity from bats aloft using computer vision algorithms. These measurements are used to compute relative colony size and mean direction of travel and to compare variation in emergence behavior both within and among colonies. Analyses using circular statistics suggest that multiple factors play a role in the nightly flight and dispersal behavior of bats, and demonstrate that NEXRAD data can be a valuable resource for monitoring the nightly behavior of large bat colonies, and larger-scale seasonal and inter-annual changes in abundance of local populations.

Larkin and Szafoni (2008) discuss how tracking radar data can be used to investigate nocturnal aggregations of birds. Statistical analyses of detailed flight paths support the hypothesis that individual birds that fly together (closer than 200–300 m) move in the same direction and at the same speed more often than those that are widely dispersed. Evidence from tracking radar suggests that birds flying together also may have similar wing beat frequencies than can be expected by chance.

Hristov et al. (2008) provide an overview of recent applications of thermal infrared imaging in ecological research and discuss how this technology has revolutionized our ability to observe and document the behavior of free-ranging organisms in the dark. Unlike traditional imaging that requires visible light, thermal infrared imaging relies on the emission of heat energy from objects in the environment. Temperature-sensitive cameras and computer vision algorithms are used to detect differences in thermal values in their fields of view and to depict information visually as different brightness (temperature) values. As noted in this article, successful applications of thermal infrared imaging from ongoing studies of bat ecology and behavior also are relevant for the study other organisms.

Kalko et al. (2008) present results based on recordings and analysis of echolocation calls of Neotropical bats that, for the first time, permit explicit species identification as well as assessment of foraging activity in these species-rich tropical assemblages. Use of miniature radio transmitters also makes it possible to assess foraging strategies, range size, and differential habitat use of species that previously have been otherwise difficult to study. Given the high impact of bats as seed dispersers, pollinators, and predators on arthropods, the fine resolution of movements afforded by radio-telemetry provides a better understanding of the links between spatial use and resource distribution and abundance. In turn, this provides novel information needed to understand temporal dynamics, to help quantify the ecosystem services provided by bats, and to predict how anthropogenic changes may affect the abundance and distribution of their prey.

Jones and Holderied (2008) discuss how echolocation is used by bats to detect, localize, and classify airborne targets at night. As obstacles or prey species are approached, it has become increasingly clear that the call structure of echolocating bats changes in predictable ways: calls become shorter to reduce overlap between pulse and echo, and calls change in shape so that localization errors in the detection of insect prey can be minimized. Echolocation behavior and flight performance of bats are closely synchronized by monitoring both features simultaneously using stereo photo- and videogrammetry, and by acoustic tracking of their flight paths. These approaches make it possible to quantify the intensity of signals used by free-ranging bats, and thus demonstrate systematic changes in signal design in relation to the proximity of obstacles (e.g., moving insect prey and stationary objects) in the aerosphere.

Westbrook (2008) discusses long-distance migration of important agricultural pests, such as adult corn earworm moths (*Helicoverpa zea*), also called cotton bollworm moths, and several other noctuid moth species upon which bats and birds sometimes feed. These seasonal geographic expansions of pest populations and the consequent increased infestations of agricultural crops are documented on a continental scale in North America. Observed patterns of migratory flight by these insect pests are largely associated with vertical profiles of temperature and wind direction and are concentrated in the atmospheric boundary layer. Collective patterns of moth migrations generally are related to wind direction, but often at significant angular deviations. Preliminary analyses suggest that moth distributions in the aerosphere can be estimated from discrete moth counts using X-band radar and bulk reflectivity data from NEXRAD Doppler radar.

McCracken et al. (2008) discuss bat echolocation calls recorded using radio microphones suspended in the aerosphere from kites and tethered helium balloons. These data mostly include calls of Brazilian free-tailed bats from ground-level up to 1118 m above ground level (AGL). Altitudinal profiles show significantly different levels of bat echolocation call activity at different levels AGL in the aerosphere. Bat activity was greatest at ground level and 400–600 m AGL, coincident with the atmospheric boundary layer and the highest densities of moths as described in the paper by Westbrook (2008). Feeding buzzes, indicating attacks on aerial prey, were most abundant near ground level and at 400–600 m AGL, although some were detected at altitudes up to 1 km AGL.

Srygley and Dudley (2008) review data on insects in the atmospheric boundary layer by tracking individuals as they migrate across the Caribbean Sea and the Panama Canal. Data presented on dragonflies of the genus *Pantala* show that migration occurs in October and is associated with frontal systems. Butterflies and dragonflies are capable of directed movement towards a preferred compass direction in variable winds, whereas moths of the genus *Urania* migrate from Central to South America and drift with winds over water. Butterflies navigating in the aerosphere appear to use both global and local cues. In support of optimal migration theory, butterflies and dragonflies appear to adjust their flight speeds to maximize migratory distance per unit energy, whereas moths do not.

Swartz et al. (2008) examine the biomechanics and physiology of flight of bats in the laboratory, and explore how this knowledge can help advance

understanding of foraging, dispersal, and migration of free-ranging animals. Laboratory studies of animal flight in wind tunnels provide valuable information for improving and understanding of airflow dynamics. Emphasis is placed on flow characteristics of distinct aerial environments as a critical first step toward understanding the ecology of free-ranging animals aloft. The dynamics of natural airflow, characterized by air speeds, variability, intensity, and turbulence, will likely influence many aspects of an animal's behavior in the aerosphere. A combination of field- and laboratory-based research also is needed to delineate conditions under which flight mechanics and energetics are influenced by turbulence created by other animals.

Cochran et al. (2008) discuss the advanced use of miniaturized radio-transmitters that allow for the continuous monitoring of behavioral and physiological variables of small, free-ranging animals that use the aerosphere. Monitoring of nocturnal migratory flights of three species of neotropical thrushes in the mid-western US has revealed variations in wing beat frequencies, flight speeds and body accelerations that may reflect ascending and descending movements of individuals during flights. Individual thrushes also pause (in wingbeat) more often than expected during their migratory flights, likely to save energy. The high variation in wingbeat frequencies also cautions against categorizing radar echoes as particular types of birds.

Future directions

To further advance the emerging discipline of aeroecology, studies are needed that integrate the research discoveries of atmospheric scientists, engineers, and computer scientists with those of ecologists, physiologists, and functional morphologists, to more fully understand the activity and movements of organisms in the aerosphere. Research that incorporates laboratory and field studies on biomechanics, physiology, behavior, and ecology also promises to provide new insights into how, where, when, and why organisms interact with anthropogenic features in the aerosphere. To this end, studies are needed to assess: (1) physiological and behavioral responses of airborne organisms to climate change, (2) behavioral and ecological responses of organisms to structures that extend into the aerosphere (e.g., communication towers, tall buildings, and wind turbines), (3) how landscape fragmentation and land use change affects movements, and (4) how the altered structure of aeroecological communities, through the invasion of exotics, may affect species

distributions and abundance (Lindenmayer and Fischer 2006; National Research Council 2007; Kunz et al. 2007a; Lian 2007; Wilcove 2008). Use of stable isotopes to investigate trophic relationships between insects, birds, bats, and their prey also promises to yield valuable insight into how the myriad of organisms interact in the aerosphere. Ultimately, understanding the ecosystem services provided by arthropods, birds, and bats that use the aerosphere is important for maintaining ecosystem health, human health, and biodiversity on the planet (Daily et al. 1997; Cleveland et al. 2006; Chivian and Burnstein 2008).

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Utility-scale solar impacts to volant wildlife

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Abstract

To reduce carbon emissions from fossil fuel combustion, United States government agencies, including those in California, initiated aggressive programs to hasten development of utility-scale solar energy. Much of California's early development of solar energy occurred in deserts and annual grasslands, much of it on public land. Measurement of solar energy's impacts to wildlife has been limited to mortality caused by features of solar facilities, and has yet to include impacts from habitat loss and energy transmission. To estimate species-specific bird and bat fatality rates and statewide mortality, I reviewed reports of fatality monitoring from 1982 to 2018 at 14 projects, which varied in duration, level of sampling, search interval, search method, and carcass detection trials. Because most monitors performed carcass detection trials using species of birds whose members were larger than birds and bats found as fatalities, I bridged the monitors' onsite trial results to offsite trial results based on the same methods but which also measured detection probabilities across the full range of body sizes of species represented by fatalities. This bridge preserved the project site's effects on detection probabilities while more fully adjusting for the effects of body size. My fatality estimates consistently exceeded those reported. Projected to California's installed capacity of 1,948.8 MW of solar thermal and 12,220 MW of photovoltaic (PV) panels in 2020 (14,168.8 MW total), reported estimates would support an annual statewide fatality estimate of 37,546 birds and 207 bats, whereas I estimated fatalities of 267,732 birds and 11,418 bats. Fatalities/

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MW/year averaged 11.61 birds and 0.06 bats at PV projects and 64.61 birds and 5.49 bats at solar thermal projects. Fatalities/km/year averaged 113.16 birds and zero bats at generation tie-ins, and 14.44 birds and 2.56 bats along perimeter fences. Bird fatality rates averaged 3 times higher at PV projects searched by foot rather than car. They were usually biased low by insufficient monitoring duration and by the 22% of fatalities that monitors could not identify to species. I estimated that construction grading for solar projects removed habitat that otherwise would have supported nearly 300,000 birds/year. I recommend that utility-scale solar energy development be slowed to improve project decision-making, impacts assessment, fatality monitoring, mitigation efficacy, and oversight.

KEYWORDS

bats, birds, carcass detection trials, collision mortality, fatality monitoring, solar energy, wildlife impacts

In response to environmental and economic threats posed by carbon emissions from fossil fuel combustion, state and federal governments embarked on ambitious plans to develop renewable energy in California, USA (California Public Utilities Commission 2008). Plans such as the Desert Renewable Energy Conservation Plan (California Energy Commission et al. 2014) were formulated to overcome regulatory and permitting barriers for utility-scale renewable energy and its transmission to help Californians achieve the goal of obtaining 60% of its energy from renewable sources by 2030 and 100% of it by 2045. Because development of utility-scale renewable energy projects comes with environmental costs, including impacts to wildlife, state and federal agencies collaborated on an Avian-Solar Science Coordination Plan (Multiagency Avian-Solar Collaborative Working Group 2016) to identify and prioritize information needs related to impacts to birds. Just as understanding of impacts to wildlife lagged the rapid expansion of wind energy development (May et al. 2015, 2017), understanding impacts to wildlife also lags the rapid expansion of utility-scale solar energy projects (Multiagency Avian-Solar Collaborative Working Group 2016, Kosciuch et al. 2020). For example, only recently was it learned that many of the animals killed at California's solar projects originated out of state (Conkling et al. 2020), thus elevating the impacts to the regional level.

Deliberation is needed concerning the environmental costs and benefits of utility-scale solar energy compared to other forms of energy generation (e.g., wind, geothermal, hydroelectric, fossil-fuels, nuclear, rooftop solar). Accurate estimates of wildlife mortality would help determine impacts at project and regional levels. Researchers have calculated regional estimates of wind energy impacts to birds (Loss et al. 2013a, Smallwood 2013, Zimmerling et al. 2013, Erickson et al. 2014) and bats (Hayes 2013; Smallwood 2013, 2020; Zimmerling and Francis 2016). Researchers have also discussed cumulative impacts (Calvert et al. 2013) and calculated regional estimates of wildlife mortality caused by other anthropogenic sources, such as from collisions with automobiles (Loss et al. 2014a), transmission lines (Rioux et al. 2013, Loss et al. 2014b), and buildings (Machtans et al. 2013, Loss et al. 2014c), and predation from house cats (Loss et al. 2013b). Accuracy of these regional estimates depends on representativeness of the monitored projects (or places) relative to the spatial distribution of all projects (Smallwood 2013, Huso and Dalthorp 2014). It also depends substantially on study design and field methods implemented at the project level.

Before 2012, fatality monitoring at utility-scale solar projects was rare, largely because few utility-scale solar projects existed. The only wildlife fatality monitoring performed before 2012 had been at the 10-MW Solar One project in 1982–1983 near Barstow in San Bernardino, California (McCrary et al. 1986). Since monitoring at Solar One, much had been learned about fatality monitoring at wind projects from the late 1980s through the initial fatality monitoring plan for solar projects (Nicolai et al. 2011) and its update in 2016 (Huso et al. 2016). Managers formulated guidance documents to standardize survey methods for the purposes of accurately estimating and comparing fatalities among wind energy projects and to fatalities estimated for other forms of energy generation (Smallwood 2017b). Researchers deliberated field methods concerning their support of accurate fatality estimation (Smallwood 2007, Johnson et al. 2016, Reyes et al. 2016, Smallwood et al. 2018, Kitano et al. 2020), and the estimation methods themselves (Korner-Nievergelt et al. 2011, Kitano and Shiraki 2013, Péron et al. 2013, Warren-Hicks et al. 2013, Smallwood et al. 2018). A new framework for testing the efficacy of bat, golden eagle (*Aquila chrysaetos*), and bald eagle (*Haliaeetus leucocephalus*) impact-reduction strategies at wind energy projects (Sinclair and DeGeorge 2016) was also an important step in measuring and responding to utility-scale renewable energy impacts to volant wildlife. Much of what has been learned from research of wind energy impacts to wildlife can contribute to improved fatality monitoring at utility-scale solar projects, but solar projects also pose different risk factors, including to many species less vulnerable to wind energy impacts.

Once constructed, utility-scale solar projects pose multiple fatality risk factors. Volant wildlife can collide with solar collectors, power block structures, project buildings, medium-voltage overhead lines, gen-tie lines (i.e., generator lead or transmission lines), fencing, and automobiles servicing the project. Some birds might collide with photovoltaic (PV) panels because of the lake effect, or the birds' perception of many closely spaced PV panels as a waterbody onto which they attempt to land (Kagan et al. 2014). Polarized light from PV panels might attract prey of insectivorous birds and hence the birds themselves (Horváth et al. 2010), or it might fool birds into trying to lick water from the panel while in flight (Horváth et al. 2009, 2010). Reflected self-images on mirrors of solar thermal projects, or even of PV panels, might elicit aggressive responses of birds motivated to defend territory (Hager and Craig 2014, Kahle et al. 2016). Collisions might result from high-speed predator-prey encounters in which the pursuer or pursued collide with a project feature (Dunn 1993). Bats might fail to detect angled collector panels or mirrors because of reduced echolocation output (Gorresen et al. 2017, Corcoran and Weller 2018) or confused echolocation feedback (P. R. Long, retired military pilot, personal communication). Bats might also misinterpret echolocation-detected flat panels as water bodies from which they attempt to drink while in flight (Greif and Siemers 2010). At power tower projects, birds and bats die because of acute exposure to the zone of solar flux (Kagan et al. 2014). Data summarized herein indicate that birds also perish because of electrocution on energized portions of the project, entrapment or entanglement with project infrastructure such as fencing, and drowning in solar evaporation ponds. Until 2018, however, data needed to test hypothesized causal factors and to estimate regional fatalities were largely unavailable to the public.

Reviews of project-level fatality estimates were reported by those with exclusive access to reports and data (Kagan et al. 2014, Cooper 2016, Walston et al. 2016, Kosciuch et al. 2020). These reviews, along with Harrison et al. (2016), discussed barrier effects, habitat loss, and displacement of wildlife, but they focused on the lesser impacts of mortality caused by operable projects. In the reviews other than Harrison et al. (2016), fatality rates at operative projects were compared mostly as they had been reported, and only Walston et al. (2016) attempted to adjust all project-level fatality counts by carcass detection probabilities. I obtained and reviewed reports, data, environmental reviews, and communications related to bird and bat fatality monitoring at California utility-scale solar energy projects (Table 1). The variety of study designs and methods I observed inspired my own estimations of project-level fatality estimates. I became most concerned over liberal exclusions of fatalities from project-level fatality estimates, use of automobiles in fatality searches, and placements of inappropriate carcasses to measure searcher detection and carcass persistence in carcass detection trials. My first objective was to compare my independent estimates to originally reported estimates of bird and bat

TABLE 1 Solar projects for which fatality data were made available for bats and bird mortalities 1982–2018 at solar projects in California, USA, in response to United States Freedom of Information Act and California Public Records Act requests in 2018

Project	Ref ^a	County ^b	Features surveyed ^c	MW	Ha	Year(s)	Other surveys ^d
California Valley Solar Ranch	1	SLO	PV, OL, G, F	258	476	2012–2014	Bat, BM
Topaz Solar Farm	2	SLO	PV, OL	550	677	2012–2016	Nest, Use, Bat, BM
Campo Verde Solar Project	3	Imp	PV, G, F	139	584	2013–2016	None
Centinela Solar Energy Project	4	Imp	PV, G, F	170	665	2014–2015	None
Imperial Solar Energy Center South	5	Imp	PV, G	130	383	2014	None
Calipatria Solar Project	6	Imp	PV	20	64	2016	None
Midway Solar Farm II	7	Imp	PV	30	113	2018	None
Desert Sunlight Solar Farm	8	Riv	PV, G, F	550	1,700	2015–2016	None
Stateline Solar Farm	9	SB	PV, G	300	682	2017–2018	None
McCoy Solar Energy Project	10	Riv	PV, G, F	250	914	2016–2017	None
Blythe Solar Power Project	11	Riv	PV, G, F	235	769	2016–2017	None
Genesis Solar Energy Project	12	Riv	SCA, PB, P, G, F	250	728	2015–2017	None
Solar One	13	SB	PT, HM, F, P	10	32	1982–1983	Use
Ivanpah Solar Electric Generating System	14	SB	PT, HM, G, F	377	1,457	2013–2018	Use

^aReferences: 1 = H.T. Harvey and Associates (2013, 2015a); 2 = Althouse and Meade (2012, 2014); 3 = Heritage Environmental Consultants (2014, 2015a–e); 4 = Heritage Environmental Consultants (2015b), Chambers Group (2016); 5 = UltraSystems (2014a–e); 6 = Heritage Environmental Consultants (2017a,b,c); 7 = Shoener and Barrett's Biological Surveys (2018); 8 = Western EcoSystems Technology (2017a–2018a); 9 = Dudek (2018a); 10 = Martinson et al. (2018b); 11 = Doering and Santistevan (2013), Martinson et al. (2018a); 12 = Western EcoSystems Technology (2016, 2017c); 13 = McCrary et al. (1986); 14 = H.T. Harvey and Associates (2015b), Western EcoSystems Technology (2017b, 2018b, 2019).

^bSLO = San Luis Obispo, Imp = Imperial, Riv = Riverside, SB = San Bernardino.

^cPV = photovoltaic panels mounted on ground-based metal frames, OL = medium voltage overhead lines, G = gen-tie, or generation tie-ins to the nearest substation or transmission lines, F = perimeter security fence, SCA = solar collector arrays composed of parabolic mirrors, PB = power blocks, P = solar evaporation ponds, PT = power towers receiving reflected sunlight from heliostat mirrors, and HM = heliostat mirrors arranged to reflect solar energy to receiver on power tower.

^dBat = bat activity surveys performed using acoustic detectors; BM = background mortality surveys consisting of fatality searches in adjacent areas lacking solar project infrastructure; nest = nest survey, use = visual scans to detect and count birds during daylight hours.

fatality rates at monitored utility-scale solar projects. I predicted my estimates would usually be higher. My second objective was to estimate statewide fatalities of birds and bats caused by the installed capacity of utility-solar projects in 2020. My third objective was to apportion collision fatality impacts to project features to reveal which features warrant greatest concern. My fourth objective was to compare fatality rates among bird and bat species and among those with special status to identify species in relatively greater need of research and mitigation. My fifth objective was to identify additional sources of error and bias that warrant further research to increase accuracy of fatality estimates.

STUDY AREA

The fatality monitoring studies I reviewed had been performed from 1982–2018 at 14 utility-scale solar energy projects on relatively flat terrain in annual grassland, desert, and agricultural environments within the desert of California (Figure 1; Table 1). Elevations ranged –4 m to 983 m. Climate was Mediterranean, with warmest temperatures and least rainfall during June–August, coolest temperatures and greatest rainfall during November–February, and transitional periods with increasing temperatures and decreasing rain in March–May, and deceasing temperatures and increasing rain during September–October. Twelve projects were located in Mojave and Sonoran deserts, where annual rainfall averaged <10 cm, and natural ground cover was desert scrub including creosote (*Larrea tridentata*). Two project sites were in San Luis Obispo County, where annual rainfall averaged 10–38 cm, and natural ground cover was annual grassland composed of red brome (*Bromus madritensis rubens*), soft chess (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum*), six-weeks fescue (*Festuca octoflora*) and wild oat (*Avena fatua.*). Wildlife typical of the desert sites included coyote (*Canis latrans*), desert kit fox (*Vulpes macrois*), bighorn sheep (*Ovis canadensis*), black-tailed jackrabbit (*Lepus californicus*), canyon bat (*Parastrellus hesperus*), common raven (*Corvus corax*), desert sidewinder (*Crotalus cerastes*), and Agassiz desert tortoise (*Gopherus agassizii*).

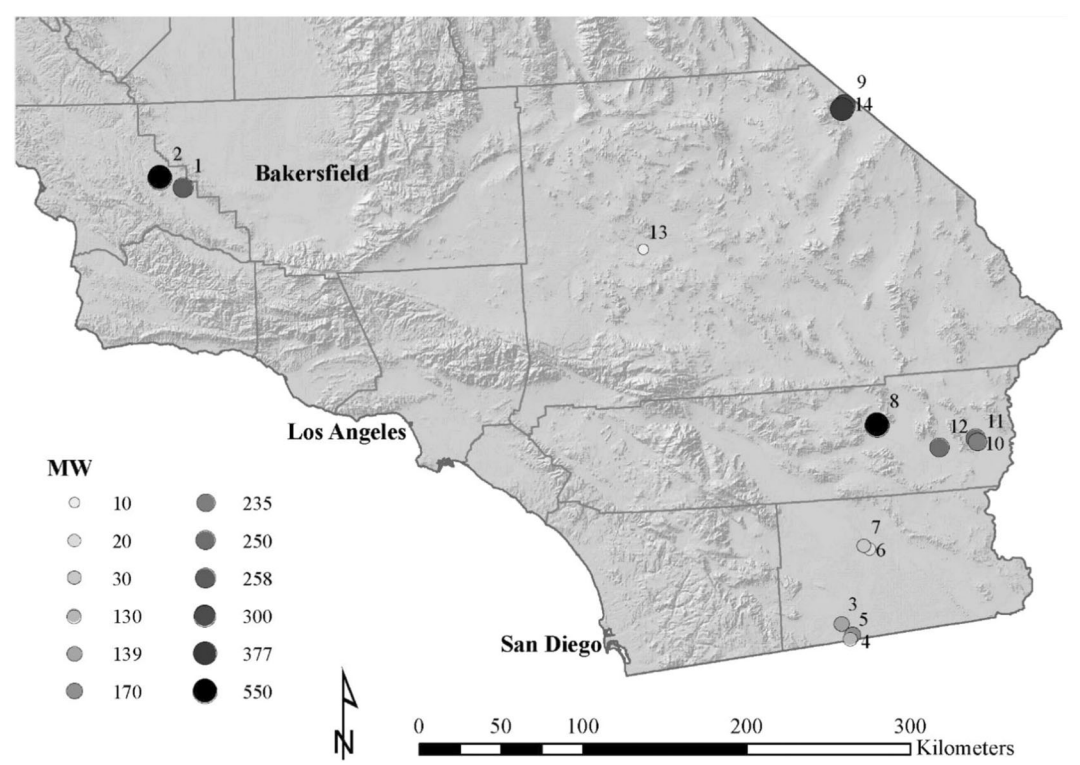


FIGURE 1 Locations and rated capacities (MW) of solar energy project sites that were monitored for wildlife fatalities in California, 1982–2018: 1 = California Valley Solar Ranch, San Luis Obispo County, 2 = Topaz Solar Farm, San Luis Obispo County, 3 = Campo Verde Solar Project, Imperial County, 4 = Centinela Solar Energy Project, Imperial County, 5 = Imperial Solar Energy Center South, Imperial County, 6 = Calipatria Solar Project, Imperial County, 7 = Midway Solar Farm II, Imperial County, 8 = Desert Sunlight Solar Farm, Riverside County, 9 = Stateline Solar Farm, San Bernardino County, 10 = McCoy Solar Energy Project, Riverside County, 11 = Blythe Solar Power Project, Riverside County, 12 = Genesis Solar Energy Project, Riverside County, 13 = Solar One, San Bernardino County, 14 = Ivanpah Solar Electric Generating System, San Bernardino County

Wildlife typical of the grassland sites included coyote, San Joaquin kit fox (*Vulpes macrotis mutica*), black-tailed jackrabbit, giant kangaroo rat (*Dipodomys ingens*), and northern Pacific rattlesnake (*Crotalus oreganus oreganus*).

All monitored projects had been graded flat and natural vegetation had been removed. Of the 3 solar energy technologies monitored, 1 technology included flat PV panels on ground-mounted frames with solar trackers at most projects. The other 2 technologies were solar thermal, including solar-trough parabolic mirrors referred to as solar collector arrays (SCAs) at Genesis Solar Energy Project, and heliostat mirrors reflecting light to receivers, or boilers, atop power towers at Ivanpah Solar Electric Generating System (Ivanpah) and the since-decommissioned Solar One project. Solar projects connected to the grid via gen-ties, which resemble transmission lines and their towers. Solar projects were also surrounded by perimeter security fences. Some projects also included medium-voltage overhead lines. Monitored projects totaled 3,259 MW, including 627 MW of solar thermal and 2,632 MW of PV. They included 163.35 km of security fence bordering 2,237 MW of solar arrays (0.073 km/MW) and 78.09 km of gen-tie serving 2,237 MW of solar arrays (0.037 km/MW) that were monitored for fatalities.

METHODS

Through use of California Public Records Act (PRA) and federal Freedom of Information Act (FOIA) requests to agencies with regulatory authority over biological resources, I obtained reports, data, environmental reviews, and communications related to fatality monitoring at utility-scale solar projects in California. Field and analytical methods of fatality monitoring varied among reports but all were intended to estimate the number of fatalities caused by the project. Monitors searched for fatalities by following protocols designed to account for proportions of fatalities not found, to extrapolate from sampling units to whole projects, and to compare fatality rates between project features and whole projects. Although monitors used various fatality estimators, the basic form was $\hat{F} = \frac{F}{p}$, where $\hat{F}$ was the fatality estimate, F was the number of fatalities found, and p represented carcass detection probability.

Monitors typically searched by foot or by car for fatalities according to a periodic schedule and along evenly spaced transects across sampled portions or all of a solar project. At 6 projects, monitors applied distance sampling from transects. They usually removed all fatality finds upon discovery. Most performed carcass detection trials, in which testers placed carcasses on the study site to quantify searcher detection rates and carcass persistence time, or the time until the placed carcass was no longer detectable by searchers. Outcomes of carcass detection trials were used to estimate p . For fatality estimation, monitors usually omitted fatalities found incidental to scheduled searches or outside search areas. Some monitors set 5 or 10 fatality detections/species as thresholds for species' inclusion, and some separately reported fatality estimates between known and unknown cause of death. A few reports provided estimates for 10 species with the highest fatality rates.

From information I received following PRA and FOIA requests, I constructed data sets I needed to independently estimate fatalities at monitored solar projects (fatality data and their reported attributes, along with definitions of data fields [Table S1], are available in Supporting Information). I recorded each study's start date, duration of monitoring of each project feature, proportion of each project feature searched, whether searched by walking or car, transect width, whether distance sampling was used, fatality search interval, and fatality metric (Table 2). I recorded essential attributes of carcass detection trials that monitors used to represent p , including taxa, carcass source, body size classes into which trial carcasses were grouped, trial duration, and metric used to estimate the probability of carcasses persisting to the next search (r), which could be derived from R = proportion of carcasses remaining on the i th day into a trial, R_c = mean daily carcass persistence upon the i th day into a trial, and $\bar{t}$ = mean days to carcass removal (Table S2, available in Supporting Information). Some of the monitors' detection trials included placements of feather piles as a separate class from small and large birds. I did not use the results of such trials because all fatalities found as feather piles began as complete carcasses. Starting a trial from a feather pile, as if the rest of the carcass never existed, was unrealistic.

TABLE 2 Bird and bat fatality search methods reported at utility-scale solar projects in California, USA, 1982–2018

Project	Feature ^a	Yrs	Sample (%)	Search	Transect (m) ^b	I (days) in spring, summer, fall, winter ^c	$\hat{F}$ metric ^d
CVSR ^e	Gen-tie	2.4	100	Walk	15	7, 7, 7, 7	F/(S × r)
CVSR ^e	MVOH	1.8	100	Walk	18	7, 7, 7, 7	F/(S × r)
CVSR ^e	Fence	2.0	20	Walk	3	7, 7, 7, 7	F/(S × r)
CVSR ^e	PV	2.0	20	Walk	5	7, 7, 7, 7	F/(S × r)
Topaz	MVOH	5.0	3.3	Walk	2.13	1 30	F/plot/search
Topaz	PV	5.0	3.5	Walk	2.3	1 30	F/plot/search
Campo Verde	Fence	2.5	100	Walk		1 30	None
Campo Verde	Gen-tie	2.5	30	Walk	7.5	1 30	None
Campo Verde	PV	2.5	30	Walk		1 30	None
Centinela	Gen-tie	0.8	50	Walk	5	3.5, 3.5, 3.5, 3.5	F/(S × R _C)
Centinela	Fence	1.0	100	Walk		1 30	
Centinela	PV	1.0	10	Walk	4.2	1 30	F/0.2 yr
Imperial	Gen-tie	0.4	100	Car		1 30	None
Imperial	PV	0.4	10	Car	14.5	1 30	None
Calipatria	PV	2.0	100	Walk	35	7, 21, 7, 21	Distance ^f
Midway	PV	0.4		Car	60	7, 0, 18, 0	
Desert Sunlight	Fence	1.0	7	Car		7, 23, 8, 19	F/(S × r)
Desert Sunlight	Gen-tie	1.0	48	Walk	15	7, 23, 8, 19	F/(S × r)
Desert Sunlight	PV	1.0	30	Walk	70	7, 23, 8, 19	F/(S × r × A)
Stateline	Fence	1.0	100	Car	3	7, 21, 7, 21	F/(S × r)
Stateline	Gen-tie	1.0	50	Car	15	7, 21, 7, 21	F/(S × r)
Stateline	PV	1.0	40	Car	120	7, 21, 7, 21	F/(S × r × A)
McCoy	Fence	2.0	98	Car	3	7, 21, 7, 21	F/(S × r)
McCoy	Gen-tie	2.0	25	Walk	15	7, 21, 7, 21	F/(S × r)
McCoy	PV	2.0	45	Car	160	7, 21, 7, 21	F/(S × r × A)
Blythe	Fence	2.0	92	Car	3	7, 21, 7, 21	F/(S × r)
Blythe	Gen-tie	2.0	25	Walk	15	7, 21, 7, 21	F/(S × r × A)
Blythe	PV	2.0	41	Car	95	7, 21, 7, 21	F/(S × r × A)
Genesis	Fence	2.0	100	Car	?	7, 20, 7, 19	F/(S × r)
Genesis	Gen-tie	2.0	25	Walk	15	7, 20, 7, 19	F/(S × r)
Genesis	Ponds	2.0	100	Walk		7, 20, 7, 19	F/(S × r)
Genesis	PBlocks	2.0	100	Walk	7.5	7, 20, 7, 19	F/(S × r)
Genesis	SCAs	2.0	30–50	Car	30	7, 20, 7, 19	F/(S × r × A)

(Continues)

TABLE 2 (Continued)

Project	Feature ^a	Yrs	Sample (%)	Search	Transect (m) ^b	I (days) in spring, summer, fall, winter ^c	$\hat{F}$ metric ^d
Solar One	Heliostats	0.8	100	Walk		7, 0, 7, 7	F/(r)
Solar One	Tower	0.8	100	Walk		7, 0, 7, 7	F/(r)
Ivanpah	Fence	2.0	100	Car	3	7, 25, 7, 25	F/(S × r)
Ivanpah	Gen-tie	2.0	100	Car	15	7, 25, 7, 25	F/(S × r)
Ivanpah	Heliostats	2.0	24	Walk	5	7, 25, 7, 25	F/(S × r)
Ivanpah	Heliostats	2.0	8	Walk		7, 0, 0, 21	F/(S × r)
Ivanpah	Tower ^e	2.0	100	Walk		7, 25, 7, 25	F/(S × r)
Ivanpah	Tower ^e		100	Walk		7, 21, 7, 21	F/(S × r)

^aPV = photovoltaic panels mounted on ground-based metal frames, MVOH = medium voltage overhead lines, Gen-tie = generation tie-ins to the nearest substation or transmission lines, Fence = perimeter security fence, SCA = solar collector arrays composed of parabolic mirrors, PBlocks = power blocks, Ponds = solar evaporation ponds, Tower = power towers receiving reflected sunlight from heliostat mirrors, and Heliostats = mirrors arranged to reflect solar energy to a receiver on power tower.

^bWidth of search area to one side of transect.

^c1 | 30 refers to daily searches for 7 consecutive days beginning again every 30 days.

^d $\hat{F}$ = estimated number of fatalities, F = number of fatalities found, S = proportion of trial carcasses found, r = proportion of trial carcasses persisting to next search, A = proportion of search area that was searchable; empty spaces indicated the reporting was unclear which metric was used.

^eCalifornia Valley Solar Ranch. Also performed daily searches for 5 consecutive days once every 4 weeks.

^fUsed Program Distance (Miller 2016), but none of the models fit the data well.

^gIncluded cleared ground around towers, power blocks, and inner rings of high-density heliostat mirrors.

Where monitors used distance sampling, I derived probabilities of searcher detection of trial carcasses within distance increments from transects, which were reported graphically. I multiplied each distance increment by transect length to calculate the search area, and hence the search area as a proportion of the project area (A) associated with a probability of searcher detection. Because all but the gen-tie at Centinela did not report distances of fatalities from the transect, I usually could not assign fatalities to the distance increment for which detection probabilities had been characterized by trials. I therefore averaged $S \times A$ among the distance increments searched, where S was the proportion of placed trial carcasses found within the *i*th distance increment (of those available), and A was the searchable area between the car and the farthest point of the *i*th distance increment. Along with r, $S \times A$ composed p : $\hat{F} = \frac{F}{r \times S \times A}$.

Where carcass detection trials were not implemented, insufficiently described, or based on <8 carcass placements/category of bats, small birds, and large birds (i.e., California Valley Solar Ranch [CVSR], Campo Verde, Centinela, Imperial, Solar One), I applied detection rates from my own trials of carcasses as part of 2 3-year fatality monitoring studies in the Altamont Pass Wind Resource Area (APWRA). Given its short-stature annual grassland cover, carcass visibility to scavengers and fatality searchers should be similar between the APWRA and the 5 project sites to which I applied APWRA-derived carcass detection rates, but to minimize differences, I relied solely on trial carcasses that had been placed on open ground to simulate conditions of ground visibility at the 5 solar project sites. The APWRA trials were integrated into routine fatality monitoring with placements that were periodic throughout each study and randomized within fatality search areas. In 1 study, trials included 276 bird carcasses of 79 species that ranged in mass from 2 g to 6,650 g (Smallwood et al. 2017a, 2018). In the other study, trials included 764 bird carcasses of 100 species ranging in mass from

3 g to 6,000 g, and 144 bat carcasses of 16 species ranging in mass from 2.3 g to 23.6 g (Brown et al. 2016). Trial carcasses were left indefinitely where placed. Whether searchers ever found the carcass determined each trial outcome. I logit-regressed trial outcomes of found or not found on $\log_{10}$ body mass (g) to estimate overall detection probability $\hat{D}$:

$$\hat{D} = \frac{e^{-a+b \times \log_{10} M}}{1 + e^{-a+b \times \log_{10} M}},$$

where a and b were fitted coefficients and M was body mass (Figure 2). I estimated $\hat{D}$ separately for birds and bats, and among the 3 fatality search intervals that were implemented between the 2 APWRA studies: 5, 7, and 28 days. To simulate a daily search interval, I estimated $\hat{D}$ from carcass trial placements 1 day prior to the next search (Smallwood 2017a).

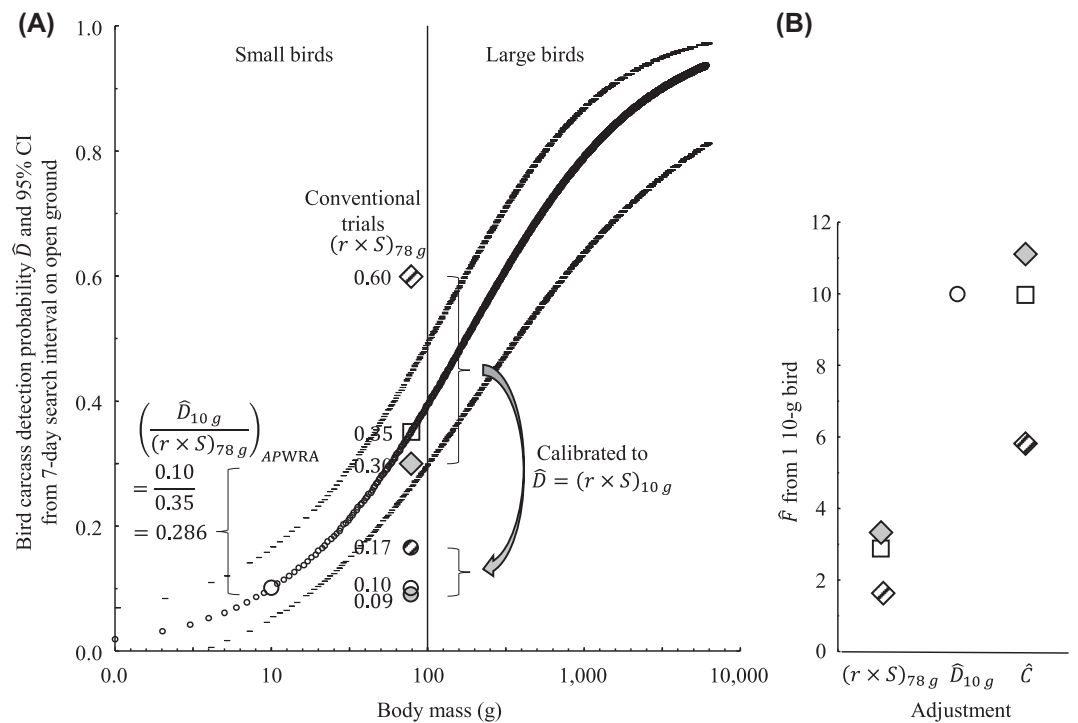


FIGURE 2 Hypothetical fatality estimation from 1 bird of a 10-g species found at a site where monitors used 78-g bird carcasses to represent small birds of ≤ 100 g body mass in on-site carcass detection trials, and then calibrated to carcass detection trial outcomes on open ground in the Altamont Pass Wind Resource Area (APWRA), California, USA, 2012–2015, where carcass detection probability was modeled to variation in body mass. A) Predicted probability of carcass detection ($\hat{D}$) and 95% confidence intervals based on outcomes of detection trials performed at 7-day intervals and logit-regressed on $\log_{10}$ body mass, and overlayed by overall detection measured for 78-g bird carcasses in on-site trials at 2 sites (shaded and striped diamond symbols) and in the APWRA (open square) and calibrated to $\hat{D}$ of the 10-g bird that was found (oversized circle among mean $\hat{D}$). Also overlaid are the detection probabilities derived from trials with 78-g birds calibrated to that of the 10-g bird (circles patterned to match symbols representing uncalibrated detection probabilities). B) Resulting fatality estimates ($\hat{F}$) derived from 3 types of adjustment: conventional trials for carcass persistence r and searcher detection S using 78-g birds to represent small birds, $\hat{D}$ of a 10-g bird, and the calibration bridge to introduce the effect of body size on detection probability while preserving the site effect: $\hat{C} = \frac{1}{(r \times S)_{78g \text{ on site}} / \left(\frac{\hat{D}_{10g}}{(r \times S)_{78g}} \right)_{APWRA}}$

Although logit regression calculates asymptotic confidence intervals along with predicted detection probabilities of each body mass used to develop the model, the body masses of fatality finds can differ from those of the trial carcasses used to develop the model. To extend the model's confidence intervals to fatality finds, I fit nonlinear regression models to logit regression's 95% lower and upper confidence limits (Smallwood et al. 2018).

To the 5 studies at solar projects in need of carcass detection probabilities from my offsite studies, $\hat{D}$ served as p in the fatality estimator: $\hat{F} = \frac{F}{\hat{D}}$. I assumed that detection probabilities of carcasses placed on open ground depended more on variation in carcass size than on variation in carcass removal rates among project sites. Spatial variation in carcass removal rates remains unknown, but the effect of body mass on detection probability is strong (Figure 2). Given the strong effect of body mass, $\hat{D}$ served a second purpose in this study. Because I monitored trial carcasses in the APWRA for availability to be found by searchers so that I could also estimate fatalities using the conventional terms $r \times S$, I had the means to calibrate $r \times S$ to $\hat{D}$, the importance of which is discussed below.

Most fatality monitors at solar projects deployed birds in detection trials that were larger than most of the birds and bats found as fatalities. This practice emerged as a potential bias because the placed birds represented broad size categories in which the body size-specific detection probabilities of the placed birds would be increasingly discrepant from the detection probabilities of increasingly smaller or larger species found as fatalities in the same broad size category (Figure 2). I therefore adjusted the results of detection trials to account for the effects of variation in body mass. I used integrated, overall detection trials performed in the APWRA to derive a unit-free scaler to adjust for the effects of variation in body mass on trial outcomes. I formulated a body mass scaler $\hat{C}$ as follows:

$$\hat{C} = \left(\frac{F}{r \times S} \right)_{ith \text{ solar project}} / \left(\frac{\hat{D}}{r \times S} \right)_{APWRA, \text{ open ground}}$$

With $\hat{C}$, I adjusted number of fatalities found for overall detection probability $r \times S$ based on the monitors' onsite trials, and then I adjusted fatalities by the ratio of overall detection probability $\hat{D}$ to overall detection probability $r \times S$ derived from the same conventional trials using the same-sized carcasses as at the solar project. In these cases, $\hat{C}$ served as p . In the dividend, $r \times S$ were from the same-sized species as $r \times S$ in the divisor, thereby serving to bridge the 2 sites, 1 site where $\hat{D}$ was additionally measured along a continuous range of body mass and the other site where F was additionally measured among species that varied continuously in body mass (Figure 2). This bridge preserved any differences in r and S between the sites. I applied this bridge to onsite detection trials and fatality data from Topaz, Desert Sunlight, McCoy, Midway, Calipatria, Blythe, Genesis, and Ivanpah. I was unable to apply this bridge to data from Stateline, to which I relied solely upon onsite detection trials.

I applied the body mass scaler to bird and bat fatalities where trial outcomes had been lumped into broad size categories. Monitors had performed detection trials for bats at only 1 solar project, but bats were represented by small birds in those trials. The scaling function I used for bats was $\hat{D}$ for bats relative to $r \times S$ for whichever bird species in my study represented small birds at the solar project, and again I relied only on bats and small birds in my study that had been placed on open ground (no occlusion) at Vasco Winds (Brown et al. 2016) or Sand Hill (Smallwood et al. 2018). To represent trial carcasses at solar projects, I selected APWRA bird trial carcasses ranging in size 24–32 g for house sparrows (*Passer domesticus*), 36–47 g for brown-headed cowbirds (*Molothrus ater*), 50–70 g for Japanese quail (*Coturnix japonica*) chicks, 108–168 g for Japanese quail adults, 260–400 g for rock pigeons (*Columba livia*), 1,050–1,150 g for mallards (*Anas platyrhynchos*), and 1,200–2,300 g for ring-necked pheasants (*Phasianus colchicus*). For application to fatality monitoring based on 21-day search intervals, I averaged $\hat{D}$ between 7- and 28-day intervals on open ground at Vasco Winds.

Only at CVSR were found fatalities sufficiently assigned to sampling units so that other researchers could estimate standard error attributable to variation among sampling units. Consistent with Smallwood et al. (2020), I used the delta method to estimate confidence intervals at CVSR. Otherwise, I relied on logit-regressed estimates of confidence intervals to represent confidence intervals of fatality estimates. I estimated fatalities of every species

represented by ≥ 1 fatality at operational solar projects. I assumed solar projects caused all fatalities found by monitors, but natural causes likely contributed to a few of the fatalities.

Although I endeavored to reduce the effects of bias on p by factoring in fatality detection probability as a function of interspecific variation in body mass, fatality estimates remained amply prone to error and bias (Smallwood 2007). To improve accuracy of fatality estimates going forward, I addressed 3 additional sources of error and probable bias. First, I compared monitoring outcomes between pedestrian and car surveys. I assumed bias would be indicated, though not verified, if estimated fatality rates differed between projects searched by foot and by car. Second, to indicate whether and to what degree wildlife species were represented in fatality monitoring results at solar projects, I related the cumulative number of species represented as detected fatalities by months since monitoring was initiated, similar to the approach used by Beston et al. (2015). To the fatality monitoring data of each project, I attempted to fit a nonlinear model for the purpose of identifying the asymptote of the cumulative number of species represented, and to determine whether the predicted asymptote had indeed been reached. Third, I tallied fatalities that monitors had assigned to taxa or size groups other than the species level.

RESULTS

Attributes of fatality monitoring studies

Fatality monitoring studies varied greatly in attributes that affect fatality estimates (Tables 2, S1). As examples, fatality searches covered 3.3% to 100% of solar project features, and spanned 0.42 to 5 years in duration. Fatality search intervals ranged 1 to 25 days, but at 2 projects searches were daily for 5 to 7 consecutive days beginning at intervals of 28 to 30 days, respectively. Areas searched from transects varied within maximum distances of 2.1 to 160 m—a 76-fold range. Distance sampling was used from a transect along the gen-tie at Centinela, from transects intersecting PV arrays at Centinela, Imperial, Calipatria, Midway, Desert Sunlight, Midway, McCoy, and Blythe, and from transects intersecting SCAs at Genesis. The fatality metric at Topaz was fatalities/plot/search, which was incomparable to fatality metrics reported in other studies. No fatality estimates were reported at Campo Verde and Imperial, and none were reported for bats at Ivanpah.

Studies varied greatly in carcass detection trials needed to accurately represent p . Bat detection trials were implemented only at Genesis, where small birds served as surrogates for bats (Table S2). Bird carcasses were placed in all detection trials except for trials along the Centinela gen-tie, where colorful bird-shaped holiday ornaments were placed in searcher detection trials. Source of bird carcasses was unreported at all studies except CVSR, which used carcasses from wildlife rehabilitation facilities and fatalities found during monitoring. Two studies neglected to identify species used in detection trials. Monitors at Solar One and Calipatria did not perform searcher detection trials. Monitors at Centinela and Imperial did not perform detection trials of any type. Duration of carcass persistence trials ranged 5 to 42 days. The carcass persistence metric varied but was usually mean days to carcass removal (Table S2).

The majority of birds killed at solar projects were small-bodied; most were smaller than the bird carcasses used to represent them in detection trials (Figure 3). Of bird species found as fatalities among solar projects, the typical adult body mass of 30% were <22 g, 50% were <42 g, 63% were ≤ 100 g, and only 22% were at least as large as rock pigeons. Of bird species found as fatalities at 11 PV projects, the typical adult body mass of 30% were ≤ 25 g, 50% were <56 g, 57% were <100 g, and only 25% were at least as large as rock pigeons. Among 3 projects (McCoy, Blythe, and Desert Sunlight), the smallest species used in small-bird persistence trials was larger than 73% of the small birds found as fatalities (Figure S1, available in Supporting Information). The smallest species used in medium-bird persistence trials was larger than 33% of the medium bird species found. The largest species used in large-bird persistence trials was smaller than 50% of the large birds found as fatalities. Accounting for the detection probabilities of fatalities of species smaller than detection trial carcasses increased fatality estimates of many small-bird

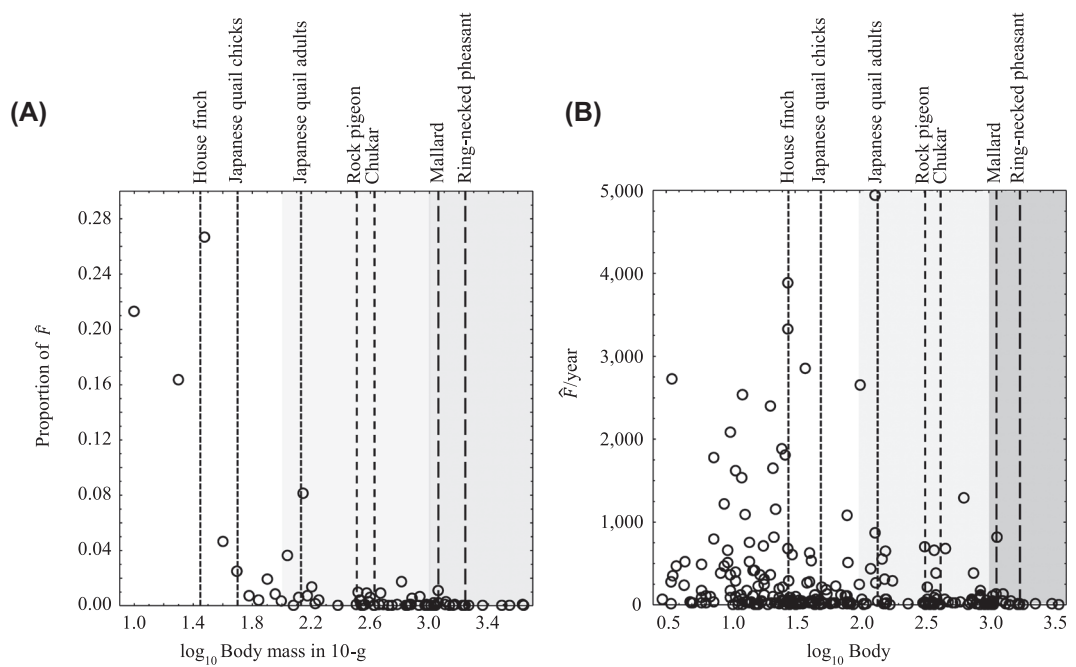


FIGURE 3 Body size-distribution of bird fatalities relative to typical body mass of species used in searcher detection and carcass persistence trials (dashed vertical lines) among 13 California solar projects (Solar One not included) monitored 2012–2018, where the clear zone represents small birds ≤ 100 g, light gray represents medium birds >100 g to $\leq 1,000$ g, and dark gray represents large birds $>1,000$ g: A) proportion of estimated number of fatalities ($\hat{F}$) by 10-g increments of typical species' body mass, and B) estimated annual fatalities by body mass on a continuous scale. Carcasses of many found fatalities were smaller than the species used in on-site detection trials

species, but it reduced estimates of a much smaller number of large-bird species (Figure S2, available in Supporting Information). The onsite-adjusted fatality estimates bridged to the APWRA's integrated overall detection trials related linearly to onsite-adjusted fatality estimates without the bridge, indicative of an unbiased adjustment for interspecific variation in body mass (Figure S3, available in Supporting Information).

Body-size adjusted fatality estimates

My bird fatality estimates exceeded originally reported estimates by factors of 1.07 at Campo Verde, 1.5 at Desert Sunlight, 1.88 at CVSR, 4.59 at McCoy, 6.59 at Blythe, 10.49 at Genesis, 10.5 at Calipatria, and 18–72 at Topaz (Table 3). No project-wide fatality estimates were reported at Ivanpah, but my estimates for birds at Ivanpah's heliostat mirror arrays and in the tower area exceeded originally reported estimates by factors of 10 and 3.8, respectively.

My estimate of bird fatalities among Ivanpah's heliostat mirrors exceed that of the Tower Area by a factor of 6.2 (Table 3; Figure S4, available in Supporting Information). Some unknown portion of the fatalities found among heliostat mirrors was likely caused by exposure to the zone of solar flux. Bird fatality rates among mirrors at Genesis averaged only 20% of those among heliostat mirrors at Ivanpah. Bird mortality was highest at solar thermal projects (Table 3). On a per-MW basis, the gen-tie was the most dangerous project feature to birds at some projects, whereas the PV panels or mirrors were the most dangerous at others. On a project-wide basis, however, more birds died by collision with solar collectors—mirrors and PV panels.

TABLE 3 Reported estimates and my own estimates of wildlife fatality rates at California utility-scale solar energy projects and project features through 2020. I cannot explain the estimates that were not reported by monitors, but I did not estimate fatalities caused by medium-voltage overhead lines and PV at Topaz because these facilities overlapped to a degree that I could not determine which caused the fatalities

Project	Taxa	Feature ^a	$\hat{F}$ /MW/year (95% CI)	
			Reported ^b	This study
CVSR	Birds	Gen-tie	0.38 (0.32–0.48)	1.27 (0.89–1.93)
CVSR	Birds	MVOH	0.10 (0.08–0.12)	0.35 (0.26–0.48)
CVSR	Birds	Fence	0.72 (0.60–0.89)	1.15 (0.85–1.64)
CVSR	Birds	PV	8.97 (7.33–11.49)	16.17 (11.98–22.05)
CVSR	Birds	Project	10.07 (8.20–12.92)	18.98 (14.00–26.16)
Topaz	Birds	MVOH	0.0546–0.2159 ^c	
Topaz	Birds	PV	0.0491–0.1909 ^c	
Topaz	Birds	Project	0.1037–0.4068 ^c	7.48 (6.12–11.22)
Campo Verde	Birds	Fence		0.10 (0.08–0.14)
Campo Verde	Birds	Gen-tie		0.50 (0.39–0.78)
Campo Verde	Birds	PV		20.49 (16.52–31.07)
Campo Verde	Birds	Project	19.65	21.09 (16.99–32.00)
Centinela	Birds	Fence		1.82 (1.49–2.77)
Centinela	Birds	Gen-tie	1.68 ^c	2.31 (1.7–3.82)
Centinela	Birds	PV	12.93	22.92 (18.52–34.71)
Centinela	Birds	Project		28.64 (23.09–43.76)
Imperial	Birds	Project		9.70 (8.22–14.65)
Calipatria	Birds	PV	2.1	22.09
Calipatria	Birds	Project	2.1	22.09
Midway	Birds	Project		3.22
Desert Sunlight	Birds	Fence	0.015 (0.005–0.042)	0.03 (0.02–0.03)
Desert Sunlight	Birds	Gen-tie	1.86 (0.87–4.99)	2.58 (1.68–4.32)
Desert Sunlight	Birds	PV	1.05 (0.88–1.56)	1.68 (1.24–3.19)
Desert Sunlight	Birds	Project	2.93 (2.03–6.67)	4.39 (3.01–7.70)
Stateline	Birds	Gen-tie	0.457	0.19
Stateline	Birds	PV	0.387	1.94
Stateline	Birds	Project		2.13
McCoy ^d	Birds	Fence	0.096 (0.016–0.20/8)	0.25 (0.17–0.36)
McCoy ^d	Birds	Gen-tie	3.124 (2.36–4.04)	11.68 (7.19–21.13)
McCoy ^d	Birds	PV	0.23 (0.04–0.49)	3.88 (2.58–6.04)
McCoy ^d	Birds	Project	3.45 (2.66–4.39)	15.83 (9.98–27.60)

(Continues)

TABLE 3 (Continued)

Project	Taxa	Feature ^a	$\hat{F}$ /MW/year (95% CI)	
			Reported ^b	This study
McCoy ^d	Bats	Project		0.46 (0.01–0.73)
Blythe ^d	Birds	Fence	0.09 (0.03–0.17)	0.38 (0.28–0.55)
Blythe ^d	Birds	Gen-tie	3.32 (2.51–4.30)	16.35 (10.07–28.96)
Blythe ^d	Birds	PV	0.18 (0.009–0.455)	6.67 (4.52–5.75)
Blythe ^c	Birds	Project	3.59 (2.76–4.60)	23.65 (15.04–35.62)
Genesis	Bats	Fence	0.012 (0.002–0.030)	1.67 (0.11–4.27)
Genesis	Bats	Ponds	0.036 (0.008–0.078)	4.82 (0.13–7.90)
Genesis	Bats	PBlocks	0.002 (0.002–0.006)	2.40 (0.09–4.77)
Genesis	Bats	SCAs	0.052 (0.020–0.092)	0.56 (0.09–3.53)
Genesis	Bats	Project	0.106 (0.032–0.198)	10.92 (0.48–22.98)
Genesis	Birds	Fence	0.39 (0.25–0.56)	5.63 (4.21–7.70)
Genesis	Birds	Gen-tie	1.50 (0.66–2.73)	17.62 (11.26–31.09)
Genesis	Birds	Ponds	0.39 (0.14–0.72)	5.57 (3.98–8.09)
Genesis	Birds	PBlocks	0.21 (0.13–0.29)	4.93 (3.51–7.06)
Genesis	Birds	SCAs	2.41 (1.90–3.10)	12.93 (9.77–17.86)
Genesis	Birds	Project	4.56 (3.44–5.84)	47.83 (33.53–73.59)
Solar One	Birds	Heliostats		26.20 (18.70–58.94)
Solar One	Birds	Tower area		16.24 (9.24–92.42)
Solar One	Birds	Project	9.88–11.44	42.44 (27.94–151.36)
Ivanpah	Birds	Fence	0.19 (0.13–0.28)	0.58 (0.41–0.83)
Ivanpah	Birds	Gen-tie	0.005	0.14 (0.09–0.25)
Ivanpah	Birds	Others		0.82 (0.45–5.23)
Ivanpah	Birds	Heliostats	6.41 (4.66–10.38)	63.91 (40.45–141.33)
Ivanpah	Birds	Tower area	2.69 (1.82–4.46)	10.30 (5.79–52.95)
Ivanpah	Birds	Project		75.74 (47.19–200.59)
Ivanpah	Bats	Tower area		1.79 (0.08–3.70)

^aProject = all features of the project, Fence = perimeter security fence, Ponds = solar evaporation ponds, Gen-tie = generation lead or transmission lines, MVOH = medium-voltage overhead collector lines, PV = solar photo-voltaic panels; and in solar thermal projects, Heliostats = heliostat mirrors, SCAs = solar collector arrays, Tower area = bare ground between SCAs and the power tower, PBlocks = power blocks, and Others = ancillary structures such as operations and maintenance buildings.

^b90% CI at California Valley Solar Ranch (CVSR) and Genesis.

^cI calculated the value based on the reported estimate in terms of a different metric.

^dI assumed methods remained unchanged in year 2, but the second-year report was unavailable. Martinson et al. (2018a,b) reported results only for year 1, whereas I report results for both years 1 and 2.

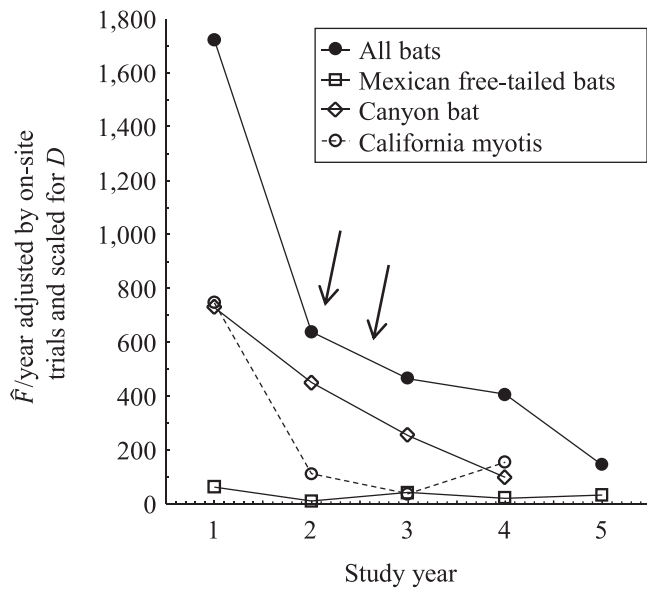


FIGURE 4 Estimates of annual bat fatalities in the tower area of Ivanpah Solar Electric Generating System, San Bernardino County, California, USA, 2013–2018, spanning the cleared ground between the power tower and the mirror arrays and including all bats as a group, Mexican free-tailed bats (*Tadarida brasiliensis*), canyon bats, and California myotis. Arrows point to years following installations of ultrasonic deterrents at power towers, 1 installation after the first year, and 2 more during the second year. Declines in bat mortality preceded installations of deterrents

Bat mortality was highest at Genesis, followed by Ivanpah and McCoy. At Genesis, the most dangerous project feature to bats was the solar evaporation ponds, followed by power blocks, fences, and SCAs (Table 3). At Ivanpah, bat fatality estimates were possible only in the tower area, where mortality declined over the 5 years of monitoring (Figure 4). Species exhibiting the largest declines were canyon bat and California myotis (*Myotis californicus*). An ultrasonic bat deterrence method was implemented at unit 1 on 10 September 2014, and at units 2 and 3 on 23 April 2015.

California-wide impacts of operative utility-scale solar projects

According to the California Energy Commission, 1,948.8 MW of solar thermal projects operated in California in 2020, and 12,220 MW of PV had been installed by the end of 2019. On average, utility-scale solar energy projects required 3.48 ha/MW for solar thermal and 2.67 ha/MW for PV. Therefore, utility-scale solar thermal projects covered 6,782 ha, and utility-scale solar PV covered 32,627 ha. Projected to California's installed capacity of all utility-scale solar projects in 2020, mean annual fatalities at monitored projects predicted 267,732 (95% CI = 186,071–495,391) bird fatalities and 11,418 (95% CI = 601–23,926) bat fatalities (Table S3). Only 8 studies reported project-wide bird fatality estimates, and only 2 of these reported a confidence interval. Only 2 studies at solar thermal projects reported project-wide bat fatality estimates. Projected to California's installed capacity of all utility-scale solar projects in 2020, originally reported mean annual fatalities would predict 82,471 birds, but original reporting was insufficient for including a 95% confidence interval or for predicting statewide bat fatalities.

At utility-scale solar PV projects, my estimates of $\hat{F}/\text{MW}/\text{year}$ averaged 11.61 (95% CI = 8.37–17.56) birds and 0.06 (95% CI = 0.01–0.10) bats (Table S4, available in Supporting Information). Projected to

California's installed capacity of 12,220 MW of PV in 2019, my fatality rates predicted annual fatalities of 141,811 (95% CI = 102,227–214,593) birds and 716 (95% CI = 124–1,221) bats. At solar thermal projects my estimates of $\hat{F}$ /MW/year averaged 64.61 (95% CI = 41.74–149.95) birds and 5.49 (95% CI = 0.25–11.65) bats (Table S4). Projected to California's installed capacity of 1,948.8 MW of solar thermal in 2020, my fatality rates predicted annual fatalities of 125,921 (95% CI = 81,346–292,225) birds and 10,701 (95% CI = 477–22,705) bats.

Along perimeter fences, I estimated $\hat{F}$ /km/year averaged 14.44 (95% CI = 10.88–20.34) birds and 2.56 (95% CI = 0.17–6.54) bats (Table S4). Projected to California's installed 900 km of fencing around solar projects in 2020, these rates predicted annual fatalities of 13,005 (95% CI = 9,802–18,324) birds and 2,304 (95% CI = 156–5,892) bats. I estimated fatalities along fences averaged almost 5% of birds and 20% of bats killed at solar projects.

Along gen-ties, I estimated $\hat{F}$ /km/year averaged 113.16 (95% CI = 71.78–198.42) birds and no bats (Table S4). Projected to California's installed 461 km of gen-ties at solar projects in 2020, these rates predicted annual fatalities of 52,162 (95% CI = 33,087–91,463) birds. I estimated fatalities along gen-ties averaged 19% of birds and 0% of bats killed at solar projects.

Projected to the 2019 installed capacity, utility-scale solar PV annually killed more mourning doves (*Zenaidura macroura*) than any other species at 17,043, followed by 10,082 horned larks (*Eremophila alpestris*), and 7,628 western meadowlarks (*Sturnella neglecta*), and thousands of other grassland birds (Table S4). The PV panels killed 5,362 American coots (*Fulica americana*), 4,755 soras (*Porzana carolina*) among many other rails, grebes, and waterfowl, and 2,224 burrowing owls (*Athene cunicularia*), 958 American kestrels (*Falco sparverius*), and hundreds of other raptors. They also killed 1,486 common yellowthroats (*Geothlypis trichas*), 1,298 yellow warblers (*Setophaga petechia*), and thousands of additional likely migrants.

Projected to the 2020 installed capacity, utility-scale solar thermal projects annually killed more unidentified small birds than any individual species, at 10,716. Solar thermal killed 8,118 canyon bats and members of ≥ 8 other bat species (Table S4). It killed likely migrants, including 7,043 yellow-rumped warblers (*Setophaga coronata*), 5,582 yellow warblers, 4,470 Costa's hummingbirds (*Calypte costae*), and thousands of birds of other species. It killed many grassland and desert scrubland birds, including 3,678 white-crowned sparrows (*Zonotrichia leucophrys*), 3,506 American pipits (*Anthus rubescens*), 3,116 western meadowlarks, and 1,498 loggerhead shrikes (*Lanius ludovicianus*).

I estimated that in 2020 fences surrounding solar projects killed 1,783 canyon bats, 1,385 western meadowlarks, 1,174 greater roadrunners (*Geococcyx californianus*), and 476 northern flickers (*Colaptes auratus*; Table S4). Fences also killed an estimated 226 burrowing owls, 172 yellow-headed blackbirds (*Chrysomus icterocephalus*), and 108 northern harriers (*Circus hudsonius*).

I estimated that in 2020 gen-ties of solar projects killed 8,425 Wilson's warblers (*Cardellina pusilla*), 7,144 Brewer's sparrows (*Spizella breweri*), 3,364 common yellowthroats, 2,031 yellow warblers, 899 loggerhead shrikes (*Lanius ludovicianus*), 241 American kestrels, and 195 red-tailed hawks (*Buteo jamaicensis*; Table S4).

Fatalities at operational projects represented ≥ 8 bat species and ≥ 192 bird species. Of the 10 species of bats represented by fatalities at solar projects, 3 were California species of special concern. Western Bat Working Group ranked 4 species as high and 2 as moderate conservation priority. Of species of birds represented by fatalities at solar projects, 2 were listed as threatened or endangered under the federal or California Endangered Species Acts. California Fish and Game Code 3503.5 (i.e., birds of prey) protected ≥ 20 species, and additional statutes protected 8 of these species. Two bird species were California fully protected, and another 36 species were listed as a United States Fish and Wildlife Service bird species of conservation concern or California species of conservation concern, or listed on California's Watch List. Of species listed as California species of special concern, 8 were priority level 3, 9 were priority level 2, and 2 were priority level 1 (2 species were assigned no priority level). Including raptors, 45 special-status species of vertebrate wildlife were documented as fatalities of utility-scaled solar projects, or 23% of all species represented by fatalities.

Additional sources of error and bias

The PV solar projects were searched by foot ($n = 6$) and car ($n = 5$), whereas SCAs at Genesis were searched by car, and power tower projects were searched by foot. Estimated fatalities differed between foot and car searches at PV projects ($t_9 = 2.44$, $P = 0.037$), with respective means of $15.14 \hat{F}/\text{MW}/\text{year}$ and $5.08 \hat{F}/\text{MW}/\text{year}$.

To indicate whether and to what degree wildlife species were represented in fatality monitoring results at solar projects, I fit nonlinear models to the cumulative number of species represented by fatalities with increasing number of months into the study at 5 projects that were monitored more extensively in space and time (Table 4). The monitoring data from Ivanpah served to exemplify not only the asymptotic nature of species representation with monitoring duration, but also the effect of a change in search coverage (Figure 5A). Monitoring effort substantially lessened after 24 months when the monitor terminated fatality searches along the gen-tie and fence and reduced search coverage among heliostat arrays from 24.1% to 8% (0% in the fifth year). Subsequent to the reduced search effort, the increase in number of additional species represented by fatalities was slower than predicted by the pattern in the data through 24 months (Figure 5A). Where fatality monitoring lasted long enough, the pattern in the data revealed how much longer it would have taken at sustained search efforts to achieve asymptotes in species representation by fatalities (Figure 5B). Fatality monitoring at 5 projects was too brief to reveal anything other than a linear increase of species with increasing monitoring duration (Figure 5C). The regression slopes of Blythe and McCoy were nearly identical (Figure 5C). These 2 projects were adjacent to each other, and monitored by the same consulting firm. But even after 2 years of monitoring and documentation of >50 species as fatalities, the pattern of increasing cumulative species represented by fatalities hinted of no imminent arrival to an asymptote. I could not fit a model to the cumulative number of species represented by fatalities with increasing number of months into the study from 4 PV projects. The MW-years sampled among these 4 projects averaged only 11.4% of MW-years at the other 7 PV projects, a significant difference ($F_{1,9} = 22.76$, $P = 0.001$).

Species represented by fatalities were often vulnerable to biased fatality estimates because of misrepresentation. Monitors did not identify nearly 22% of fatalities to species, and identified them instead to coarser levels such as genus, subfamily, small, medium, or large bird, or as unknown bird or bat (Table 5). The coarser the reported level of identification, the more I applied detection probabilities derived from lumped representations of body mass. For example, the degraded carcass of a Pacific-slope flycatcher (*Empidonax difficilis*) found by a weekly

TABLE 4 Best-fit models of cumulative vertebrate species detected as fatalities at California, USA, utility-scale solar projects relative to the number of months since the fatality monitoring began, where model 1 was of the form $Y = a + b \times X$, and model 2 was of the form $Y = \frac{1}{a + b \times c^{\log_{10} X}}$

Project	Model	Coefficients			r^2	RMSE ^a
		a	b	c		
California Valley Solar Ranch	2	0.0157	0.4970	0.0490	0.99	51.34
Topaz	2	0.0032	0.2229	0.2548	0.96	266.20
Campo Verde	2	0.0096	0.2435	0.1401	0.97	81.30
Desert Sunlight	1	-2.5714	3.3571		0.96	1.44
Stateline	1	0.8	0.55		0.92	0.67
McCoy	1	3.2029	2.0804		0.96	1.44
Blythe	1	2.0000	2.1700		0.98	1.02
Genesis	2	0.0097	0.2305	0.0017	0.98	311.57
Ivanpah	2	0.0061	0.1762	0.0406	0.99	300.49

^aRMSE = root mean square error.

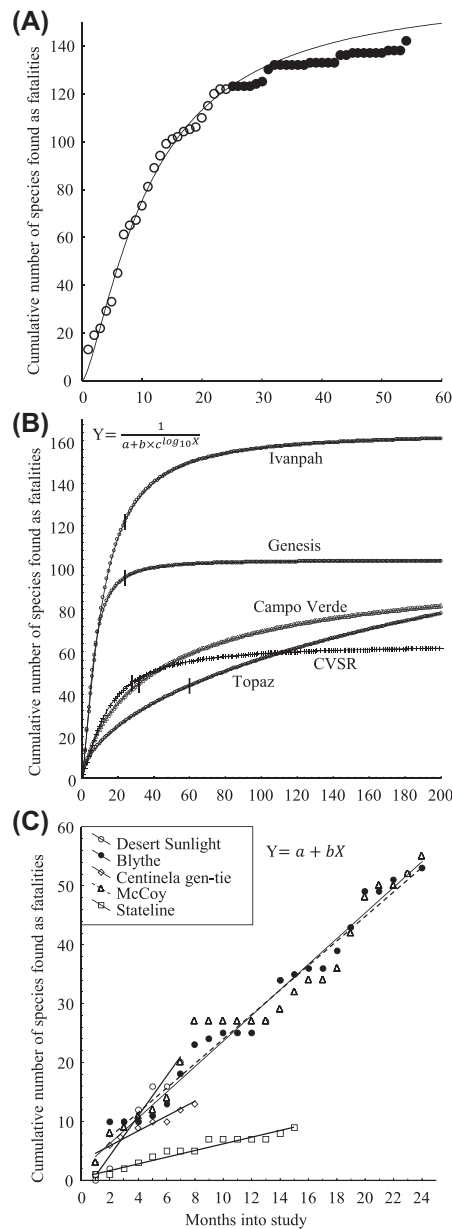


FIGURE 5 Cumulative number of vertebrate species detected as fatalities, California, USA, 2012-2018: A) during the first 2 years of monitoring (open circles) and last 3 years of reduced monitoring effort (filled circles) at the Ivanpah Solar Electric Generating System, San Bernardino County, California, along with best-fit model to the first 2 years of data and projected to the last 3 years of monitoring; B) among solar projects where fatality monitoring lasted long enough to predict an asymptote of species represented by fatalities (vertical bars indicate duration of monitoring used to project the nonlinear pattern in the data); and C) among solar projects where fatality monitoring had not lasted long enough to predict an asymptote, and therefore insufficiently represented species affected. Survey effort largely determined the number of species represented by found fatalities

TABLE 5 Species of wildlife identified as fatalities among California's utility-scale solar energy projects, USA, 1982–2018, and the percentages of estimated fatalities ($\hat{F}$) that could and could not be identified to species

Solar project	Number of species represented by fatalities	Percent of $\hat{F}$ /MW/year of F	
		Identified	Not identified
California Valley Solar Ranch	43	96.8	3.2
Topaz Solar Farm	17	95.3	4.7
Campo Verde Solar Project	45	81.4	18.6
Centinela Solar Energy Project	24	53.0	47.0
Imperial Solar Energy Center South	4	100.0	0.0
Calipatria Solar Project	13	77.8	22.2
Midway Solar Farm II	4	76.1	23.9
Desert Sunlight Solar Farm	53	83.3	16.7
Stateline Solar Farm	9	100.0	0.0
McCoy Solar Energy Project	49	79.9	20.1
Blythe Solar Power Project	54	82.6	17.4
Genesis Solar Energy Project	97	81.3	18.7
Solar One	25	71.2	28.8
Ivanpah Solar Electric Generating System	147	72.3	27.7
All projects	200	78.3	21.7

search on open ground might have been reported as a small bird. I assigned $D = 0.197$ to small birds, which was the value predicted for house sparrows—the smallest species placed in small-bird detection trials among solar projects. Had the Pacific-slope flycatcher been accurately identified to species, it would have been adjusted by $D = 0.10$, resulting in twice the estimated fatality rate.

The same bias applies to bats. As one of the most often-found bats among solar projects, canyon bats likely contributed most often to bats found and identified as unknown bat. At wind projects, an unknown bat would typically be adjusted using an overall detection probability quantified from the placements of all bats in carcass detection trials. I therefore used the mean from such trials to represent unknown bats with $D = 0.1008$. Overall detection for canyon bat was $D = 0.0485$. Again, had searchers been able to identify canyon bats to species instead of unknown bats, and assuming most of the unknown bats were canyon bats, each of these bats' contribution to bat fatality estimates would have doubled.

At Centinela, 47% of fatalities were not identified to species (Table 5). Other projects where monitors could not identify many fatalities to species included Solar One and Ivanpah at 28.8% and 27.7%, respectively. Projects where all fatalities were identified to species were surveyed briefly by car, including at Imperial where fatalities of only 4 large-sized bird species were found, and at Stateline where fatalities of only 9 species were detected.

DISCUSSION

I largely achieved my study objectives. Original reports of fatality monitoring did not always provide fatality estimates for project features and whole projects, but of those that did, I compared my independent estimates to theirs. From my estimates of project-level fatalities, I estimated statewide fatalities based on the installed capacity

of utility-scale solar projects in 2020, and I did so per each project feature. An exception was for medium-voltage overhead lines, which deposited bird carcasses too close to PV solar arrays to discern whether the fatalities were caused by collisions with the overhead lines or the PV solar arrays. I compared fatality rates among species of birds and bats, and among those with special status. I also identified sources of error and bias to alert investigators to research directions needed to improve accuracy of fatality estimation.

To achieve my study objectives, I assumed that the fatality data and carcass detection trial data I obtained from natural resource agencies were accurately reported. I assumed that I accurately interpreted reported study methods and descriptions of solar projects. Data inaccuracies or misinterpretation of methods would have diminished the accuracy of my independent fatality estimates. For biases and large sources of error that I understood from previous research on fatality estimation at wind energy projects, I endeavored to mitigate them by applying adjustment factors. For methods I believed were inappropriate, such as searches for fatalities from cars, I examined the data for evidence of bias and for opportunities to mitigate the effects of bias. I also applied a bridge from my study of the effects of variation in body mass on overall carcass detection probability to account for the disparity I found between carcasses placed in detection trials and those found as fatalities at solar projects. My estimates of fatalities at solar projects were as accurate as I could achieve but undoubtedly inaccurate to some unknown degree. Potential for inaccuracy was greatest for the smallest birds and bats. On the whole, I suspect I more often underestimated rather than overestimated fatality rates. My fatality estimates nevertheless indicate the magnitude of impacts caused by utility-scale solar projects in California, and they can serve as a collective starting point for improving methods to increase accuracy of fatality estimates.

I estimated that by 2020 annual fatalities exceeded a quarter million birds and 11,000 bats at California solar projects. My statewide fatality estimates were based on the available, nonrandom pool of monitored projects, which means they were vulnerable to geographic biases of unknown direction. At the same time, the fatality monitoring performed to date has been prone to substantial biases that largely resulted in underestimation of fatalities. Earlier estimates of regional fatalities were much lower than mine. At PV and solar thermal projects in California, Walston et al. (2016) estimated a weighted mean 9.9 bird fatalities/MW/year, whereas I estimated a weighted mean 18.9 bird fatalities/MW/year. At solar PV projects, Kosciuch et al. (2020) estimated 2.49 bird fatalities/MW/year, whereas I estimated a mean 11.6 bird fatalities/MW/year without adding fatalities caused by perimeter fences and gen-ties. The earlier regional estimates used reported estimates without sufficiently accounting for the effect of body mass on carcass detection probability. They also relied on project-level estimates exclusive of the many species represented by $F < 5$, and because many of these excluded species were small-bodied, under-estimation of $\hat{F}$ had been exacerbated. For these reasons, my fatality estimates were larger, but other biases indicate fatality estimates could be even larger. As examples, the monitors' use of cars for fatality searches and insufficient survey effort both appear to have negatively biased $\hat{F}$. Omitting the 7 fatality monitoring studies that were either based on car surveys or cursory effort, the weighted mean increases 1.25-fold from 11.605 to 14.51 bird fatalities/MW/year among PV projects.

Background mortality (i.e., mortality caused by natural processes) was often suggested as the source of fatalities for which cause of death could not be assigned (Kosciuch et al. 2020), but no reports raised the possibility of crippling bias, the rate of mortally injured animals leaving the search area undetected (Smallwood 2007). Some unknown number of animals mortally injured by exposure to the zone of solar flux, electrocution, or collision likely died, undiscovered, far from study areas. The very background mortality studies discussed by Kosciuch et al. (2020) and reported in (2013) and Althouse and Meade (2012, 2014) likely counted fatalities representative of both crippling bias and background mortality because the background mortality monitoring plots were adjacent to the solar energy projects. These studies could have lessened confounding had they begun monitoring ≥ 1 year in advance of project construction, and had they located study plots farther from the project to minimize counting of remains of birds that had been displaced by construction and rendered more vulnerable to predation and competition.

Estimates of solar energy's impacts could be more complete by monitoring for fatalities along transmission lines constructed to accommodate the projects. Transmission lines kill many birds, mostly from collisions but also electrocutions. Loss et al. (2014) estimated 29.6 bird collision fatalities/km/year (95% CI = 9.3–66.4) in the United States based on a mix of studies with and without adjustment by p. Rioux et al. (2013) estimated 110.4 bird collision fatalities/km/year (95% CI = 43.5–177.2) across Canada after adjusting by p. Avian fatality rates along transmission lines have been rarely studied in California. The only study of which I was aware was at Mare Island in Solano County (Hartman et al. 1992). Weighted mean fatality rates along gen-ties servicing solar projects (Table S4) could serve to estimate annual fatality rates along transmission lines that deliver power from solar projects, so long as one knows the length of transmission lines that do so.

Impacts of habitat loss

Estimates of solar energy's impacts could be more complete by also measuring numerical losses of wildlife populations caused by habitat loss. Project sites should be studied prior to construction to estimate densities in breeding and non-breeding seasons, and to measure migratory activity levels, which based on isotopes in feathers collected from dead birds found at solar projects, appears high (Conkling et al. 2020). Wildlife use of the site could be compared before and after project construction and concurrent with studies of wildlife at reference sites.

By 2020 the installed capacity of solar energy projects covered 39,409 ha in California, including 25,453 ha (64.6%) in the Mojave and Sonoran deserts. Construction grading for these projects removed all native vegetation, which continued to be suppressed through project operations. Utility-scale solar projects destroyed habitats of many wildlife species by eliminating breeding sites and forage. No studies were performed to estimate breeding and nonbreeding densities in advance of construction grading at any of the projects I reviewed. No efforts were made to estimate potential reductions in reproductive and numerical capacities of wildlife species.

Estimates of total bird nesting density are available, along with species-specific density estimates, for indicator-level analysis of impacts. Bird nesting densities of 13.27 and 14.19 nest sites/ha were estimated at study sites composed of grassland, wetland, and woodland (Young 1948, Yahner 1982). Assuming 6.94 nest sites/ha, or half the average of Young's (1948) and Yahner's (1982) densities, would more realistically represent California's annual grasslands, this density multiplied against California's 12,414 ha of utility-scale solar in non-desert environments would predict a loss of 86,153 bird nest sites.

Franzeb (1978) provided a basis for applying bird breeding density to areas lost to solar projects in California's deserts. Franzeb (1978) estimated 0.366 breeding birds/ha at a Sonoran Desert site. Projected to 25,453 ha of California's desert environments, this density would estimate 9,316 breeding birds, or 4,658 nest sites, were lost to construction grading for solar projects. Added to the estimate above for non-desert environments, I estimate that California solar projects displaced 90,811 bird nests by 2020. Assuming 25 years of operational impacts, and assuming an average fledging of 2.9 birds/nest/year (Young 1948) and a generation time of 5 years, the lost capacity of breeders and annual chick production would be 7,491,908 birds: $[(\text{nests/year} \times \text{chicks/nest} \times \text{number of years}) + [2 \text{ adults/nest} \times \text{nests/year} \times (\text{number of years} \div \text{years/generation})]]$. Averaged over 25 years of project operations, this indicator-level approach would estimate an annual loss of 299,676 birds due to habitat destruction to accommodate California's 2020 installed capacity of utility-scale solar.

Burrowing owls, in particular, face significant impacts from habitat loss caused by development of utility-scale solar. Burrowing owls happen to select terrain conditions for breeding and foraging that are also sought by developers of solar projects: flat to gentle southwest- or south-facing slopes. In the 1990s, an estimated 71% of California's entire burrowing owl population resided within the Imperial Valley, after the species had declined throughout the rest of its range in California (DeSante et al. 2007). The average density of breeding attempts was 8.13/km² (0.081/ha). With 1,488.5 MW of solar PV installed in Imperial County as of 2019, and with an average 2.67 ha/MW, utility-scale solar in Imperial County destroyed 3,974.3 ha of burrowing owl habitat. Assuming the

estimate of burrowing owl breeding density from DeSante et al. (2007) still applies, I estimate this level of habitat loss reduced the capacity for breeding attempts by 322 and the number of breeding adults by ≥ 644 . Assuming an average generation time of 8 years and an average 3 chicks produced/breeding attempt, the equation in the preceding paragraph would estimate an annual loss of 1,073 burrowing owls due to habitat loss.

Another form of habitat loss, or habitat degradation, was project-generated wildfires. In June 2019, a bird landed on a power pole at CVSR, sparking a 486-ha fire that removed 84% of the project's generating capacity. The fire reportedly did not damage solar panels, but it likely destroyed many bird nests on the grasslands that were burned next to the project.

Combined impacts to birds from collision mortality and habitat loss

Assuming utility-scale solar projects eliminate breeding habitat within the project footprint, then post-construction collision mortality is largely to migrants or residents of adjacent habitat. If true, then I estimated the installed capacity of utility-scale solar in 2020 removes from California >500,000 birds/year because of combined effects of collision mortality and loss of birds to habitat destruction. Over 25 years of operations of this installed capacity, I estimated California's loss of birds will be >12.5 million. I estimated just over half of this mortality was attributable to habitat destruction (53%), and the rest to operative solar energy projects, but source-specific magnitudes of impacts likely would vary interspecifically.

For burrowing owls in particular, the estimated mean 0.182 collision fatalities/MW/year at solar PV projects applied to 1,488.5 MW of solar PV installed in Imperial County as of 2019 would estimate 271 burrowing owl fatalities/year in Imperial County, where most of California's burrowing owls live. Combined with the estimated impact of habitat loss, I estimate utility-scale solar in Imperial County removed 1,344 burrowing owls annually as of 2020. With an estimated 5,600 burrowing owls in the Imperial Valley in the 1990s, my estimated loss could prove devastating for burrowing owls in Imperial Valley.

Avian mortality at utility-scale solar projects might contribute cumulatively to an ongoing substantial decline of birds in North America (Rosenberg et al. 2019). Bat mortality at solar projects contribute cumulatively to increasingly large nationwide impacts to bats caused by wind turbines (Smallwood 2020). That many of the birds and bats killed at solar projects were special-status species should heighten concern over the ecological and economic impacts of solar energy-caused mortality. A suite of errors and biases suppress understanding of the ecological impacts of solar projects and how to mitigate them.

Additional sources of error and bias in collision fatality estimates

Fatality monitoring efforts not only varied greatly among solar projects, but they introduced biases that resulted in inaccurate fatality estimates. Monitoring that lasted <1 year or covered small portions of a project likely generated incomplete lists of affected species and hence inaccurate fatality estimates. Searches of PV projects by car yielded a third of the fatality estimates of searches of PV projects by foot. No studies performed car surveys simultaneously with pedestrian surveys. Perhaps the most substantial bias was the use of carcasses in detection trials that were larger than many of the birds and bats found as fatalities. I endeavored to offset this latter bias, whereas I identified most others as likely. I also identified additional sources of error and bias that cannot be quantified without further effort on the parts of monitors going forward.

Monitors recorded fatalities of nonvolant wildlife at only 1 project. Either nonvolant animals died only at the 1 project or monitors ignored them at other projects. In another example of potential bias, monitors removed all fatality finds to prevent double counting of fatalities. If this practice altered forage availability and hence scavenger removal rates of carcasses placed in detection trials, then bias was possible. Omissions of fatalities found

incidentally to routine searches introduced potential bias when those discoveries occurred on search plots. Also, where monitors searched daily for 5 to 7 consecutive days at beginning of monthly intervals, difficult decisions were necessary over how to treat fatalities found on the first day of each daily search sequence. Another potential bias was the practice of placing feather piles in bird carcass detection trials because doing so increased carcass persistence by offering scavengers inedible body parts that normally would not occur without flesh and bone upon a bird's death.

Monitors could not identify a fifth of all fatalities to species, which means they likely misidentified fatalities such as Allen's hummingbird (*Selasphorus sasin*) and rufous hummingbird (*Selasphorus rufus*). Such errors affect 2 species at once, the species inaccurately assigned the fatality and the species inaccurately denied it. Factors that diminish one's ability to identify fatalities to species include inexperience, insufficient motivation to examine remains carefully enough to identify them, and too much time between fatality searches. As search interval lengthens, more carcasses degrade to the point of becoming less recognizable to species. A related factor is lower detection probabilities of certain search methods. Human searchers miss more carcasses than do scent-detection dogs (Smallwood et al. 2020), and judging from the 3-fold difference in fatality rates between car and pedestrian surveys, searchers in cars likely miss more carcasses than do searchers on foot. Missed carcasses can later be found, but the delay in detection allows carcasses to be scavenged and decay, thereby increasing the likelihood they will not be identified to species. Species identification errors could not be fully quantified without viewing photographic evidence or preserved remains of all fatality finds. Such evidence was not forthcoming in responses to PRA and FOIA requests to state and federal agencies.

Mitigation measures and recommendations

Other than measures implemented to minimize hazards along powerlines, little testing was performed of candidate mitigation measures to minimize or reduce collision fatalities with solar collectors. Nearly all projects implemented mitigation measures to minimize bird collision mortality with gen-ties and medium-voltage overhead lines, and 1 implemented a measure to minimize avian collisions with solar PV panels (Dudek 2018b). At CVSR, for example, the gen-tie and medium-voltage overhead lines were fitted with Swan-flight Diverters SFD1520 during fatality monitoring (H. T. Harvey & Associates 2013). An ultrasonic acoustic deterrent was also implemented at Ivanpah's Unit 1 on 10 September 2014 and on 23 April 2015 at both Units 2 and 3 to reduce bat exposure to the zone of solar flux. The deterrent, however, was installed without experimental design elements that would have supported a conclusive hypothesis test of whether the deterrent reduced fatalities. Although bat fatalities declined throughout the study (Figure 4), the largest declines preceded installations of deterrents, which left the possibility that bat numbers were initially depleted by project-caused mortality. Although guidance had been prepared on how to perform experiments to test mitigation efficacy (Sinclair and DeGeorge 2016), none of the mitigation measures were implemented along with sufficient experimental design to convincingly test the measure's efficacy.

Considering the objectives of fatality monitoring and mitigation measures implemented at utility-scale solar projects, and considering what needs to be known of solar energy impacts to wildlife, I recommend the following changes and additions to wildlife studies: 1) perform baseline studies beginning ≥ 1 year prior to project construction to quantify relative abundance, densities in both breeding and nonbreeding seasons, and behavior patterns of resident and migratory wildlife species; 2) repeat fatality monitoring at projects where it was performed inadequately; 3) either monitor all new utility-scale solar projects for fatalities, or sample projects from the available pool of projects to obtain region-wide fatality estimates; 4) improve scientific access, transparency, and data sharing; 5) introduce peer review as a required standard of report preparation; 6) increase methodological standardization where it is most needed; 7) minimize fatality search intervals or use scent-detection dogs (Paula et al. 2011, Mathews et al. 2013, Smallwood et al. 2020); 8) treat incidental fatality finds just like those found in scheduled searches, so long as they were located on sampling plots; 9) whenever trying a new search method,

compare it to the conventional method through concurrent implementation of methods on, minimally, a suitable subsample of the search area; 10) integrate carcass detection trials into routine fatality monitoring, using appropriate species to quantify overall detection probability (Smallwood et al. 2018); 11) quantify and report observer error rates associated with monitoring, such as carcass detection rates and species misidentifications; 12) report species-specific use rates and fatality rates in addition to use rates and fatality rates of all birds and all bats; and 13) implement tenets of experimental design to test hypothesized causal factors and the efficacy of mitigation measures (Sinclair and DeGeorge 2016, Smallwood and Bell 2020a).

Based on the impacts I quantified in this review, my first recommendation on performing baseline studies is of high priority. The reports I reviewed were overly focused on collision mortality and paid no attention to impacts of habitat loss. Whereas collision mortality is substantial, more animals are lost to habitat destruction caused by the development of utility-scale solar projects. Resource agencies and permitting authorities need to view the impacts and how to mitigate them more comprehensively. I suggest directing 2 to 3 times more effort into measuring and mitigating habitat impacts than collision impacts. I suggest implementing macro-siting strategies, and I note that I saw amid the data and reports I received via PRA and FOIA requests no evidence of siting to minimize impacts to wildlife. One strategy would be to site projects to avoid migration clusters or locations where rare or declining populations of particular species occur (Ruegg et al. 2020). Another would be to site projects to minimize collision mortality of all birds and bats, and yet another would be to site to minimize loss of breeding sites.

I suggest the formulation of a research fund to assess impacts of habitat loss, explore methodological improvements to more accurately predict and estimate impacts, quantify the effects of causal factors, and test the efficacy of mitigation measures. An example of research that would vastly improve understanding of causal factors of collision mortality would be surveys performed by behavioral ecologists. As in wind energy projects, the most effective means to learn of the circumstances of fatalities is to study animal behavior in the context of the project specific to birds (Hoover and Morrison 2005, Smallwood et al. 2009a,b; Hull and Muir 2013) and bats (Horn et al. 2008, Cryan et al. 2014). In my experience, careful observation of living animals can determine collision factors more effectively than can collections of dead animals (Smallwood et al. 2017, Smallwood 2017b, Smallwood and Bell 2020a,b). Lastly, I suggest follow-up measures to reduce and compensate for impacts revealed by monitoring.

MANAGEMENT IMPLICATIONS

In light of the magnitudes of solar energy impacts to wildlife, it would be prudent to slow the development of utility-scale solar projects long enough to formulate more accurate impacts assessments and more effective project decision-making, mitigation, and oversight. More than sufficient capacities exist for distributed generation and energy conservation to compensate for the time needed to develop policies and methods for safer development of utility-scale solar energy. Time is needed to develop decision-making frameworks that compare costs and benefits of solar technology, such as solar thermal versus PV, and alternative project locations. Time is needed to improve fatality monitoring and measurement of impacts, including routine implementation of baseline studies. Time is also needed to develop a more transparent oversight process, along with consequences for exceedance of mortality thresholds or for failing to meet standards of baseline studies and fatality monitoring.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data available in article supplementary material and in cited reports. Cited reports of fatality monitoring are also available from the author on request.

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Associate Editor: Courtney Duchardt.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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Electric car carriers promise to pack a punch

By Namrita Chow | 28 March 2022

Austrian trailer manufacturer Kässbohrer is developing a battery-powered car transporter with Swiss engineering firm Designwerk Technologies that promises to make vehicle deliveries by road a cleaner thing altogether. Namrita Chow talks to Tobias Wülser and Dr Markus Guggenbichler



Automakers are under pressure to show their supply chains are as close to carbon neutral as possible. The transport of their brand new, fully built vehicles is now the subject of scrutiny.

Those logistics providers with facilities to help OEMs further offset their carbon footprints will gain traction in an industry embracing the transition to greener alternatives.

In Europe, the pressure is acute, as EU mandates call for a ban to fossil fuel heavy vehicles as soon as 2040. Those weighing under 26 tonnes are expected to meet the carbon-neutral mandate as early as 2035 in specific markets.

In a special spotlight interview, *Automotive Logistics* talked exclusively with German equipment manufacturer Kässbohrer Transport Technik and Designwerk Products, the companies behind a customised electric car carrier built in collaboration with Swiss finished vehicle logistics player, Galliker Transport.

The truck is the first fully electrified, full-size car transporter and is based on a Futuricum e-truck. Futuricum is a division of Designwerk that makes electric trucks, mobile rapid chargers, and modular battery systems for electric vehicles. The company says that electric trucks will be an important to the future of mid and long-distance road transport.

Designwerk, the mother company of Futuricum, is currently working on megawatt battery, buffered charging solutions with high-speed charging especially for e-trucks like the Kässbohrer car transporter.

Dr Markus Guggenbichler, head of sales and product development at Kässbohrer, and Tobias Wülser, founder at Designwerk Products, talk to Namrita Chow about the sustainable contribution the technology promises for the industry and whether this pilot is the gamechanger heralding the future of electric transporters for the finished vehicle logistics sector.

Truck and battery capacity

Namrita Chow: This electric full-size car transporter, which includes electric mechanisms for the loading and unloading of passenger cars, is now in use. Could you tell us a bit about its capacity? What is the total permissible load and how many cars is it able to carry?

Dr Markus Guggenbichler: With this first electric articulated vehicle transporter we can load eight cars. The loading possibilities correspond to a conventional car transporter, with the exception that the height above the driver's cab and at the first loading position behind the cab is somewhat limited due to the vehicle height.

To design the world's first electric car transporter not in the laboratory but for normal logistics use was a key objective from the outset, and we have succeeded in doing so, with zero emissions and maximal loading capabilities for cars.

The electrified car transporter has a battery capacity of 900 kWh and 500kW (680HP) drive power. The storage capacity of the electric truck consists of four 225kWh lithium-ion batteries. In comparison, an average electric passenger car has a capacity of 40 to 60kWh net energy content.

Designwerk founders Frank Loacker (left) and Tobias Wülser

Could you explain a little bit about the battery powering this electric car carrier? Is this such that the overall range is increased?

Tobias Wülser: The cumulative battery capacity increases the total range of the truck. The four Designwerk batteries systems sum up to a total installed battery capacity of 869.6kWh and a total range of approximately 500km with a full load.

Dr Markus Guggenbichler: The batteries work together in one pack. They can be recharged at all standard charging stations. Usually, 150 KW charging stations are already available today. With these high capacities, however, Designwerk offers coordinated charging options up to 350kW. This means that rapid recharging – 80% of capacity in less than two hours – is possible with this electric car transporter.

Why did you create such a large capacity battery?

Tobias Wülser: The answer is simple. We developed the 900kWh Futuricum e-trucks because no one else can do that right now. We are frontrunners in the field of electromobility for commercial vehicles.

We own the segments of niche e-trucks for special applications. These are electric trucks no OEM offers [and include] special electric vehicles with four or five axles, e-trucks with 900kWh battery systems for long range and heavy-duty transport, or vehicles with additional auxiliary drives, which we electrify as

The four Designwerk batteries systems sum up to a total installed battery capacity of 869.6kWh and a total range of approximately 500km with a full load

Why this level of power is preferable for a car carrier?

Tobias Wülser: *Our goal was to drive with an electric motor drivetrain that does not need to be shifted into different gears. This allows top speeds on motorways of 86 km/h and gradients of 18%. The gearbox complete in-house development by Designwerk.*



My understanding is that the total weight of the four battery packs is about 5,440kg. Does this extra weight affect the range of the truck?

Tobias Wülser: The vehicle's weight plays a role in terms of rolling resistance. The far greater impact on such an electric truck is the air resistance.

From where are these battery modules sourced?

Tobias Wülser: In this arrangement we have resorted to a high-performance cell from the Asian region, which offers us better performance compared to price and weight.

Charging infrastructure

Are charging points exclusively located at the company depot? What type of charger is this and how long does it take to charge 100%?

Dr Markus Guggenbichler, head of sales and product development at Kässbohrer

Dr Markus Guggenbichler: We can charge the vehicles during the set-up with the usual high-voltage network. There is a public charging station in the immediate vicinity. The vehicle has a CCS [combined charging system] Type 2 charging connection, so it can be charged at an external DC charging station or with AC Type 2.

Tobias Wülser: Depending on the local infrastructure the Futuricum electric truck is equipped to be charged at different speeds. With a 150kW CCS charger it will take approximately 4.1 hours up to 80% state of charge. With a 350kW CCS charger you can reduce the charging duration to 1.7 hours for an 80% state of charge. The Designwerk battery systems built in this truck are set up to charge up to 80% state of charge to prolong the battery life.

What about charging en route? Does the electric car carrier have to travel on predestined routes? Have you worked with local authorities to plan routes with the required charging facilities installed?

Dr Markus Guggenbichler: The deployment and route planning was carried out by the customer. In particular, the customer's own existing infrastructure was taken into account.

Public charging points usually represent a possible back-up scenario.



r application

What are Kässbohrer's plans for moving from pilot project stage to roll out of more such vehicles?

Dr Markus Guggenbichler: Based on the experience of the pilot projects to date, we would like to provide standardised body configurations suitable for battery-electric trucks for different key applications, such as shuttle transport or vehicle distribution, which can be assembled from a modular system. This should be possible in the near future. Just as Kässbohrer developed the first (fuel) car transporter almost a century ago, we are sure that, together with our partners, we will also be able to make important contributions to the zero-emission future of the industry.

What specific considerations did you have to make in building the transporter for Galliker Transport?

Tobias Wülser: With this project, our company wanted to move up into the champions' league of vehicle construction. On the one hand, we are the first to have tackled the problem of long ranges for car transporters. In addition, there were the battery positions as well as the axle loads and, of course, the length extensions of +1 metre.

Regulation driving change

The EU is pushing hard for our transport industry to become carbon neutral by 2050. The latest update to Regulation 2019/1242 for emissions from heavy-duty vehicles is due out in Q4 2022. Do you see these regulations as a major incentive to electrify the fleet at Kässbohrer?

Dr Markus Guggenbichler: Inspired by these legal objectives, we currently see a strong interest in projects where the battery-electric truck is to be tested in various specific uses. However, with the current costs of electrification, economic efficiency calculations naturally play a role, not only in these projects.

Each member state of the EU has a host of incentives to encourage the switch to zero and low-emission, heavy-duty vehicles. How do these incentives apply to you and your customers?

Dr Markus Guggenbichler: National funding opportunities are important for pilot projects, of course. However, these subsidies are handled by the customers and operators in each case, with their national authorities, and must also be applied for by the transport companies.

What does the production and trial of this transporter promise for the those tasked with delivering finished vehicles in more sustainable ways on the road?

 **Wülser:** With the completion of this electric car transporter, we are making a clear statement. Passenger vehicles can now be delivered to dealerships with zero emissions. Making a further

contribution towards sustainable mobility is important to both automotive manufacturers and us.

We are also developing a battery-backed DC charger. With the Designwerk MBDC-18-21 you can charge trucks, buses, ships and aircraft in record time. Its high-charging power and low operating costs make it ideal for use in fleet operations, the commercial vehicle industry, by vehicle manufacturers, in test centres or during events.

Dr Markus Guggenbichler: It is not measured in kilowatts but what is also crucial for the success of innovation in the traditional vehicle industry is entrepreneurship. Private-sector initiatives and visions of the future, such as we have developed in our joint project [here] is about tackling the future, in the truest sense of the word!

(Development team l to r): Roland Schantel, Kässbohrer; Tobias Wülser, founder Designwerk; Felix Felder, fleet manager, Galliker; Dr Markus Guggenbichler, head of sales and product development Kässbohrer; Horst Foessler, head of engineering, Kässbohrer; Günther Percht, CEO of Kässbohrer



Item F. 1. Public Hearing Port of Hueneme Outdoor Vehicle Storage Facility

Comments: FEIR and Special Use Permit

Submitted by Shirley Godwin godwinc@earthlink.net

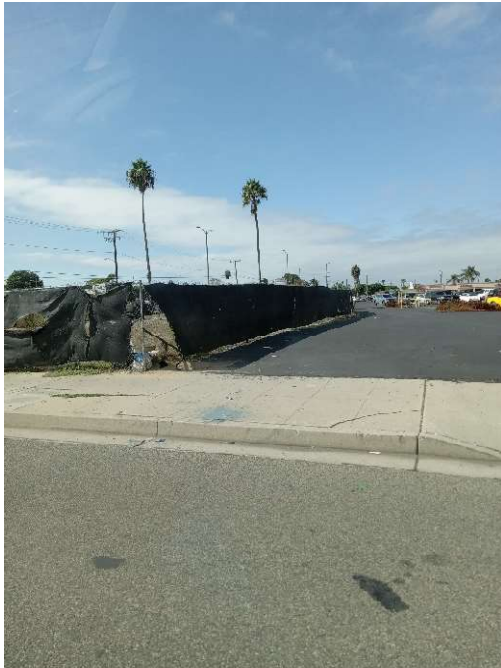
The EIR consultants have minimized the impacts of locating this facility at this particular location. While Hueneme Road is not designated a State or City scenic highway, it is designated as part of the Coastal Scenic Drive which extends from PCH (HWY1) along Hueneme Road, continuing through the City of Port Hueneme and heading north. It is also the Coastal Bikeway Route. Signs are posted along the way. Therefore, if the landscaping, chain link fencing and cloth wrapping are not maintained, this site will become a visual blight.

The consultants state that it will be maintained because the Special Use Permit requires that the site meet Oxnard's 1986 landscape maintenance requirements or legal action will be taken. Unfortunately, the City has found this difficult. For example, the City has been unable to get the private property owner of the Halaco plant site on Perkins Road to even clean up the perimeter of the property.

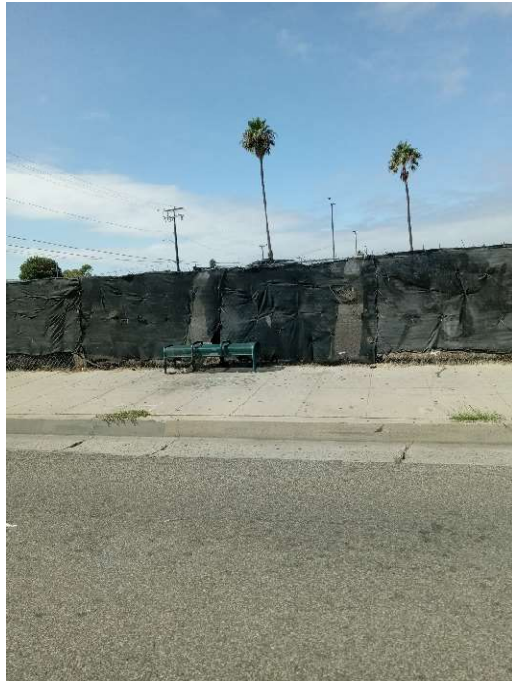
I'm including 4 photos that I took as examples of chain link fencing in Oxnard with weeds and torn cloth wrap or slats: the busy intersection at the NW corner of Saviers Road and Pleasant Valley and two properties on Arcturas Ave. used by customers of the Port of Hueneme. These properties have remained in this blighted condition for about 10 years.

Another issue with using this 34 acre site for vehicle storage is the proximity to the Ormond Wetlands Preserve. The project description states that the land to the south of the proposed project is "vacant." That property is owned by The Nature Conservancy and part of the Ormond Restoration area with restoration planning by The Nature Conservancy, the State Coastal Conservancy and the City of Oxnard as partners. TNC gives educational tours of their property and plans call for nature trails, signage and public access.

NW corner of Saviers Road and Pleasant Valley Road



OCTOBER 16, 2022

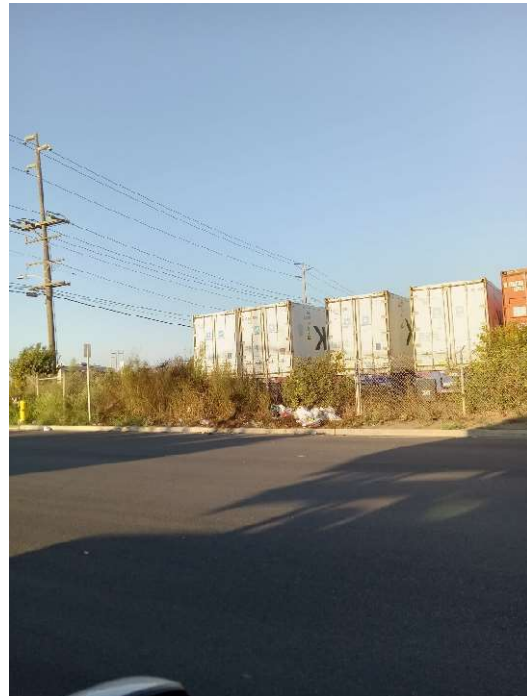


OCTOBER 16, 2022



OCTOBER 16, 2022

6001 Arcturas Ave.



OCTOBER 16, 20

5980 Arcturas Ave.

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October 20, 2022

Re: Public Hearing: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility

Dear Oxnard Planning Commissioners,

The Community Environmental Council (CEC), founded in 1970, has worked for over 50 years to pioneer environmental solutions in California. For the last 15 years we have focused on building on-the-ground momentum to reverse the threat of the climate crisis, working most closely in Ventura, Santa Barbara, and San Luis Obispo counties. Our programs work across energy, transportation, and buildings to mitigate carbon emissions, sequester carbon in natural and working lands, and build equitable climate resilient communities.

CEC has reviewed the Final EIR and the staff recommendation to proceed with the Temporary Outdoor Vehicle Storage Facility; however, **CEC urges the Oxnard Planning Commission to reject the FEIR and to vote NO on the proposed expansion of the Port.**

CEC has collaborated on several projects and initiatives in Oxnard and the broader Ventura County region to advance building electrification, plan for and scale EV adoption, and build out EV charging infrastructure. CEC has supported, and commends, the City on its decision to join the Clean Power Alliance, draft a strong Climate Adaptation Plan, and conduct a Sustainable Transportation Plan. Additionally, CEC has worked closely with the Port of Hueneme for years to support and collaborate on their electrification efforts from supporting the installation of EV charging stations on site, to assessing the feasibility of electrifying the goods movement vehicles that work with the Port. Our mission is to accelerate these and other efforts community wide. However, our intention is to ensure that this work is done equitably, in a way that builds community resilience and does not reinforce existing systemic inequities.

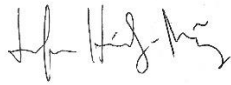
The communities of South Oxnard have long been burdened with the impacts of an industrialized coastline. They have fought to ensure that their families and neighbors no longer have to live in sacrifice zones, where their health and well-being are considered a necessary trade off in the name of economic progress.

CEC cannot support expansion of the Port in the absence of a strong target for electrification, stronger workforce opportunities and protections for jobs that would be created, and a full analysis of the potential near- and long-term pollution impacts from increased trucking and car trips on already impacted region.

We urge the Planning Commission to affirm the agency of the people of South Oxnard to take an active role in shaping the resilient future that is right for their particular community - even if that choice might seem at odds with the system they are operating in. We urge the Planning Commission to fully consider the impacts of increased diesel trucking in the neighborhoods surrounding the proposed project area. We urge the Planning Commission to consider the options that community members and CBOs in the region have uplifted as alternatives to the current proposal.

We thank you for the opportunity to comment on this project.

Respectfully,

A handwritten signature in black ink, appearing to read 'Jennifer Hernandez', is positioned above the printed name.

Jennifer Hernandez
Climate Justice Manager
Community Environmental Council



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'alicia gallegos' via Planning <planning@oxnard.org>

Wed, Oct 19, 2022 at 5:57 PM

Reply-To: alicia gallegos <alizyosh@yahoo.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Alicia Gallegos

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Kimberly Rice <ricekimmy@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 6:18 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Kimberly Rice



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Eva Reynoso <evareynoso21@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 6:52 PM

Dear Oxnard Planning Commissioners, I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods. It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage. The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community. The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime. Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks. This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely, Eva Reynoso



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Aylin Fernandez <afernandez18@oxnardunion.org>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 6:53 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Aylin Fernandez

This is a student email account managed by Oxnard Union High School District. The contents of this email are governed by the laws of the state and the board policies of the school district.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Zaide Pasion <zaidepasion@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:00 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Zaide Pasion



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Tara Robinson <tararob@att.net>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:05 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Aracely Marin <aracelymarin1114@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:05 PM

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Zac Sherar <zsherar@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:05 PM

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Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Trinity Tran <talatrinity@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:06 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Amanda Immer <amandaimmer@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:06 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods. It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage. The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community. The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime. Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks. This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Amanda I.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Hattie Ellison <hattie.ellison.10@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:06 PM

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Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Jorge Palafox <jorge_palafox@ucsb.edu>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:06 PM

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Jorge Palafox



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Andie McNeil <aemcneil04@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:06 PM

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Andie McNeil



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Subject: 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Vanessa Makhoulf <venemak2003@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:07 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Vanessa Makhoul



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

rodeg@umail.ucsb.edu <rodeg@umail.ucsb.edu>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:08 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Robin Odeg



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

George Pineda Jr. <georgepineda5000@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:17 PM

Dear Oxnard Planning Commissioners,

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George Pineda Jr.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Evelyn Mendez' via Planning <planning@oxnard.org>
Reply-To: Evelyn Mendez <xah.evelyn11@icloud.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:25 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Evelyn Xahuentla



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Anastatia ortiz <aortiz48@oxnardunion.org>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 7:29 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Anastatia Ortiz

This is a student email account managed by Oxnard Union High School District. The contents of this email are governed by the laws of the state and the board policies of the school district.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Julissa Lopez' via Planning <planning@oxnard.org>

Wed, Oct 19, 2022 at 8:04 PM

Reply-To: Julissa Lopez <julissal12@icloud.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

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Sincerely,

Julissa Lopez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Subject: 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Alex Masci <alexmasci22@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 8:23 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Alex Masci

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10/20/22, 9:41 AM

City of Oxnard Mail - [Ask Planning Action] Subject: 10/20 Public Hearing-Public comment to Vote NO on the The Port of Huene...

Alex Masci
(she/her/hers)
alexmasci22@gmail.com
805.886.0559



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project1 message

'Selina Magallon' via Planning <planning@oxnard.org>

Wed, Oct 19, 2022 at 8:46 PM

Reply-To: Selina Magallon <Seli_2720@yahoo.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Selina Magallon



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Natalie Chaparro <natalie.celeste99@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 11:22 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Natalie Chaparro



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Monse Santoyo <monserrat.santoyo12@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 11:23 PM

Dear Oxnard Planning Commissioners,

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Sincerely,
Monserrat Santoyo

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Jada Escamilla <jadaescamilla16@gmail.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 11:44 PM

Dear Oxnard Planning Commissioners,

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Sincerely,

Jada Escamilla

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Bryna Sullivan' via Planning <planning@oxnard.org>
Reply-To: Bryna Sullivan <sullivanbryna@icloud.com>
To: planning@oxnard.org

Wed, Oct 19, 2022 at 11:56 PM

Dear Oxnard Planning Commissioners,

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Bryna S.



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Dani Espindola <daniespindola587@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 12:12 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

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environmental justice!

Sincerely,

Daniella Espindola



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

王宇迪 <Muriel_didi@outlook.com>

Thu, Oct 20, 2022 at 12:39 AM

To: "planning@oxnard.org" <planning@oxnard.org>

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

王宇迪 <Muriel_didi@outlook.com>
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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

2 messages

'Alexis Lopez' via Planning <planning@oxnard.org>
Reply-To: Alexis Lopez <alexisl135@icloud.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 5:45 AM

Dear Oxnard Planning Commissioners,

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Sincerely,

Sent from my iPhone

'Alyssa Ramirez' via Planning <planning@oxnard.org>
Reply-To: Alyssa Ramirez <alyssa.ramirez00@icloud.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 6:59 AM

Dear Oxnard Planning Commissioners,

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Sincerely,

Alyssa Ramirez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Katya Acuña <katya_acuna@hotmail.com>
To: "planning@oxnard.org" <planning@oxnard.org>

Thu, Oct 20, 2022 at 7:28 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Katya Acuña



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Daniel O.' via Planning <planning@oxnard.org>
Reply-To: "Daniel O." <qinectar@pm.me>
To: "planning@oxnard.org" <planning@oxnard.org>

Thu, Oct 20, 2022 at 7:57 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Daniel O



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Mariam Gendi <basantgendi123@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 8:35 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Today's Public Hearing - Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Rachel Kim <sueyonie@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 8:49 AM

Dear Oxnard Planning Commissioners,

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Sincerely,
Rachel



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Bella Abbatoye' via Planning <planning@oxnard.org>
Reply-To: Bella Abbatoye <bellaabbatoye@yahoo.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 8:56 AM

Dear Oxnard Planning Commissioners,

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Bella Abbatoye



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Sara Reynoso' via Planning <planning@oxnard.org>
Reply-To: Sara Reynoso <sarareynoso1014@yahoo.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:04 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Sara Reynoso



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Leila Benoun <lbenoun000@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:08 AM

Dear Oxnard Planning Commissioners,

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Leila Kaseke
Ventura County Resident



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Elisabeth Lamar <kissmyblog@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:08 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Lisa Nguyen <lisa.marie.nguy3n@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:21 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Lisa Marie Nguyen



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Cristian Rodriguez' via Planning <planning@oxnard.org>
Reply-To: Cristian Rodriguez <c7rodrig@ucsd.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:47 AM

Dear Oxnard Planning Commissioners,

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Sincerely,

Cristian Rodriguez



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Jillian Hall <jillian.hall520@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 9:54 AM

Dear Oxnard Planning Commissioners,

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environmental justice!

Sincerely,

Jillian Hall



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

David Camacho <david.camacho11115@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 10:04 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project1 message

Adriana <adriana.bracamontes217@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 10:27 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Adriana Bracamontes



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Lisette Espinosa <lespinosa15@students.claremontmckenna.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 11:08 AM

Dear Oxnard Planning Commissioners,

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Sincerely,
Lisette Espinosa

--

Lisette Espinosa
Claremont Mckenna College | Class of 2015
805 - 890 - 6067



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Zuleth Lucero' via Planning <planning@oxnard.org>
Reply-To: Zuleth Lucero <zlucero@mail.fresnostate.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 11:16 AM

Dear Oxnard Planning Commissioners,

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Sincerely,

Zuleth Lucero



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Elijah Tumalan' via Planning <planning@oxnard.org>
Reply-To: Elijah Tumalan <etumalan@ucsc.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 11:36 AM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

10/20/22, 12:14 PM

City of Oxnard Mail - [Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Te...

Elijah Tumalan



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Yari Jimenez <loveyari4562@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 12:16 PM

Dear Oxnard Planning Commissioners,

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Sincerely,
Yaritza



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Rafael Ceja' via Planning <planning@oxnard.org>
Reply-To: Rafael Ceja <rafaelceja777@yahoo.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 12:19 PM

Dear Oxnard Planning Commissioners,

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Sincerely,
Rafael ceja

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

3 messages

'Rafael Ceja' via Planning <planning@oxnard.org>
 Reply-To: Rafael Ceja <rafaelceja777@yahoo.com>
 To: planning@oxnard.org

Thu, Oct 20, 2022 at 12:19 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
 Rafael ceja

Sent from my iPhone

'Bertha Guzman' via Planning <planning@oxnard.org>
 Reply-To: Bertha Guzman <bertha.guzman02@icloud.com>
 To: planning@oxnard.org

Thu, Oct 20, 2022 at 1:29 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Sent from my iPhone

'Bertha Guzman' via Planning <planning@oxnard.org>
Reply-To: Bertha Guzman <bertha.guzman02@icloud.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 1:29 PM

[Quoted text hidden]



Solis, Rogelio <rogerio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

s_t_g@umail.ucsb.edu <s_t_g@umail.ucsb.edu>
To: planning@oxnard.org, Sofi@causenow.org

Thu, Oct 20, 2022 at 1:31 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

S. Tara Grover



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Kathryn Masci <Kathryn@masciandmasci.com>
To: "planning@oxnard.org" <planning@oxnard.org>

Thu, Oct 20, 2022 at 1:33 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Kathryn Masci



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

2 messages

'Christian Sanjose' via Planning <planning@oxnard.org>
 Reply-To: Christian Sanjose <christian.sanjose95@icloud.com>
 To: planning@oxnard.org

Thu, Oct 20, 2022 at 1:56 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Best,
 Christian San Jose

'Christiana Pennington' via Planning <planning@oxnard.org>
 Reply-To: Christiana Pennington <cnp6@icloud.com>
 To: planning@oxnard.org

Thu, Oct 20, 2022 at 1:57 PM

Dear Oxnard Planning Commissioners,

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Christiana

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project1 message

'Gabriela Magallon' via Planning <planning@oxnard.org>

Thu, Oct 20, 2022 at 2:10 PM

Reply-To: Gabriela Magallon <gabriela2720@yahoo.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

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Sincerely,

Gabriela Magallon

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Cynthia Echeverria <cynthiare27@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:14 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,
Cynthia Echeverria



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Eric Martinez <emarti2195@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:22 PM

Dear Oxnard Planning Commissioners,

It is my personal opinion that this project should not go forward. I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Eric Martinez

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Natalie Alhabash' via Planning <planning@oxnard.org>
Reply-To: Natalie Alhabash <natalie.alhabash@icloud.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:38 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Natalie

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Molly McCoy <mollymccoyx@gmail.com>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:53 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. As a Ventura County resident and environmental science college student, I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,
Molly McCoy



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Alina Tong <atong@callutheran.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 2:54 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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Sincerely,

Alina Tong



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Please Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

2 messages

Jonathan Ullman <jonathan.ullman@sierraclub.org>

Thu, Oct 20, 2022 at 2:57 PM

To: planning@oxnard.org

Cc: Elisabeth Lamar <elisabethlamar@hotmail.com>, "DAVIDGOLD4@aol.com" <davidgold4@aol.com>, James Hines <Jhcasitas@gmail.com>, Katie Davis <kdavis2468@gmail.com>

Dear Oxnard Planning Commission members:

The Sierra Club Santa Barbara Chapter representing Ventura County and members who directly enjoy and benefit from restored wetlands adjacent to the property in the City of Oxnard and the restoration of these lands ask the Oxnard City Planning Commission to vote no on accepting the EIR and vote no to any permitting. Please instruct planning staff to return with findings of denial.

This is a bad project.

Sincerely,

Jonathan Ullman
Director, Sierra Club Santa Barbara-Ventura Chapter

--

Jonathan Ullman, Director
Sierra Club Santa Barbara-Ventura Chapter

P O Box 31241
Santa Barbara, CA 93130-1241
Phone: (805) 617-3106

Jonathan Ullman <jonathan.ullman@sierraclub.org>

Thu, Oct 20, 2022 at 3:25 PM

To: planning@oxnard.org

Cc: Elisabeth Lamar <elisabethlamar@hotmail.com>, "DAVIDGOLD4@aol.com" <davidgold4@aol.com>, James Hines <Jhcasitas@gmail.com>, Katie Davis <kdavis2468@gmail.com>

A correction to our 2:57 p.m. email.

On Thu, Oct 20, 2022 at 2:57 PM Jonathan Ullman <jonathan.ullman@sierraclub.org> wrote:

Dear Oxnard Planning Commission members:

The Sierra Club Santa Barbara-**Ventura** Chapter representing Ventura County and members who directly enjoy and benefit from restored wetlands adjacent to the property in the City of Oxnard and the restoration of these lands ask the Oxnard City Planning Commission to vote no on accepting the EIR and vote no to any permitting. Please instruct planning staff to return with findings of denial.

This is a bad project.

Sincerely,

Jonathan Ullman
Director, Sierra Club Santa Barbara-Ventura Chapter

--

Jonathan Ullman, Director
Sierra Club Santa Barbara-Ventura Chapter

10/20/22, 3:42 PM

City of Oxnard Mail - [Ask Planning Action] Please Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage F...

P O Box 31241
Santa Barbara, CA 93130-1241
Phone: (805) 617-3106

[Quoted text hidden]



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

'Rebecca Carasco' via Planning <planning@oxnard.org>

Thu, Oct 20, 2022 at 3:40 PM

Reply-To: Rebecca Carasco <kcarasco@icloud.com>

To: planning@oxnard.org

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage.

The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community.

The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime.

Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks.

This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Grace Carasco



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Keenan Hancock <kphancoc@usc.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 3:44 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods. It is not accurate to describe this project as temporary when the FEIR fails to say what the long term plans are for Port Storage after the 3-5 years. It has been submitted to the record that the Port of Hueneme and GLOVIS already have plans, started contracts, and applied for grants to start a much bigger 250 acre expansion project, over seven times as big as this one farther down Hueneme Road, but it was left out of the FEIR. There cannot be a vote on this project without a study on long-term plans for Port storage. The FEIR states the project will not be expanding more shipments into the port, but it also says the project is going to allow more shipments from GLOVIS to create more jobs at the port. Both cannot be true. This project will only bring 14 jobs, all of which are contracted by GLOVIS that pay around minimum wage and are non-union. We want long-term high-paying union jobs in our community. The Port has said cars stored at the 34-acre site will be picked up by diesel trucks to transport them to dealerships around the country but the FEIR does not consider impacts to air quality from diesel trucks. This project will bring more diesel trucks on Hueneme Road, polluting our air with more cancer causing diesel exhaust. Diesel exhaust is the #1 cancer-causing air pollutant and exposure can result in lung function damage in children that lasts a lifetime. Right now, the port is using 31 acres of extra storage at the naval base to help the Port of LA during the pandemic. Instead of turning more and more land in South Oxnard into port storage which brings more and more polluting trucks to our neighborhoods, the FEIR should consider other options like using space in the navy base and the use of zero emission trucks. This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Keenan Hancock

--

Keenan P. Hancock
Pharm. D, M.S. HCDA
Tel: 1(760) 310-2214



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] 10/20 Public Hearing-Public comment to Vote NO on the The Port of Hueneme –Temporary Outdoor Vehicle Storage Facility Project

1 message

Bowen Liu <bowenliu@ucsb.edu>
To: planning@oxnard.org

Thu, Oct 20, 2022 at 3:50 PM

Dear Oxnard Planning Commissioners,

I am writing to urge you to reject the Final EIR (FEIR) and vote NO on the 34-Acre GLOVIS Port Expansion. As Commissioners, it is your job to conduct fair hearings that work to preserve the environment and health of Oxnard residents and avoid using false or inaccurate information when making important decisions for our city. The FEIR fails to include an accurate project description, does not consider impacts to air quality and pollution from diesel trucks, and avoids consideration of alternatives to alleviate the pollution burden on South Oxnard neighborhoods.

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This FEIR fails to accurately examine the negative impacts of this project. I'm asking that you do not certify the FEIR and deny the Special Use Permit. Oxnard deserves clean air and environmental justice!

Sincerely,

Sent from my iPhone



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Fwd: Item F-1: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility Special Use Permit PZ 18-500-02

1 message

Chaparro, Rose <rose.chaparro@oxnard.org>

Thu, Oct 20, 2022 at 11:15 AM

Cc: Alexander Nguyen <alexander.nguyen@oxnard.org>, "Golden, Ashley" <ashley.golden@oxnard.org>, "Klima, Shiri" <shiri.klima@oxnard.org>, Stephen Fischer <stephen.fischer@oxnard.org>, Planning <planning@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>

Dear Council,

FYI - Please find attached below written comments received.

Rose Chaparro, City Clerk
City of Oxnard

300 West Third Street

Oxnard, CA 93030

Main Line: (805) 385-7803

rose.chaparro@oxnard.org

CITY OF

The logo for the City of Oxnard, California. It features the word "OXNARD" in large, bold, blue letters. Below it is a stylized wave graphic with orange, yellow, and green colors. The word "CALIFORNIA" is written in small blue letters to the right.

----- Forwarded message -----

From: **lucy cartagena** <sleepoutventuracounty@gmail.com>

Date: Thu, Oct 20, 2022 at 9:35 AM

Subject: Item F-1: Port of Hueneme - Temporary Outdoor Vehicle Storage Facility Special Use Permit PZ 18-500-02

To: <cityclerk@oxnard.org>

My name is Lucy Cartagena. I am a resident of Oxnard, and founder of Family's First, a non-profit that provides parenting classes as well as works in the community to raise literacy in our community.

I support the project as it aligns with the betterment of our society in ending global warming and raises the aesthetics of that blighted part of our city that has been generationally neglected.

I'm afraid those opposed to the project still do not even have a plan, project or something to bring to the table or funding to implement their pipe dream.

Oxnard, needs to move forward and change the landscape of that area today so that it can pave the way for those opposed to raise the funds needed to do what they only envision for tomorrow.

To not support movement or beautification of the Ports project will only leave that area that is currently neglected by the city to continue for possibly another 20 years. Unless the opposition has concrete funding, with blueprint plans for that area it will continue to be their pipe dream, as lovely as it sounds. But, this 1 project will not fix the surrounding, nor will the opposition. So that leaves our community to grapple with the outcome of something that can benefit our community, or nothing and continue wishing for something.

And, on another note, I urge the commission to direct CAUSE and its affiliates to stop spreading false information of the project to the community. It is not fair to the Port and all its wonderful employees to be slandered.

~Lucy

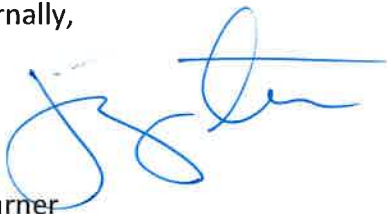
**PROJECT NAME: Port Temporary Vehicle Storage; PLANNING AND ZONING
PERMIT NO. 18-500-02 (Special Use Permit); (South Winds and Cypress
Neighborhoods)**

Planning Commissioners,

Thank you for taking the time to read my email concerning the temporary vehicle storage. There are certain projects that come across the docket, that benefit the community, this being one of them. The Port of Hueneme is an economic driver for the county as well as the City of Oxnard. Being an Oxnard resident, and as part of my daily job duties, I'm constantly in the Port. I see how much work is provided to local residents, with goods, cargo and vehicle movement. In years past, vehicles were stored at Camarillo and Oxnard Airports, in vacant fields, and behind the Auto Center in Ventura. All receiving important additional income, that were turned into upgraded features for our local residents. The Camarillo Airport installed more public hangers and Oxnard just repaved the runway with drainage improvements. My point is that this temporary vehicle storage will benefit the city, with more tax revenue without any out of pocket expenses. And after 5 years it will be returned to the state that it currently sits. The Port of Hueneme currently has a Community Workforce Agreement, that generates additional work for us local residents and in turn we spend within the community.

The Port of Hueneme continues to move forward with all electric cranes and electric drayage trucks for moving cargo, and the majority of the vehicles coming off the cargo ships are all electric. If we want to move forward with improving our community and clean up what has been left to us, we need to make strategic partnerships with public and private stakeholders when it benefits everyone. This partnership makes so much sense in the job market and tax revenue. I appreciate the time the commissioners spend on topics like this. Thank You.

Fraternaly,



Jay Turner

Proud Oxnard Resident



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

City of Oxnard, Planning Division
Attn: Jay Dobrowalski, Senior Planner
214 South C Street
Oxnard, CA 93030
jay.dobrowalski@oxnard.org

Dear Jay Dobrowalski,

On Behalf of the Wishtooyo Foundation (“Wishtooyo”) we submit the following comments on the Final Environmental Impact Report SCH NO. 2020069039 (FEIR) for the Port of Hueneme Temporary Outdoor Vehicle Storage Project (“Project”).

Founded in 1997, Wishtooyo Foundation is a California 501(c)(3) nonprofit public interest organization with members composed of Chumash Native Americans, First Nations People, and Santa Barbara, Ventura, and Los Angeles County residents. Wishtooyo is place, organization, and movement inspiring people to live in harmony with our Earth again. Wishtooyo serves as a “rainbow bridge” linking Chumash and Indigenous lifeways with the protection of natural and cultural resources, utilizing traditional ecological knowledge to provide environmental and cultural preservation and justice, education, research, and advocacy.

City of Oxnard’s Response to Comments

In brief, the FEIR's "Global Responses" fail to adequately respond to the community's comments. The FEIR, if approved, will greenlight a parking expansion with negative impacts to the environment and the animal and plant species, which it supports, and the Oxnard community.

The City’s Global Response 3 (“GR-3”) failed to properly respond to community comments over piecemealing of the project and expansion of the port. The FEIR has only included analysis of the 34-acre temporary storage facility, but fails to include any analysis of a 250-acre permanent storage facility that has not yet been subject to environmental review. The project in question is a



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FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

temporary vehicle storage facility that was planned in response to the Port's contracts with GLOVIS. The FEIR makes no mention of a transitional plan or where vehicles will be stored after this temporary term. As referenced in the CAUSE comment letter submitted in February of this year, the Port of Hueneme has previously sought funding for the 250-acre Multimodal Logistics Park. Oxnard Harbor District and the City of Oxnard have long known of this 34-acre facility as a stop-gap measure that will give the Port of Hueneme and City of Oxnard time to meet regulatory requirements for the longer term 250-acre project. The City's GR-3 response clearly demonstrates the City's lack of understanding of the definition of "reasonably foreseeable" and "speculative". The absence of applications for the 250-acre project to the City of Oxnard does not preclude the definition of reasonably foreseeable. As addressed in the CAUSE comment letter, substantive evidence exists in which the Port of Hueneme seeks to expand its operations and land acquisitions in Oxnard and the surrounding areas in order to keep up with its contracts with GLOVIS.

Follow-up Biological Resources Inventory - 2022

The City's Follow-up Biological Resources Inventory included in Appendix FA in response to public comments concerning impacts to biological resources is woefully inadequate. For example, the first bird species of special concern listed is the Tricolored Blackbird. The inventory claims "Not expected to occur. This species has not been documented in Ventura County since 1994". The Consultant Firm, Dudek, referenced the CDFW CNDDDB database in this determination. The CNDDDB database lacks input from citizen science projects, current research, and is overall exceptionally outdated and omits crucial plant and wildlife data. Surprisingly, Dudek also referenced the database, ebird, for some of its other determinations in the biological resources inventory. If they had referenced the ebird database when making a determination for the Tricolored Blackbird, they would have found that Tricolored Blackbirds have been seen throughout Ventura County as recently as the summer of 2022, as well as the Ormond Beach wetlands, adjacent to the project site. I have personally observed a Tricolored Blackbird at Ormond Beach Wetlands in 2017 and ebird includes multiple pictures of the species at Ormond. There is no explanation why Dudek did not use ebird for their claims for this



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particular species. The inventory also claimed that “the site lacks suitable wetland habitat to support this species”. Tricolored Blackbirds are not wetland obligate species. These blackbirds are known to forage rice fields, alfalfa, irrigated pastures, ripening or cut grainfields, annual grasslands, and even disturbed areas such as cattle feed lots and dairies¹. Although the site is comprised of disturbed upland/grassland, it is entirely possible for Tricolored blackbirds, which have been observed in the adjacent wetlands, to use the project site.

This follow-up inventory did little more than the biological resources inventory used in the Draft EIR and completely failed to analyze the impacts to sensitive and listed species that use the project site and the adjacent habitats that could be affected by the project. These would include, but are not limited to the Peregrine Falcon, White-tailed Kite, Red-tailed Hawk, Tricolored Blackbird, Belding’s Savannah Sparrow, California glossy snake, San Diegan Tiger Whiptail, and Western Pond Turtle.

The City and its consultants must take their obligation to properly analyze the Project’s impacts to biological resources seriously. To date, the analysis of impacts to biological resources has been entirely lacking and has omitted impacts to the sensitive plants and wildlife that exist in the project area and the adjacent habitats. Please see attached letter from February of this year detailing Wishtooyo’s concerns with the environmental review of this project. The City has a duty to inform its citizens of all of the impacts that a project will have on the environment and has failed to do so.

Mati Waiya
Executive Director
Wishtooyo Chumash Foundation

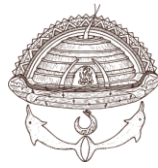
Tevin Schmitt
Watershed Scientist
Wishtooyo Chumash Foundation

¹ Tricolored Blackbird Working Group. 2007. Conservation Plan for the Tricolored Blackbird (*Agelaius tricolor*). Susan Kester (ed.). Sustainable Conservation. San Francisco, CA.



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CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

Attachment: Wishtoyo Foundation February 14th, 2022 Comment Letter



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

February 14, 2022

City of Oxnard, Planning Division

Attn: Jay Dobrowalski, Associate Planner

214 South C Street

Oxnard, CA 93030

jay.dobrowalski@oxnard.org

Dear Jay Dobrowalski,

On Behalf of the Wishtoyo Foundation ("Wishtoyo") we submit the following comments on the Draft Environmental Impact Report SCH NO. 2020069039 (DEIR) for the Port of Hueneme Temporary Outdoor Vehicle Storage Project ("Project").

Founded in 1997, Wishtoyo Foundation is a California 501(c)(3) nonprofit public interest organization with members composed of Chumash Native Americans, First Nations People, and Santa Barbara, Ventura, and Los Angeles County residents. Wishtoyo is place, organization, and movement inspiring people to live in harmony with our Earth again. Wishtoyo serves as a "rainbow bridge" linking Chumash and Indigenous lifeways with the protection of natural and cultural resources, utilizing traditional ecological knowledge to provide environmental and cultural preservation and justice, education, research, and advocacy.

Project Description and Piecemeal

The DEIR has failed to properly disclose and analyze the full Project to include 1) the temporary vehicle storage facility discussed in this DEIR as Phase I and 2) the 250-acre permanent vehicle storage facility as Phase II of the Project. Separating these two phases is an impermissible



piecemeal of projects under the California Environmental Quality Act (“CEQA”) environmental review process. The CEQA Guidelines define “project” broadly as “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment” (Guidelines, § 15378, subd. (a)). Further, environmental analysis must include the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.

Phase II is a reasonably foreseeable consequence of the Project because the only purpose of the initial temporary facility is to serve as a bridge to the Port’s expansion of vehicle storage capabilities while the Port seeks the necessary approvals for the second facility. The Project is just Phase I of the Port’s expansion and is only being proposed in anticipation for the Port to expand its operations permanently. Officials from the Port have been clear about this with certain members of the community and the City. (See Attachment A¹). While the Port has disclosed this two-phase approach to some, it and the City failed to include this necessary information in the DEIR and failed to provide the legally mandated environmental review of all aspects of the Project, including Phase I and Phase II. Thus, because the City and the Port knew and have been planning on implementing Phase I and Phase II of the Port’s vehicle storage expansion since the beginning, Phase II is a reasonably foreseeable consequence of the Project.

The future expansion of Phase II will also change the scope and nature of the environmental effects of the Project. First, Phase II will be a permanent vehicle storage facility, not a five-year Project as analyzed in the DEIR. The DEIR did not analyze the environmental impacts of a permanent vehicle storage facility. The DEIR must be conducted including analysis on the temporary and potential permanent siting of Phase I at the Project’s current location and the permanent siting of Phase II of the Project. The location of the Phase II vehicle storage facility must be disclosed in this DEIR to fully inform the public of its environmental impacts. Second, Phase II will very likely include more driving and parking of vehicles not analyzed in the DEIR, thus increasing the traffic impacts, air and water pollution associated with driving and parking,

¹ See Attachment A for Declaration of Lucas Zucker



environmental justice concerns, impacts to Chumash cultural and natural cultural resources, and be further inconsistent with the City's general plan and wetlands restoration plans. Lastly, the DEIR misled the public into thinking the whole Project would be a minimal temporary hindrance to their community, instead of the hidden reality that the Project is just Phase I of the Port's expansion and a much larger and permanent vehicle storage facility.

Tribal Cultural Resources

The County failed to adequately analyze the impacts of the project on cultural resources. The DEIR expresses a clear bias against the recognition that the Chumash people live in Oxnard and near the Project area today; that they have strong relationships with the Project area; that they currently utilize natural cultural resources throughout the Project area; and that Chumash tribes, bands, and clans are sovereign entities.

The EIR misuses the term "cultural site" by using it synonymously with "archeological site" showing a clear lack of understanding of what a cultural site is. Archeological sites are locations identified to be of archeological value to researchers. Cultural sites include archeological sites, but also include many locations that are of little interest to archeologists, such as village sites where the ground has been previously disturbed and areas where sedimentation has relocated Chumash artifacts. Furthermore, cultural sites also include but are not limited to sacred sites, gathering locations, and cultural landscapes.

Further, the City abused its discretion when failing to locate Tribal Cultural Resources widely known to likely be present in the Project area through the use of the best available and widely used technology and methods. Wishtoyo requests that specially trained forensic canines in combination with ground penetrating radar are utilized to identify the location of all Native American burials and cultural remains within the project site. These techniques were used to reliably identify the location of Ohlone/Esselen burials in the KB Homes Development in Santa Cruz and for other development projects. Wishtoyo used forensic canines to detect the presence of Chumash ancestral remains/burials for the Santa Clara River Estuary / McGrath State Beach Campground Relocation and Estuary Restoration Feasibility Study with California



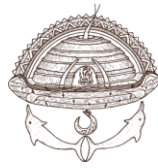
State Parks. (Attachment 1²) The use of specially trained canine forensics and ground penetrating radar, represent the best available technology and most reliable means for the identification of Native American burials, and thus should be used to identify potential impacts to Chumash Tribal Cultural Resources and to mitigate those impacts to a less than significant effect.

Under CEQA and California law, when cultural resources are identified, the preferred mitigation measure is avoidance, and if avoidance is not feasible, preservation in place as defined by the local Native nations. (CEQA Guidelines §15126.4). Avoidance and preservation in place mitigation measures cannot be implemented if Tribal Cultural Resources are not identified before the approval of the Project and its CEQA documents. Therefore, the Project's mitigation measure MM CUL-2 is an insufficient mitigation of potential impacts to cultural resources. The presence of a Native American Monitor only during subsurface grading, trenching, and construction will not avoid impact to cultural resources. This is because once construction begins and no commitments to avoidance or preservation in place are secured, a monitor can only do so much (if anything) to secure lesser protections (such as movement of the resource to another location away from its Village location or burial ground, or recovery of the resource for storage or display in a museum) for the resources which are often damaged or destroyed by the excavating activity that resulted in its discovery. Additionally, the DEIR's use of monitors is flawed because the DEIR fails to identify the process of selecting the Native American Monitor, and fails to contain procedures to ensure monitors from the proper Chumash Nations will be present during construction to best protect un-detected Chumash remain from harm and to help determine proper actions that must be taken to protect and preserve the Chumash remains encountered.

The DEIR has completely failed in its analysis of Project impacts to Tribal cultural resources and must properly categorize the finding of unidentified Tribal Cultural Resources and ancestral remains as a "potential significant impact" that must have adequate mitigation measures to ensure the proper consultation protocols and protections are in place.

Water Quality and Wetlands

² See Attachment 1 for the Santa Clara River Estuary / McGrath State Beach Campground Relocation and Estuary Restoration Feasibility Study showing Wishtoyo's use of canine forensic dogs.

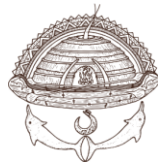


1. No analysis of Specific Water Quality Impacts

The DEIR failed to analyze the type and amounts of hazardous materials and toxic metals associated with vehicle liquids and fluids (fuel, coolant, oil, etc.), vehicle tires, vehicle brake pads, vehicle paint, and the environmental impact these hazardous materials and metals will have on the wetlands. Southern California Coastal Water Research Project (SCCWRP) conducted a study on water quality and toxicity of runoff from parking facilities during storm events. (Attachment 2³) The study found that runoff from these sites have high concentrations of Iron, Zinc, Copper, and Lead. (Id. at ii.) These pollutants are derived from the wear of breaks, tires, and other exposed auto parts, and spills of automotive fluids. Parking facilities also tend to accumulate wind and atmospheric transported pollutants over time (Id. at 1). Furthermore, because this Project is located on the coast, the salt in the air at the Project site will wear the paint and metal parts of the cars at an accelerated rate, leading to increased concentrations of metals discharged from the site in stormwater during rain events. Metal pollutants have acute, chronic, and sub-lethal effects on marine and aquatic life in the Pacific Ocean and Ormond Beach Wetlands. (Id. at 32). They can also biomagnify in the food chain, and cause these acute, chronic, and sublethal impacts on avian species. Without this necessary analysis on hazardous materials and metal pollutants that would be contained in stormwater discharges from the Project site, the City has not informed the public on the environmental impacts of the Project, needed mitigation to prevent impacts to aquatic and avian species in receiving waters, and should not have found less than significant impact in the DEIR. The DEIR provides no information regarding hazardous materials for the public and decision makers to evaluate and comment on, thus failing to meet the requirements of CEQA. The DEIR must fully analyze the impacts of the Project on Ormond Beach Wetlands and specifically, the impacts of metals and hazardous materials discharged from the Project site during storm events.

The DEIR failed to analyze whether the stormwater discharges from the Project site during or after construction will meet Clean Water Act Water Quality Standards; will harm wildlife, recreational, cultural, or tribal ceremonial beneficial uses; and will cause or contribute to harms to Clean Water Act 303(d) listed impaired waterways. As detailed above, sufficient information exists that indicates the contaminants in stormwater discharges from the Project will harm the

³ Southern California Coastal Water Research Project, *Technical Report 343, Characteristics of Parking Lot Runoff Produced by Simulated Runoff* (July, 2001).



beneficial uses of the Ormond Lagoon Waterway, Ormond Lagoon, and the Pacific Ocean. In addition, further analysis is required because the Ormond Lagoon Waterway / Lagoon are listed by the U.S. EPA and State Water Resources Control Board on the Clean Water Act 303(d) list as impaired for bacteria, pH, and trash. (Attachment 3⁴) Thus, a comprehensive analysis is needed that ensures the project is not causing or contributing to these impairments. For instance, as detailed above, an analysis of impacts of metals and other pollutants in stormwater discharges from the Project is needed in part to see if the Project's discharges will cause or contribute to the pH impairments in the Ormond Beach Lagoon identified on the 303(d) list. In addition, a comprehensive EIR analysis is needed, along with a comprehensive analysis of mitigation measures, to prevent the Project from accumulating and discharging trash into Ormond Lagoon Waterway and Ormond Lagoon, and the Pacific Ocean.¹⁷ This is especially the case because it is critical the Project does not cause or contribute to trash pollution of these waters, which are already 303(d) listed for trash. (See attachment 3.) Without this analysis, it is likely that the well-known trash littering and accumulation problem that plagues these waters and Oxnard's streets near the wetlands, will be deposited onto the Project site (via littering / dumping activities, or via wind), and then will be conveyed either by wind or stormwater discharges from the Project's graded and graveled surfaces into the adjacent Ormond Lagoon Water Way, Ormond Lagoon, tšumaš Creek, or the Pacific Ocean.

The City failed to implement necessary mitigation measures that would reduce the environmental impacts of metals, trash and hazardous materials to less than significant levels. As discussed in the SCCWRP report, best management practices are needed to reduce the toxicity of stormwater runoff from parking facilities. (Attachment 2 at iii.) Best management practices could include bioretention areas that allow runoff from the Project to pond and filter through vegetation and soil. The Project could also include sand beds to filter the runoff and planted wetland vegetation to naturally treat and filter runoff before it enters Ormond Lagoon Waterway (Attachment 4⁵). The DEIR failed to analyze or require any, and the necessary, best management practices for stormwater runoff to ensure the hazardous materials, trash, and

⁴ February 5, 2018 State Water Board Transmittal to the U.S. EPA – that includes relevant excerpts from the State Water Board's 303(d) list approvals and 2014 / 2016 California Integrated report; U.S. EPA Approved California 2014-2016 Clean Water Act 303(d) List of Impaired Waters dated April 6, 2018.

⁵ Stormwater Management Practices at EPA Facilities (February 2017), (last accessed 1/28/2019) available at <https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

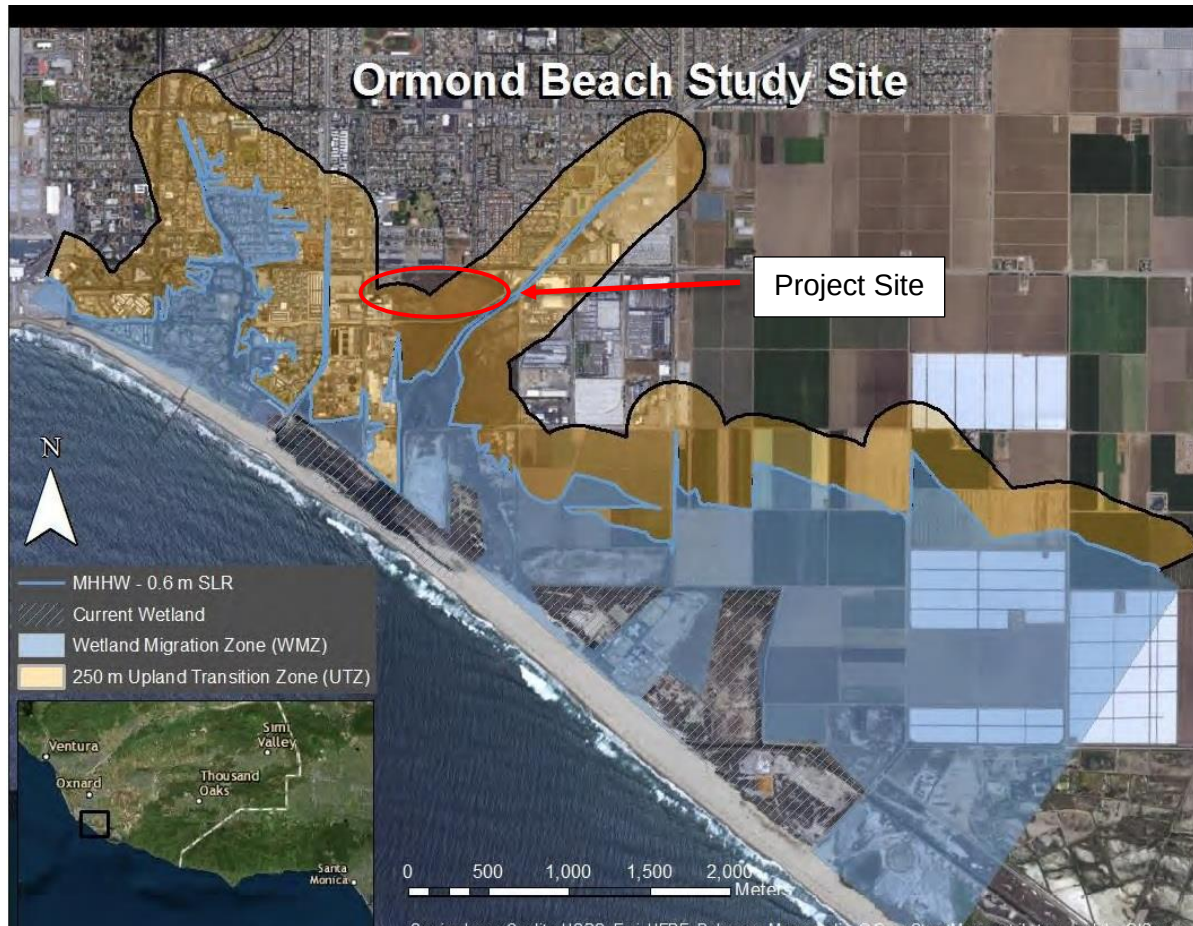
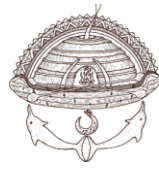


metals associated with the Project would not impact water quality or the wetlands, during or after construction of the Project.

2. No analysis of Wetland Retreat in Response to Sea Level Rise

The DEIR did not properly consider the Project's consistency with Oxnard's certified Local Coastal Plan ("LCP") and the other approvals that may be required. If any portion of the project site is within the coastal zone, a coastal development permit and possibly an LCP amendment will be necessary. According to a study conducted by UCLA, the project site is located in the future Upland Transition Zone ("UTZ") of Ormond Beach Wetlands (Attachment 5⁶ ("UCLA Study" or "Study")). The Study predicts that the mean sea level will rise 0.6 m by 2050 due to projected impacts from climate change. (Id. at 11). The UCLA Study predicted that Southern California wetland habitat will naturally retreat inland. The preservation of habitat inland of these wetland areas is essential for their successful retreat. The project lies in an important location for UTZ wetland habitat (Id. at 37, Figure 14). The construction of this temporary parking facility and disturbance of this land would significantly degrade the suitability of this habitat for future sea level rise conditions, and would impair and prevent future reclaiming of the Ormond Beach wetlands Project site needed for the wetland habitat and the endangered wildlife (see below) that depends on it to exist. The DEIR failed to consider any projections of sea level rise or wetland retreat, the associated impacts of the Project on future Ormond Beach Wetlands habitat and the endangered species that rely on the Ormond Beach Wetlands, and City of Oxnard must prepare a full EIR to further analyze the Project's impacts on retreating wetlands and UTZ habitat.

⁶ UCLA Institute of the Environment and Sustainability, *Evaluating Physical Suitability, Land Use, and Cost Feasibility for Acquiring Land for Wetland Transgression in Selected Southern California Wetlands*, (last accessed 1/28/2022) available at https://www.ioes.ucla.edu/wp-content/uploads/wetlandspracticum_finalreport.pdf.



Furthermore, the DEIR must evaluate the Project's direct, indirect, and cumulative impact on all community restoration and public access plans for the Ormond Beach Wetlands, including The Ormond Beach Restoration and Public Access Plan. While an EIR is required (1) to analyze the Project's impacts on all restoration and public access plans for the Ormond Beach Wetlands, and to ensure consistency and no impacts to these plans, and (2) that includes scoping with the Oxnard community, California government agencies (such as the Coastal Conservancy), and nonprofits (such as the Nature Conservancy involved in such restoration plans to inform this analysis), the DEIR fails to analyze the impacts on all restoration and public access plans for the Ormond Beach Wetlands, and fails to analyze whether the Project will make the Ormond Beach Wetlands less or non-tourist/visitor friendly (a critical element to improving the local economy and providing a fulfilling experience that attracts residents and visitors), thereby being harmful or inconsistent with the Ormond Beach Restoration and Public Access Plan. For instance, see attached presentation of the Ormond Beach Restoration and Public Access Plan. (Attachment



6⁷). A comprehensive analysis must be undertaken as to how the Project impacts public access to the Wetlands and enjoyment of the Wetlands, such as interaction with wildlife, aesthetic enjoyment and views when walking through and enjoying the wetlands, and spiritual enjoyment. Further, the Project must be considered, and if it moves forward, planned in conjunction with any Ormond Beach Wetlands preservation, public access, and restoration project.

Harms to Wildlife

1. Poor Survey and Literature Review Informing the DEIR's Biological Resources Analysis

The DEIR utterly fails in its analysis of the Project's impacts to sensitive wildlife and surrounding ecosystems. The DEIR fails to even mention more than 20 listed or special status species that are known to exist in the area. The literature review and reconnaissance-level surveys conducted in 2018 and 2020 proved to be woefully inadequate in determining the full scope of impacts this project would have on wildlife and sensitive species habitats.

The reconnaissance-level surveys were conducted in April 2018 and October 2020. The 2018 survey was conducted between 10 and 11 am and the 2020 survey was conducted between 9:30 and 10:30 am. Both of these surveys were conducted too late in the day for representative avian species observations. April is typically too early for representative breeding bird surveys and October does not represent breeding season counts, and is too late in the year for a representative list of fall-migrating avian species. The description of these surveys included no standardized methodology for how these surveys were conducted, making them impossible to replicate or determine if observed species were identified and quantified properly. No nocturnal surveys were conducted to determine the presence of anuran species in the project location and no special status anuran species are mentioned in the DEIR. No surveys were conducted to determine bat species presence near the Project area and no special status bat species are mentioned in the DEIR.

2. Listed and Special Status Species Missing from DEIR

⁷ For additional information regarding the Ormond Beach Restoration Project please see attachments 18-22



The DEIR's lack of analysis of impacts to biological resources in the Project area and adjacent Ormond Beach Wetlands demonstrates the City's complete ignorance of local ecology and biological resources. The use of the CNDDDB and poorly conducted reconnaissance surveys provided meek species lists that are not at all representative of the project site or Ormond Wetlands. The DEIR failed to analyze the Project's full impact on listed and special status species that exist in the Project area.

More than 200 bird species are known to use the Ormond Beach Wetlands for breeding, foraging, roosting, and migration. Among these avian species are multiple species of "birds of prey" which are protected under California Fish and Game Code section 3503.5. Birds of prey that exist in the project area and adjacent wetlands that are not included in the DEIR include: White-tailed Kite, Northern Harrier, Red-tailed Hawk, Red-shouldered Hawk, Cooper's Hawk, Sharp-shinned Hawk, American Kestrel, Peregrine Falcon, Merlin, and Osprey. A Red-tailed Hawk was even observed during a reconnaissance survey, but was not included as a special status species. All of these species have been observed either in the project area, or in the adjacent wetlands. All of these species are protected under California law and the DEIR must include analysis on the Project's impacts to birds of prey.

Salt marsh and coastal wetland habitats have declined up to 90% in California, making Ormond Beach Wetlands a rare gem and an exceptionally important area for sensitive and endangered plants, invertebrates, fish, amphibians, reptiles, mammals, and birds. The Project may have a significant impact on the ecosystems on which these species rely. The Project will have stormwater runoff exit the facility and drain into Ormond Lagoon Waterway, and eventually into Ormond Lagoon. As mentioned in the Water Quality and Wetlands section, the Project area will be in the Upland Transitional Zone according to sea level rise and wetland retreat projections. Species that rely on mixed vegetation communities will also need to retreat with wetlands, and will not be able to do so if the proposed Project area is disturbed further. As observed in the reconnaissance surveys performed for the DEIR, the Project area provides habitat for multiple prey species including small song birds and gopher snakes. If a parking lot, even temporary, is built here, this will limit foraging habitat for birds of prey and may increase the likelihood of harm from Project associated toxins or vehicle strikes.



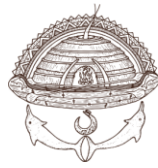
The DEIR failed to include an impact analysis of multiple California Species of Special Concern and Fully Protected species that are known to occur in and near the Project Area. The fully protected species the DEIR failed to analyze, or even mention, are the White-tailed Kite and Peregrine Falcon. As well as birds of prey, these species are also fully protected under California law FGC 3511. Species of Special Concern that are known to occur in and near the Project area, but do not appear in the DEIR are: San Diegan tiger whiptail, Blainville's horned lizard, coast patch-nosed Snake, south coast garter snake, California glossy snake, western spadefoot, western pond turtle, and coast range newt. As these species are listed as species of special concern in California and are known to exist in the project area and surrounding habitats, the DEIR must include these species and analyses of Project impacts to these sensitive species.

The DEIR failed to include an impact analysis of multiple federally listed species that are known to occur in and near the Project Area. These species include California orcutt grass, Gambel's watercress, marsh sandwort, spreading navarretia, Marbled Murrelet, Southwestern Willow Flycatcher, and vernal pool fairy shrimp. The DEIR must include these listed species and an analysis of Project impacts to these sensitive species and their habitats.

3. Impacts to Sensitive Wildlife and Their Habitats

Of great concern are the Project's hazardous materials, trash, and metals entering the Ormond Lagoon Waterway and Ormond Lagoon through stormwater runoff, polluting the waters and harming the endangered tidewater goby that reside in the two water bodies. The U.S. Fish and Wildlife Service lists Ormond Lagoon Waterway and tšumaš Creek in the LA/Ventura Recovery Unit in their Recovery Plan for the endangered tidewater goby. (Attachment 7⁸ at Figure B-17). The DEIR provides no analysis of direct, indirect, and cumulative impacts from the Project on the tidewater goby, even though the project will discharge stormwater into the goby's habitat which is located only 125 feet from the proposed Project site. Vital habitat for the tidewater goby has been lost or impacted by metal and industrial pollution in other streams. There is precedent

⁸ Pacific Region U.S. Fish and Wildlife Service, Recovery Plan for the Tidewater Goby (December, 2005)



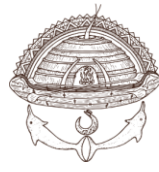
of tidewater goby habitat becoming “Water Quality Limited” due to pollution associated with metal toxicity. The State Water Quality Control Board lists tidewater goby habitat in Goleta Slough as “Water Quality Limited”; partially due to metal pollutants which harm the species (Id. at C-26). The US Fish and Wildlife Service specifically lists “watercourse contamination resulting from vehicular activity in the vicinity of lagoons” as a threat to the tidewater goby’s habitat (Attachment 8 at pg. 3⁹) The hazardous materials from the Project, including Iron, Zinc, Copper, trash, and Lead, will contaminate the goby’s habitat and will contribute to the take of the tidewater goby, violating the Endangered Species Act and preventing the recovery of the species. The City must analyze the impact the Project will have on water quality of Ormond Lagoon Waterway and Ormond Lagoon and the Project’s impact on tidewater goby and its habitat.

The hazardous materials, trash, and metals discharged during storm events from the Project will also have a significant impact on the endangered California Least Tern. California Least Terns nest at Ormond Beach Wetlands from mid-April to late September. (Attachment 9¹⁰ at 1). Ormond Lagoon Waterway flows into Ormond Lagoon, which is an important foraging habitat for California Least Terns. Toxins and metals introduced from the Project’s runoff during storm events can accumulate in the tissues and gills of small fish species which are eaten by California Least Terns and fed to their young. Southern California Coastal Water Research Project (SCCWRP) conducted a study on aquatic toxicants and their presence in seabird eggshells. The study focused on four seabird species including the California Least Tern (Attachment 10¹¹ at 2). Heavy metals, as well as other toxicants were found in all of their California Least Tern eggshell samples (Id. at 7). California Least Terns are susceptible to the biomagnification of these toxicants due to their foraging habits in near-shore environments (Id. at 23). The MND failed to analyze the Project’s direct, indirect, secondary, and cumulative impacts from metal and other hazardous materials entering into waterways during storm events, accumulating in small fish and benthic macroinvertebrates, and impacting the endangered

⁹ U.S. Fish and Wildlife Service, *Tidewater Goby*, Humboldt Bay, (last accessed 1/28/2019) available at https://www.fws.gov/refuge/Humboldt_Bay/wildlife_and_habitat/TidewaterGoby.html.

¹⁰ California Department of Fish and Game South Coast Region, California Least Tern Breeding Survey 2009 Season (July, 2010)

¹¹ Southern California Coastal Water Research Project, *Technical Report 944, Contaminant Bioaccumulation in Seabird Eggs of the Southern California Bight* (September, 2016).



California Least Tern. The City must prepare a full EIR because the Project may harm endangered species, a harm that must be adequately analyzed.

The DEIR completely failed to analyze the Project's potential impacts on the Peregrine Falcon, a California fully protected species. The DEIR does not even mention Peregrine Falcons in the Biological Resources section, even though they are found throughout the region and observed frequently at Ormond Beach and in Oxnard. The Project description includes 240 vehicle trips to the temporary vehicle storage facility per day. Though the DEIR claims this is fewer trips and vehicle miles in the region because the site is closer to the Port than existing storage facilities, this is increasing vehicle traffic to a site adjacent to the Ormond Beach Wetlands and important hunting habitat for Peregrine Falcons. Studies on Peregrine Falcon mortality have found that collisions with motorized vehicles make up a significant percentage of deaths for fledgling, juvenile, and adult falcons (Attachment 11¹²). As mentioned in the water quality impacts section of this letter, the bioaccumulation of metals and other pollutants originating from this Project may impact California Least Terns and other foraging sea and shore birds. Terns, plovers, and other shore birds are important sources of prey for Peregrine Falcons, which are apex predators that specialize in hunting avian species. Bioaccumulation of metals and toxicants could have an even more severe effect on falcons since they prey on birds that are already affected by bioaccumulation. Heavy metals can significantly limit immune mechanisms in birds of prey, and increase their susceptibility to bacteria and parasite infection (Attachment 12¹³). Since the DEIR completely failed to recognize the Peregrine Falcon and its habitat in the Project and surrounding areas, there was no analysis on potential impacts to the fully protected species. The DEIR must include an analysis of impacts on Peregrine Falcons and must include Mitigation Measures for these impacts.

Further, the Project's location is connected to a greater wildlife corridor and the MND failed to analyze how the Project will impact wildlife accessing and using the neighboring wetlands. The

¹² Gahbauer, Marcel & Bird, David & Clark, Kathleen & French, Tom & Brauning, Dan & McMorris, F.. (2015). Productivity, Mortality, and Management of Urban Peregrine Falcons in Northeastern North America. *The Journal of Wildlife Management*. 79. 10.1002/jwmg.803.

¹³ Pyzik, E., Dec, M., Stępień-Pyśniak, D., Marek, A., Piedra, J., Chałabis-Mazurek, A., Szczepaniak, K., & Urban-Chmiel, R. (2021). The presence of pathogens and heavy metals in urban peregrine falcons (*Falco peregrinus*). *Veterinary world*, 14(7), 1741–1751. <https://doi.org/10.14202/vetworld.2021.1741-1751>



Project's proximity to Ormond Beach Wetlands and future designation as Upland Transitional Zone habitat makes the Project area an important habitat for wetland species and species that rely on transitional habitat zones. UTZs provide wildlife habitat, high tide refugia for wetland species, and vital space for the wetland to migrate in response to climate change and sea level rise (Attachment 13¹⁴, pg. 3-427). The City must conduct an analysis to determine the impacts of vehicle storage, grading, fencing, and hazardous materials entering the waterways on the wildlife corridor associated with the area and the wetlands.

DEIR also completely failed to analyze the Project's impacts on the White-tailed Kite, a fully protected species under California Law. There is no mention of the White-tailed Kite in the DEIR, even though the species is found frequently in Ventura County, Ormond Beach Wetlands, and hunting in open spaces and along roadways. The DEIR completely failed to analyze potential impacts the project may have on any raptor species in the Project area. 1) The project will be grading and graveling 34 acres of open space. Though this lot may be disturbed, the Project site is habitat for prey species like mice, voles, gophers, snakes, song birds, and ground squirrels. Left as it is, the space is 34 acres of hunting habitat for White-tailed Kites, Cooper's Hawks, Sharp-shinned Hawks, Northern Harriers, Red-shouldered Hawks, Red-tailed hawks, Great Horned Owls, Barn Owls, Burrowing Owls, Merlins, American Kestrels, and Peregrine Falcons. 2) The project will be increasing vehicle traffic with 240 vehicle trips to the Project site per day. A study conducted on North American urban raptor species found that vehicular strikes were the leading cause of mortality for 39% of the raptor species studied (Attachment 14¹⁵). 3) The temporary vehicle storage facility may introduce heavy metals pollution to the site and increase these pollutants' concentrations in the adjacent waterways and wetlands. A review of bioaccumulation of heavy metals in the food web found that carnivorous birds experience the highest concentration of toxic heavy metals as a result of bioaccumulation of these pollutants (Attachment 15¹⁶). The DEIR completely failed to look into possible pathways for the Project's pollutants to enter the food web and impact sensitive birds of prey like the White-tailed Kite.

¹⁴ Brian Fulfroost, Meg Marriott, Christina Sloop, David Thomson, Laura Valoppi, Management of Marsh-Upland Transitional Habitats

¹⁵ Hager, Stephen. (2009). Human-Related Threats to Urban Raptors. *Journal of Raptor Research*. 43. 210-226. 10.3356/JRR-08-63.1.

¹⁶ Hazrat Ali & Ezzat Khan (2019) Trophic transfer, bioaccumulation, and biomagnification of non-essential hazardous heavy metals and metalloids in food chains/webs—Concepts and implications for



Though the DEIR included the Burrowing Owl in its meager species list, it did not include any analysis of impacts to the species. As mentioned above, the Project site comprises 34 acres of habitat used by multiple rodent species, including ground squirrels. Burrowing Owls depend on burrowing mammal species, especially ground squirrels, for their breeding habitat and burrows. Burrow availability is a key limiting resource for Burrowing Owls. Ground squirrels are essential for providing habitat and the recovery of the Burrowing Owl (Attachment 16¹⁷). By grading, graveling, and turning this area into a vehicle storage facility, the Project will remove 34 acres of possible breeding, burrowing, and foraging habitat for the Burrowing Owl.

Without analyzing the negative impacts that the Project will have on wildlife, especially endangered and threatened species, the City failed to provide sufficient disclosure of the Project's environmental effects to allow the public and decision makers to evaluate and comment on the project's environmental consequences.

Air Quality

The DEIR's analysis of air quality and greenhouse gas impacts lacks any information regarding increased emissions from cold-starting engines. If 240 vehicles per day will be started and driven to the vehicle storage facility, that is 240 cold-starts per day. These vehicles will also be started and driven off the parking facility to distributors and customers regularly. The DEIR also states that up to 30,000 vehicles will be stored at this facility annually, bringing the total to at least 60,000 cold starts per year (engine ignition when leaving the Port, and engine ignition when leaving the storage facility). Catalytic systems that vehicles use to reduce greenhouse gas emissions are only designed to work at the vehicles' normal operating temperature. When a vehicle is cold started, carbon monoxide and total hydrocarbon emissions increase significantly

wildlife and human health, *Human and Ecological Risk Assessment: An International Journal*, 25:6, 1353-1376, DOI: 10.1080/10807039.2018.1469398

¹⁷ See Attachment 16 for the Field Notes Entry from the Carlsbad Fish and Wildlife Office.



over normal driving conditions (Attachment 17¹⁸). The DEIR must include a full analysis of the Project's greenhouse gas emissions, including increased emissions associated with cold-start.

While the DEIR did analyze specific localized emissions, there is no discussion on how the emissions will contribute to climate change and sea level rise contributing to the retreating wetlands. Further there is no discussion on how the Project hindering the goals of Assembly Bill 32 "in reducing ... annual emissions of 14 tons of carbon dioxide equivalent for every man, woman and child in California down to about 10 tons per person by 2020... [and the fact that] [e]very part of California's economy needs to play a role in reducing greenhouse gas emissions."¹⁹ The DEIR fails to mitigate against or analyze the significant direct, indirect, and cumulative impacts, thus the DEIR must fully analyze the issue and provide the necessary mitigation measures needed.

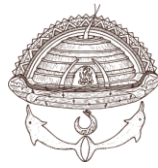
Traffic Congestion

The DEIR misleads the public concerning the Project's impacts on traffic congestion in South Oxnard. The DEIR states that there will be less than significant impact on traffic congestion because these vehicles would normally be sent to other facilities in the region. This is misleading and a poor analysis of the Project's impacts. There will be 240 vehicle trips to the Project site per day associated with this project. That is 240 more vehicles on the road per day traveling to the Project site. Current operations have these vehicles moving to storage by car carrier to other facilities and impacting traffic elsewhere in the county. The DEIR fails to analyze specific impacts to traffic congestion in the community surrounding the Project area. South Oxnard is already burdened by an industrialized coastline and continuous shipping of freight and cargo along Hueneme Rd. The DEIR must include this analysis, focused on South Oxnard and the cumulative traffic impacts to which this project would contribute.

DEIR is Inconsistent with the City of Oxnard's duty to address Environmental Justice in Government Planning

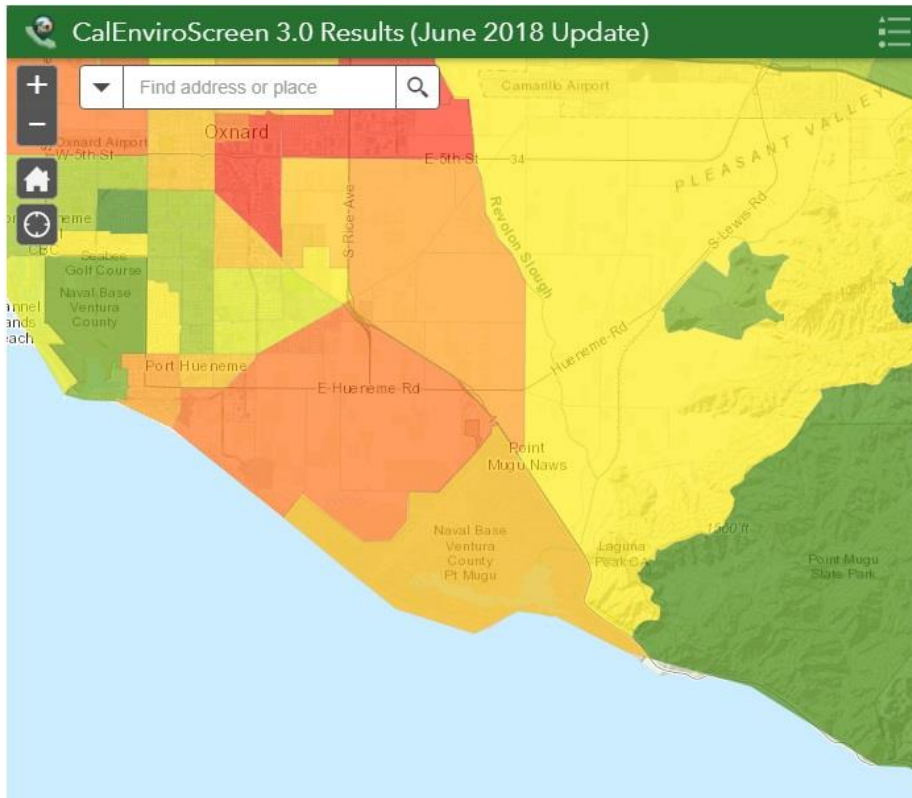
¹⁸ Christos Dardiotis, Giorgio Martini, Alessandro Marotta, Urbano Manfredi. Low-temperature cold-start gaseous emissions of late technology passenger cars. *Applied Energy*. Volume 111. 2013. Pages 468-478. ISSN 0306-2619. <https://doi.org/10.1016/j.apenergy.2013.04.093>.

¹⁹ *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 220.



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

The DEIR fails to mention the City of Oxnard's requirement to address Environmental Justice in the City's General Plan, as is required by SB 1000. The Project would have major impacts on disproportionately burdened communities in South Oxnard. According to the Office of Environmental Health Hazard Assessment (OEHHA) and their program, CalEnviroScreen 3.0, Oxnard is a community disproportionately burdened by environmental pollution. The program identifies the region, where the Project is located, is in the 98th percentile for the pollution burden rating. This census district had the highest Pollution Burden Percentile out of the Oxnard districts and is considered to be a disadvantaged community under SB535. The DEIR ignored the community's comments and requests that the DEIR analyze the extent to which the Project's cumulative impacts on air quality, traffic congestion, aesthetics, and impacts from discharge of hazardous materials (including trash and metals) into receiving waterways will increase the pollution burdens felt by the Oxnard disproportionately burdened community. The City must conduct further analysis of the Project's cumulative impacts on the Oxnard community, as a disadvantaged community that is already disproportionately burdened by environmental pollution. Failure to include this analysis would result in the DEIR being inconsistent with the City of Oxnard's 2030 General Plan and the City's failure to comply with SB 1000.



Census Tract: 6111004715

Population:	5,020
CalEnviroScreen 3.0 Percentile:	80-85%
Pollution Burden Percentile:	98
Population Characteristics Percentile:	53
<u>Ozone:</u>	40
<u>PM 2.5:</u>	41
<u>Diesel:</u>	56
<u>Pesticides:</u>	100
<u>Toxic Releases:</u>	77
<u>Traffic:</u>	17
<u>Drinking Water:</u>	85
<u>Cleanups:</u>	96
<u>Groundwater Threats:</u>	89
<u>Hazardous Waste:</u>	67
<u>Impaired Water:</u>	81
<u>Solid Waste:</u>	93
<u>Asthma:</u>	29
<u>Low Birth Weight:</u>	52
<u>Cardiovascular Rate:</u>	26
<u>Education:</u>	79
<u>Linguistic Isolation:</u>	72
<u>Poverty:</u>	71
<u>Unemployment:</u>	61
<u>Housing Burden:</u>	59

Conclusion

As discussed at length in this letter, the DEIR utterly failed to analyze the full impacts the Project would have on cultural resources, water quality, wetlands, biological resources, air quality, traffic congestion, and environmental justice. The DEIR also failed to analyze the project as a whole and failed to inform the public of the Port of Hueneme's full expansion plan, which includes the 250-acre permanent vehicle storage facility. The EIR must be redrafted to include this full analysis, and must include a complete analysis of the Project's impacts to the environment. The City of Oxnard cannot proceed with this woefully inadequate environmental review.

Mati Waiya
Executive Director
Wishtooyo Chumash Foundation

Tevin Schmitt
Watershed Scientist
Wishtooyo Chumash Foundation

Eva Pagaling
Watershed Science Intern
Wishtooyo Chumash Foundation



Solis, Rogelio <rogelio.solis@oxnard.org>

[Ask Planning Action] Fw: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach

2 messages

Irene <ireneraus@hotmail.com>

Thu, Oct 20, 2022 at 3:36 PM

To: "planning@oxnard.org" <planning@oxnard.org>, "cityclerk@oxnard.org" <cityclerk@oxnard.org>

Cc: Larry Godwin <godwinc@earthlink.net>, "john.zaragoza@oxnard.org" <john.zaragoza@oxnard.org>, Aaron Greer <ffamgreer@aol.com>, "Chair, Ventura County Surfrider" <chair@ventura.surfrider.org>, "ashley.golden@oxnard.org" <ashley.golden@oxnard.org>

Sent from Windows Mail

From: Irene**Sent:** Thursday, October 20, 2022 3:03 PM**To:** cityclerk@oxnard.org**Cc:** Larry Godwin**To: the City of Oxnard and Planning Commissioners****Re: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach**

a. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and

b. Adopt a Resolution approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.

For Oxnard,**Please OPPOSE** the Port of Hueneme Vehicle Storage at this location.

Oxnard can do better! A car park at Ormond is an imposition efforts any hope for a public project at Ormond.

Despite the Port's claim that the project is temporary, it is an eyesore to the adjacent community already in need of improvements, and a threat to existing rare native coastal environment. This rare parcel is virtually the last remaining native land on our coastline... needs to be protected for a preserve at Ormond for the generations!

Irene Rauschenberger
Oxnard Resident

Sent from Windows Mail

Dobrowalski, Jay <jay.dobrowalski@oxnard.org>

Thu, Oct 20, 2022 at 3:37 PM

To: "Loera, Miriam" <miriam.loera@oxnard.org>, Rogelio Solis <rogelio.solis@oxnard.org>

Hi Roy and Miriam,
Here is another comment letter.
Thanks,

Jay Dobrowalski | Planning Supervisor
Community Development Department
214 S C Street | Oxnard, CA 93030
O: 805.385.3948 | F: 805.385.7417
www.oxnard.org

Effective February 14, 2022, the Service Center and all public-interfacing City buildings will be open to the public.

Online services remain available through our online portal at www.oxnard.org/planning

- General inquiries should be sent via email to Planning@oxnard.org.
- For [new applications](#), email us at planning@oxnard.org. Large projects can be shipped with prior authorization. Smaller projects may be submitted via email.
- For existing applications, contact your assigned Case Planner by direct email.

For the most up to date information on COVID-19 please visit <https://www.venturacountyrecovers.org/>

----- Forwarded message -----

From: **Chaparro, Rose** <rose.chaparro@oxnard.org>
Date: Thu, Oct 20, 2022 at 3:27 PM
Subject: Fwd: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach
To: Joe Pearson II <Joe.Pearson@oxnard.org>, Jay Dobrowalski <jay.dobrowalski@oxnard.org>, Miriam Loera <miriam.loera@oxnard.org>, City Clerk <cityclerk@oxnard.org>

Hi Joe,

FYI - Additional public written comments received.

Rose Chaparro, City Clerk
City of Oxnard

300 West Third Street
Oxnard, CA 93030
Main Line: (805) 385-7803
rose.chaparro@oxnard.org

CITY OF

OXNARD



----- Forwarded message -----

From: **Irene** <ireneraus@hotmail.com>
Date: Thu, Oct 20, 2022 at 3:03 PM
Subject: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach
To: cityclerk@oxnard.org <cityclerk@oxnard.org>
Cc: Larry Godwin <godwinc@earthlink.net>

To: the City of Oxnard and Planning Commissioners

Re: Port of Hueneme request for Vehicle Storage Facility at Ormond Beach

a. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and

b. Adopt a Resolution approving Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.

For Oxnard,

Please OPPOSE the Port of Hueneme Vehicle Storage at this location; Oxnard can do better! A car parking lot at Ormond is an imposition on efforts made for decades for an Ormond Beach public project, Oxnard lets get it done! Despite the Port's claim that the project is temporary, it is an eyesore to the adjacent community already in need of improvements, and a threat to existing rare native coastal environment.

Important is Oxnard's coastline is virtually built out, this rare parcel is virtually the last remaining native land on our coastline... that should be developed into a preserve for the generations!

[Quoted text hidden]

RESOLUTION NO. 2022 - 35

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OXNARD CERTIFYING ENVIRONMENTAL IMPACT REPORT NO. 22-01 (SCH #2020069039) AND APPROVING THE FINDINGS OF FACT AND THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE PORT OF HUENEME - TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christening Birdsey (the "Applicant" and/or "Permittee") submitted a request to approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located at the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the "Project"); and

WHEREAS, a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) was issued on June 25, 2020, soliciting public input regarding a DEIR for the Project; and

WHEREAS, the public comment period on the NOP ran for thirty (30) days commencing on June 25, 2020 and ending on July 24, 2020; and

WHEREAS, a DEIR reflecting input received in response to the NOP was prepared and released for public and agency review on December 16, 2021; and

WHEREAS, the public comment period on the DEIR ran for sixty-one (61) days commencing on December 16, 2021 and ending on February 14, 2022; and

WHEREAS, after the close of the comment period on the DEIR, the DEIR was modified as set forth in the response to comment document and Chapter 1.1 of the FEIR, Summary Of Changes To The DEIR and Appendices; and

WHEREAS, in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City has prepared Final EIR No. 22-01 containing all comments received on the DEIR, written responses to all substantive comments, and necessary changes to the text of the DEIR; and

WHEREAS, Final EIR No. 22-01 was mailed to commenting agencies, organizations and individuals and made available for public review on or before October 11, 2022.

WHEREAS, the Planning Commission of the City of Oxnard has thoroughly considered Final Environmental Impact Report No. 22-01 (State Clearinghouse No. 2020069039) (the "EIR") for the Port of Hueneme - Temporary Outdoor Vehicle Storage Project, which has been prepared in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the Final EIR; and

WHEREAS, the comments of the Commissioners, agencies, interested groups, and members of the public have received adequate responses.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF OXNARD:

SECTION 1. Based on the entire record before the Planning Commission and all written and oral evidence presented, including the Planning Commission Staff Report and all attachments thereto, the Planning Commission:

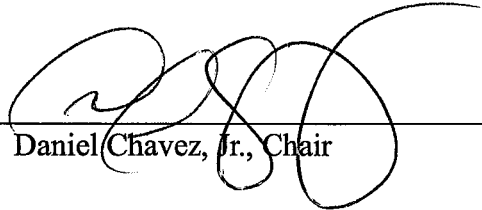
1. Certifies that Final Environmental Impact Report No. 22-01 is adequate and was completed in compliance with CEQA and the State CEQA Guidelines and reflects the City of Oxnard's independent judgment and analysis.
2. That the Planning Commission has been presented with all of the information described in the Recitals and Final EIR 22-01 and has considered this information prior to adopting this Resolution.
3. Approves the Findings of Fact in satisfaction of State CEQA Guidelines Section 15091, which are attached hereto as Exhibit A and incorporated herein by reference
4. Approves the Mitigation Monitoring and Reporting Program contained in the Final EIR in satisfaction of State CEQA Guidelines Section 15091(d), which is attached hereto as Exhibit B and incorporated herein by reference.

SECTION 2. The Planning Commission, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. The decision of the Planning Commission shall be final unless an appeal of the action is filed in accordance with the provisions of Section 16-545 of the Oxnard City Code.

SECTION 4. The Secretary shall certify the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED by the Planning Commission of the City of Oxnard on this 20th day of October 2022.



Daniel Chavez, Jr., Chair

I hereby certify that the foregoing is a true copy of a Resolution adopted by the Planning Commission of the City of Oxnard at a meeting held on the 20th day of October 2022, and carried by the following vote:

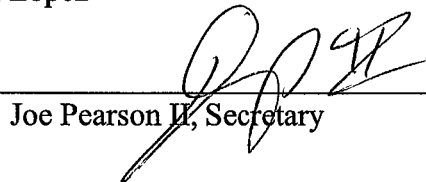
AYES: Commissioner(s): Chavez, Arruejo, Connelly, Zielsdorf

NOES: Commissioner(s): Nash

ABSENT: Commissioner(s):

ABSTAIN: Commissioner(s):

RECUSED: Commissioner(s): Meyer, Lopez



Joe Pearson II, Secretary

Exhibit 1: Findings of Fact

Exhibit 2: Mitigation Monitoring and Reporting Program

FINDINGS OF FACT

PORT OF HUENEME – TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT ENVIRONMENTAL IMPACT REPORT

SCH No. 2020069039



CITY OF OXNARD
214 South C Street
Oxnard, California 93030

September 2022

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1.0 INTRODUCTION

These Findings of Fact (Findings) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (project) are made pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), specifically PRC Sections 21081, 21081.5, and 21081.6, and the CEQA Guidelines (14 CCR 15000 et seq.), specifically Sections 15091 and 15093. The Final Environmental Impact Report (EIR) examines the full range of potential effects of construction and operation of the project, identifies standard mitigation practices that could be employed to reduce, minimize, or avoid those potential effects, and evaluates alternatives to the project. The Final EIR is incorporated into these Findings by reference.

1.1 PURPOSE

PRC Section 21081, and CEQA Guidelines Section 15091 require that the lead agency, in this case the City of Oxnard (City), prepare written findings for identified significant effects, accompanied by a brief explanation of the rationale for each finding. Specifically, CEQA Guidelines Section 15091 states, in part, that:

- a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
 - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - 3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

In accordance with PRC Section 21081, and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the decision-making agency is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable.” In that case, the decision-making agency may prepare and adopt a Statement of Overriding Considerations, pursuant to the CEQA Guidelines. State CEQA Guidelines Section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. Implementation of the proposed project would not result in any impacts that are considered significant, adverse, or unavoidable. All environmental issues were determined to result in less than significant impacts or can be reduced to less-than-significant levels with the incorporation of mitigation measures. Thus, the City is not required to adopt a statement of overriding considerations.

Section 15093 of the CEQA Guidelines states the following:

- a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The Final EIR for the project identified potentially significant effects that could result from the project. The City finds that the inclusion of certain mitigation measures as part of the approval of the project would reduce these effects to less-than-significant levels.

The City also finds that the Mitigation Monitoring and Reporting Program for the project, which is incorporated by reference and made part of these Findings, meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the proposed project.

Pursuant to PRC Section 21082.1(c)(3), the City also finds that these Findings reflect the City’s independent judgment as the lead agency for the project.

1.1.1 Custodian and Location of Records

The documents and other materials that constitute the Record of Proceedings for the City’s actions related to the project are located at the City of Oxnard, 214 South C Street, Oxnard, California 93030. The City is the custodian of the Record of Proceedings for the proposed project.

1.2 PROJECT DESCRIPTION

The project would include the construction and operation of a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. The facility would include the following:

- Vehicle parking area with gravel base
- Temporary guard house
- Portable restroom
- Perimeter site lighting

- Security fencing (6-feet-high)
- Landscaping
- Site drainage
- Associated infrastructure improvements (e.g., curb cuts, apron)

The temporary outdoor vehicle storage facility includes approximately 27.5 acres to accommodate parking for up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre.

Various permits, approvals, and actions by the City of Oxnard and various public agencies may be required to execute and implement the proposed project. The permits from the lead agency that are necessary include:

- City of Oxnard approval of Special Use Permit
- City of Oxnard issuance of Grading Permit
- City of Oxnard issuance of Building and Safety Permits
- City of Oxnard Fire Department approval of proposed site improvement
- City of Oxnard – water, sewer, and storm drain connection permits

1.2.1 Project Objectives

The Applicant has identified the following objectives for the project.

1. Facilitate commercial success for Port clients to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future.
2. Reduce and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations. The consolidation of vehicle storage closer to the Port would enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement.
3. Provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

1.2.2 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The project would require consideration of the following discretionary actions by the City:

- Certification of the Final EIR and adoption of a Mitigation Monitoring and Reporting Program
- Approval of the Special Use Permit

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2.0 CEQA FINDINGS OF INDEPENDENT JUDGEMENT

2.1 INDEPENDENT REVIEW AND ANALYSIS

Under CEQA, the lead agency must (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the EIR or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (PRC Section 21082.1[c]).

These Findings reflects the City’s independent judgment. The City has exercised independent judgment in accordance with CEQA Section 21082.1(c)(3) in retaining its own environmental consultant in the preparation of the EIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Having received, reviewed, and considered the information in the EIR, as well as any and all other information in the record, the City hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

2.2 SUMMARY OF IMPACTS

The EIR identified a number of direct and indirect potentially significant environmental effects (or “impacts”) resulting from the project. These potentially significant effects can be reduced to a less than significant level through the adoption of feasible mitigation measures.

As identified in Chapters 4, 5, 6, and 7 of the EIR, significant environmental impacts would not occur with regard to the following issues: agriculture and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, parks and recreation, wildfire and fire protection, schools, water, wastewater, and solid waste. Additionally, significant environmental impacts would not occur with regard to the following issues: biological resources (federally protected wetlands, wildlife movement, consistency with an adopted habitat conservation plan; and cumulative impacts to biological resources); cultural resources (historical resources; paleontological resources; and cumulative impacts to cultural resources); geology and soils (rupture of an earthquake fault; unstable soils–landslides; expansive soil; seiches and tsunamis; dredging and other maintenance activities); noise (exceedance of established or applicable standards in the local general plan or noise ordinance or other agencies resulting in a temporary, periodic, or permanent increase in ambient noise levels; groundborne vibration or noise; excessive noise levels within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu; or cumulative noise impacts); police protection (impacts during operations); or transportation (within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu to excessive noise levels; Level of Service standards; change in air traffic patterns; hazards due to a design feature or incompatible uses; emergency access during operations; conflict with adopted policies, plans, or programs supporting alternative transportation; CEQA Guidelines Section 15064.3 Subdivision (B); and cumulative traffic impacts). State CEQA Guidelines section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. As such, these issue areas are not discussed further within this document.

As identified in Chapters 4, 5, 6, and 7 of the EIR, the project would mitigate, avoid, or substantially lessen to below a level of significance direct, indirect, and/or cumulative potentially significant environmental effects with regard to the following issues: aesthetics (visual character/quality), biological resources (nesting birds), cultural resources (archaeological resources; human remains; tribal cultural resources), geology and soils, noise (non-human species), police protection during construction, and transportation (emergency access).

2.3 IMPACTS DETERMINED TO BE LESS THAN SIGNIFICANT WITH MITIGATION

The following summarizes the potentially significant impacts of the proposed project identified in the Final EIR that would be less than significant with implementation of mitigation measures.

2.3.1 Aesthetics

2.3.1.1 AESTHETIC IMPACT TO VISUAL CHARACTER/QUALITY OF THE SITE AND ITS SURROUNDINGS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to the visual character/quality of the site and its surroundings.

MITIGATION MEASURE(S) AND STANDARD CONDITION(S)

Standard Conditions

- | | |
|----------|--|
| SC AES-1 | Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. |
| SC AES-2 | Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. |
| SC AES-3 | Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. |
| SC AES-4 | The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. |
| SC AES-5 | All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. |
| SC AES-6 | The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. |

- SC AES-7 The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.

Mitigation Measures

- MM AES-1 The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.
- MM AES-2 In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.
- MM AES-3 Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.
- MM AES-4 The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.

Findings

As discussed in Section 5.1, Aesthetics, of the EIR, the proposed project would be compatible with surrounding development, including the Hueneme Industrial Park, shopping center, and the City of Oxnard Advanced Water Purification Facility, and the proposed use is allowed in the M-1-PD (Light Manufacturing Zone with Planned Development Additive Zone) zone. While the proposed project incorporates screening and landscape measures, it is important that the proposed measures are properly installed and maintained. Thus, visual character/quality impacts are considered potentially significant. The proposed project would be subject to Standard Conditions SC AES-1 through SC AES-7 that require landscape and irrigation plans, and the proper installation and maintenance of site landscaping and irrigation systems in compliance with City Code Section 16-165, and Mitigation Measures MM AES-1 through MM AES-4, that ensure the site landscaping and the fencing provide adequate screening. Thus, implementation of Standard Conditions SC AES-1 through SC AES-7 and Mitigation Measures MM AES-1 through MM AES-4 would result in less than significant visual character/quality impacts associated with the project.

2.3.2 Biological Resources

2.3.2.1 BIOLOGICAL RESOURCES IMPACT TO NESTING BIRDS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to suitable habitat for the burrowing owl (*Athene cunicularia*) and the California horned lark (*Eremophila alpestris actia*) and to ground-nesting bird species, including the western meadow lark (*Sturnella neglecta*), burrowing owl, and the California horned lark.

Mitigation Measure(s)

- MM BIO-1 To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code

(CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.

Findings

As discussed in Section 5.4, Biological Resources, of the EIR, potential ground nesting species, such as the western meadow lark, identified on-site during the field reconnaissance survey, could nest on-site. Additionally, there is the potential for the burrowing owl, known to winter in the Oxnard Plain, and California horned lark to occur on site. Construction activities associated with the proposed project could adversely affect nesting birds if they are present on or adjacent to the site, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and California Fish and Game Code Section 3503. Thus, implementation of the proposed project would result in potentially significant impacts to the following ground-nesting bird species: western meadow lark, burrowing owl, and California horned lark. Mitigation Measure MM BIO-1 would reduce project-related impacts to less than significant by encouraging site disturbance and construction activities outside of the bird breeding season or a pre-construction nesting bird survey and application of the biologist's recommendations during the site disturbance and construction activities. Implementation of MM BIO-1 would reduce impacts to suitable habitat for the burrowing owl and the California horned lark, and impacts to ground-nesting bird species, including the western meadow lark, burrowing owl, and the California horned lark to less than significant.

2.3.3 Cultural and Tribal Cultural Resources

2.3.3.1 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO ARCHEOLOGICAL RESOURCES

DESCRIPTION OF POTENTIAL IMPACT

The project could result in impacts to potentially undiscovered archaeological resources.

Mitigation Measure(s)

MM CUL-1 Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the project. Existence and importance of adherence to this Plan shall be stated on all project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.

MM CUL-2 Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of

one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, archival research indicated that there is one known archaeological site within a 0.25-mile radius of the project site boundaries. A foot reconnaissance of the project site in 2020 indicated two clusters (Locus¹ 1 and 2) of low density weathered marine shell, one chert biface fragment, and one weathered elasmobranch fish vertebra. Subsurface testing of the areas identified as Locus 1 and Locus 2 was performed and found that no known cultural resources exist within the proposed project site and based on the presence of disturbed and/or fill soils to depths below proposed depths of disturbance for the project, no impacts to known or unknown cultural resources are expected. Nonetheless, the proposed project involves minimal on-site ground-disturbing activities (approximately 1/10th inch to 1.95 feet)² for grubbing, grading, or other activities. In addition, the installation of site drainage infrastructure could require grading of small areas to a depth of 24 inches (2 feet). On-site areas that would not be disturbed include the site's periphery that has been previously disturbed by pipelines, roads, and the Ventura County Rail Road right-of-way. These activities could result in impacts to undiscovered archaeological resources. Mitigation Measures MM CUL-1 and MM CUL-2 require archaeological and Native American monitoring during ground disturbing activities to avoid or document any artifacts or archaeological features that may be encountered. Implementation of Mitigation Measures MM CUL-1 and MM CUL-2 reduce potentially significant impacts to less than significant.

2.3.3.2 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO HUMAN REMAINS

DESCRIPTION OF POTENTIAL IMPACT

The project could disturb human remains, including those interred outside of dedicated cemeteries.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

¹ "Locus" is defined as the place where something is situated or occurs: site, location a center of activity, attention, or concentration. Source: Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/locus>, accessed March 1, 2021.

² Source: Jensen Design & Survey, Inc., Cut & Fill Depths Analysis | Grading Plan, August 2019.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no human remains or cemeteries are known to exist in or near the project site. However, there is always the possibility that subsurface construction activities associated with the proposed project improvements, such as trenching and grading, would potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; *Health and Safety Code* Section 7050.5; *Public Resources Code* Section 5097.94 and Section 5097.98 must be followed. Implementation of Mitigation Measure MM CUL-2 would reduce potentially significant impacts associated with the discovery of human remains to less than significant.

2.3.3.3 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN THE LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K)

DESCRIPTION OF POTENTIAL IMPACT

The project would cause a substantial adverse change in the significance of previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no Native American Tribes have requested formal notification from the City pursuant to AB 52. The City also reviewed the results of the archaeological study that included a records search, archival and background research as well as a pedestrian survey and subsurface testing of the project site to further inform and consider the potential of tribal cultural resources to exist within the project site. All efforts to determine whether tribal cultural resources originating from the project site exist and may be impacted by proposed project implementation returned negative. Given the presence of the Ventureño Chumash in and around the City of Oxnard over millennia, and the proximity of a known site within 0.25 miles of the project site, there is the potential for construction of the project to impact unidentified tribal cultural resources. Thus, ground-disturbing activities, such as grading or excavation, could disturb previously unidentified subsurface resources. Implementation of Mitigation Measure MM CUL-2 would reduce any potentially significant impacts to previously undiscovered tribal cultural resources to less than significant.

2.3.3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO

THE CRITERIA SET FORTH IN SUBDIVISION (C) OF PUBLIC RESOURCES CODE SECTION 5024.1

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potentially significant impacts to previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

Refer to Section 2.3.3.4, above.

2.3.4 Geology and Soils

2.3.4.1 GEOLOGICAL IMPACT TO SEISMIC GROUND SHAKING

DESCRIPTION OF POTENTIAL IMPACT

The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Mitigation Measure(s)

MM GEO-1 Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, there are a number of potentially active/active faults in the region including the Oak Ridge, Pitas Point-Ventura, Anacapa, and Malibu Coast faults; however, these faults are located approximately 1.5 miles to 10 miles from the City. Although some structural damage is typically not avoidable during a large earthquake, the proposed project would be constructed to meet existing construction ordinances and the California Building Code in order to protect against building collapse and major injury during a seismic event. The California Building Code includes specific design measures, which are based on the determination of Site Classification and Seismic Design Categories specific to the project site. These design measures are intended to maximize structural stability in the event of an earthquake. Thus, adherence to the California Building Code requirements, as well as Mitigation Measure MM GEO-1 would reduce impacts related to strong seismic shaking to less than significant.

2.3.4.2 GEOLOGICAL IMPACT RESULTING FROM UNSTABLE SOILS AND LIQUEFACTION

DESCRIPTION OF POTENTIAL IMPACT

The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and result in unstable soils and on- or off-site liquefaction.

Mitigation Measure(s)

MM GEO-1 (see Section 2.3.4.1, above)

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, a majority of the City of Oxnard is susceptible to liquefaction as a result of underlying thick alluvial deposits and high groundwater levels. In addition, the City of Oxnard is located in a Seismic Hazard Area for liquefaction according to seismic hazard mapping conducted by the California Geological Survey. To ensure that the temporary on-site structures do not experience structural damage due to liquefaction, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

In addition, the on-site soils are characterized as unstable soils. To ensure that the temporary on-site structures do not experience structural damage due to unstable soils, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure MM GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

2.3.5 Noise

2.3.5.1 NOISE IMPACT TO NON-HUMAN SPECIES

DESCRIPTION OF POTENTIAL IMPACT

The project would result in noise impacts to special-status species, including the western meadow lark, burrowing owl, and the California horned lark, as well as suitable habitat for the burrowing owl and the California horned lark.

Mitigation Measure(s)

MM BIO-1 (see Section 2.3.2.1, above)

Findings

The proposed project would result in a potentially significant impact to suitable habitat for the burrowing owl and the California horned lark, as well as a potentially significant impact to ground-nesting bird species: western meadow lark, burrowing owl, and the California horned lark. With the implementation of Mitigation Measure MM BIO-1, project-related impacts to these special-status species or habitat are reduced to less than significant.

2.3.6 Police Protection

2.3.6.1 POLICE PROTECTION IMPACTS DURING CONSTRUCTION

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts on the California Highway Patrol, which regulates traffic in the City.

Mitigation Measure(s)

MM PP-1 Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:

- At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
- At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
- If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.

Findings

Construction-related traffic on the project site also is not expected to result in impacts on the California Highway Patrol, which regulates traffic in the City. Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. However, this would not result in a significant impact on traffic flows because construction-related traffic would only occur during short periods of time during the day and would cease upon completion. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and would reduce potentially significant impacts to less than significant.

2.3.7 Transportation

2.3.7.1 TRANSPORTATION IMPACTS ASSOCIATED WITH INADEQUATE EMERGENCY ACCESS

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts.

Mitigation Measure(s)

MM PP-1 (see Section 2.3.6.1, above)

Findings

Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and reduce potentially significant impacts to less than significant.

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3.0 FINDINGS ON PROJECT ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of the project, that could feasibly attain the basic objectives of that project, and to evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by “a rule of reason” (14 CCR 15126.6[a], [f]). CEQA directs that the scope of alternatives considered shall be limited to ones that would avoid or substantially lessen the significant effects of the project (14 CCR 15126.6[f]). Notably, this project does not result in any significant and unavoidable impacts.

3.1 ALTERNATIVES CONSIDERED AND ELIMINATED DURING THE SCOPING/ PROJECT PLANNING PROCESS

The CEQA Guidelines provide that an EIR should “identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency’s determination” (14 CCR 15126.6[c]). The following is a discussion of the project alternatives proposed during the scoping and planning process and the reasons they were not selected for detailed analysis in the EIR.

With respect to the feasibility of potential alternatives to the proposed project, CEQA Guidelines Section 15126.6(t)(l) states, “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.”

In determining an appropriate range of proposed project alternatives to be evaluated in the EIR, a number of possible alternatives were initially considered and then rejected. Proposed project alternatives were rejected because they could not accomplish the basic objectives of the proposed project, or they would not have resulted in a reduction of significant adverse environmental impacts.

REDUCED PROJECT ALTERNATIVE

The City considered a Reduced Project Alternative that would reduce the site acreage and would not utilize more than 50% of the approximately 34-acre site. The reduction in total acres would also reduce the acreage for temporary outdoor vehicle storage capacity from approximately 27.5 acres under the proposed project to approximately 14 acres. This would reduce the vehicle storage capacity from 4,944 to 2,472 vehicle spaces.

This Alternative does not fulfill a key project objective to reduce and consolidate Port vehicle customer reliance on Off-Port storage locations, nor would this Alternative eliminate the need for car carrier truck movement to distribute vehicles to those Off-Port storage locations.

In addition, fewer new jobs would be created under this Alternative, thus not fulfilling a second key project objective regarding employment in the region.

Finding

The City rejects the Reduced Project Alternative on the following grounds, which provides sufficient justification for rejection of this alternative: the Reduced Project Alternative fails to meet most of the project objectives. Thus, the Reduced Project Alternative was rejected from further consideration in the EIR.

ELECTRIC CAR CARRIER TRUCKS ALTERNATIVE

The City considered an alternative that assumes that electric car carrier trucks would be used by the Port Customer to transport vehicles to existing Off-Port storage locations.

An electric truck is an electric vehicle powered by batteries designed to deliver cargo. The recent development of lithium batteries has broadened the applicability of electric trucks due to the increased range of several hundred miles. Battery powered electric vehicles have no exhaust emissions, but emissions are created from the production and distribution of the energy used to charge them.

At this time, the Port Customer is not using electric car carrier trucks to transport vehicles to existing Off-Port storage locations, nor would car carrier trucks be used for the proposed project. While the use of electric trucks would reduce greenhouse gas emissions, the financial implications to the Port Customer to rent or purchase such equipment is unknown at this time, and as such, this Alternative is infeasible. Additionally, to the knowledge of the Port Customer, there are no commercially available electric car carrier trucks. Therefore, it would not be financially possible for the Port or City to procure electric car carrier trucks for use in the proposed project, and electric car carrier trucks are not anticipated to be feasible for the Port or City to acquire during the five-year life of the proposed project. Therefore, under this alternative without the use of traditional car carrier trucks, vehicle transport would not be able to occur.

Because electric car carrier trucks are not a feasible option for vehicle transport at this time, this Alternative does not fulfill a key project objective to reduce and consolidate Port Customer reliance on Off-Port storage locations and thus, reduce the need for car carrier truck (diesel or electric) movement to distribute vehicles to those locations. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

Finding

The City rejects the Electric Car Carrier Trucks Alternative on the following grounds which provides sufficient justification for rejection of this alternative: this alternative is infeasible given that there are no commercially available electric car carrier trucks and no such trucks are likely to become available within the next 5 years. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

ALTERNATIVE LOCATIONS

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. The City is mostly developed, with the exception of some undeveloped land to the south of the project site, where the Ormond Lagoon and various undeveloped parcels are located. Therefore, there are very limited areas of approximately equivalent size to the project site that could be used for the project. In addition, the project applicant does not control another site within the City of comparable land area that is available for development of the proposed project. One of the factors for

feasibility of an alternative is “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.” Because the City is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development to the east, north, and west. As such, an alternative location was ultimately rejected from further analysis in the EIR.

Finding

The City rejects the Alternative Locations, on the following ground, which provides sufficient justification for rejection of this alternative: the alternative is infeasible given that the project applicant does not own or control any other property within the City that would be suitable for development of the proposed project. Therefore, this alternative is eliminated from further consideration.

3.2 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

This section discusses a reasonable range of alternatives to the proposed project, including a No Project Alternative, in compliance with CEQA Guidelines Section 15126.6(e). These alternatives are as follows:

- Alternative One: No Project Alternative
- Alternative Two: Two Existing Off-Port Vehicle Storage Locations
- Alternative Three: Existing Zoning

These alternatives are evaluated for their ability to avoid or substantially lessen the impacts of the proposed project identified in the Final EIR, and in consideration of their ability to meet the basic objectives of the proposed project as described in the Final EIR.

3.2.1 Alternative One: No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of a No Project Alternative. The “purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project” (14 CCR 15126.6[e][1]). When defining the No Project Alternative, the analysis must be informed by “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (14 CCR 15126.6[e][2]).

Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the No Project Alternative, which reflects the “circumstances under which the project does not proceed.” Under the No Project Alternative, no development would occur on the project site. Accordingly, the site characteristics of this alternate would be equivalent to the existing conditions and would remain as vacant and undeveloped land.

Impacts

Under Alternative 1, the No Project/ No Build Alternative, all environmental impacts would be reduced further below the project’s less- than-significant impacts.

Finding

The City rejects the No Project Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the No Project Alternative fails to meet any of the project objectives; (2) the No Project Alternative does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.2 Alternative Two: Two Existing Off-Port Vehicle Storage Locations

Description

Alternative Two assumes the existing vehicle storage operations of GLOVIS (Customer) at the Port of Hueneme (Port) and Off-Port locations for vehicle storage within the local area, including within Oxnard, Ventura, Camarillo, and Ventura County would continue.

As such, imported vehicles would be transported by Customer car carrier trucks from the Port to two Off-Port storage locations:

1. Camarillo Airport (555 Airport Way, Camarillo)
2. Tuff Shed (3355 Ventura Road, Ventura)

The locations are approximately 10.6 miles and 9 miles, respectively, from the Port.

Impacts

Under Alternative Two, Two Existing Off-Port Vehicle Storage Locations, environmental impacts related to agriculture and forestry resources, hazards and hazardous materials, population and housing, parks and recreation, schools, and wastewater would be the same as compared to the project, or neither environmentally superior nor inferior to the project.

Alternative Two would result in reduced impacts to aesthetics, biological resources, cultural and tribal cultural resources, geology and soils, wildfire and fire protection, police protection, water, and solid waste, as Alternative Two would not result in development of an undeveloped site. Therefore, Alternative Two would be environmentally superior to the proposed project in regard to these environmental issue areas.

Alternative Two would result in increased impacts to air quality, energy, greenhouse gases, noise, and transportation due to the increased distances to the two locations (Camarillo Airport 10.6 miles, Tuff Shed 9 miles) from the Port. In addition, because the proposed project allows for the consolidation of multiple Off-Port storage locations to a single site within one jurisdiction in a zoning district that allows the proposed use, Alternative Two would result in increased impacts to land use. The Camarillo Airport site and proposed project site are located within MRZ-1, and thus does not contain mineral resources. However, the Tuff Shed site in Ventura is located within MRZ-2 zone, which does contain mineral resources of regional and statewide significance, resulting in an increased impacts to mineral resources under Alternative Two. Lastly, while hydrology and drainage impacts would remain less than significant under both Alternative Two and the proposed project, the proposed project provides more pervious

surface and infrastructure to improve hydrology and water quality impacts, both on-site and off-site. Therefore, Alternative Two is considered environmentally inferior to the proposed project in regard to these environmental issue areas.

Objectives

Alternative Two would partially meet Objective 1, as the project would facilitate commercial success for Port clients to ensure they keep their business in the region, and keep 167 local citizens employed. However, Alternative Two does not provide for new jobs. In addition, Alternative Two would not meet Objective 2, as Alternative Two would not reduce and consolidate Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations, to enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement. Lastly, the project would meet Objective 3, as it would provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative 2 on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative 2 would result in greater impacts to some environmental resource areas; and (2) Alternative 2 does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.3 Alternative Three: Existing Zoning

Description

Alternative Three, Existing Zoning, assumes the approximately 34-acre project site would be developed with a light manufacturing use consistent with the M-1-PD zone (Light Manufacturing Zone with Planned Development Additive) and in accordance with applicable use and development standards required per Oxnard City Code Chapter 16, Zoning.

The M-1-PD zone permits the following: maximum building height of 55 feet and a maximum floor area ratio of 70%. For this Alternative, the maximum development assumes a 40% floor area ratio and 587,189 square feet.

Impacts

Under Alternative Three, Existing Zoning, environmental impacts relative to agriculture and forestry resources, biological resources, cultural and tribal cultural resources, geology and soils, mineral resources, population and housing, and schools would be similar compared to the project.

Alternative Three would result in greater impacts relative to aesthetics, as the site would be developed with light manufacturing uses with buildings up to 55 feet in height, thus changing the visual character of the site. In addition, Alternative Three would result in greater impacts relative to air quality, energy, greenhouse gas emissions, and noise, as the duration of both construction and operations associated with Alternative Three would be increased compared to the project. Light manufacturing uses have the

potential to manufacture, transport, use, or dispose of hazardous materials and thus impacts to hazards and hazardous materials would be increased under Alternative Three. Alternative Three would result in less pervious area and more impervious area compared to the project. Thus, impacts to hydrology and water quality would be increased compared to the project. Although Alternative Three would be consistent with the City's Zoning Code and compatible with surrounding uses, similar to the proposed project, Alternative Three would be subject to the Ventura County Airport Comprehensive Land Use Plan (ACLUP) land use or compatibility guidelines, and Federal Aviation Regulations Part 77 height limitations and would be required to be consistent with the ACLUP and Federal Aviation Regulations Part 77. Therefore, Alternative Three would result in greater impacts to land use.

In addition, the number of employees associated with Alternative Three would increase, resulting in an increase in demand for parks and recreation, wildfire and fire protection, and police protection. Regarding transportation, the vehicle trips generated by a 587,189 square foot light manufacturing uses could result in significantly more peak daily, A.M. peak hour, and P.M. peak hour trips that affect a larger traffic impact area and would increase vehicle miles traveled. As Alternative Three would require water and wastewater infrastructure to be installed, impacts associated with water and wastewater would be increased compared to the project. Lastly, the quantity of solid waste generated is dependent upon the light manufacturing use but would be greater than the proposed project. Therefore, Alternative Three is considered environmentally inferior to the proposed project in regard to aesthetics, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, noise, parks and recreation, wildfire and fire protection, police protection, transportation, water, wastewater, and solid waste.

Objectives

Alternative Three would not meet any of the project objectives. Alternative Three would not facilitate commercial success for Port client to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future; reduce and consolidate, where feasible, Port vehicle customer reliance on Off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicle to those locations; or provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative Three on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Three fails to meet most of the project objectives; (2) Alternative Three would result in greater impacts to some environmental resource areas; and (3) Alternative Three does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.4 Environmentally Superior Alternative

Alternative One, the No Project Alternative, would result in the least environmental impacts and would be the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is Alternative Two, Two Existing Off-Port Vehicle Storage Locations.

Alternative Two would partially meet Objective 1, would not meet Objective 2, and would meet Objective 3. As set forth above, the City rejects Alternative Two on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Two would result in greater impacts to some environmental resource areas; and (2) Alternative Two does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

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4.0 GENERAL CEQA FINDINGS

Based on the foregoing Findings and the information contained in the administrative record, and as conditioned by the foregoing, the City has determined the following:

1. The plans for the proposed project have been prepared and analyzed so as to provide for public involvement in the planning and the CEQA processes.
2. To the degree that any impacts described in the Draft EIR are perceived to have a significant effect on the environment, or such impacts appear ambiguous as to their effect on the environment, any significant effect of such impacts has been substantially lessened or avoided by the mitigation measures set forth in the Draft and Final EIR.
3. Comments regarding the Draft EIR received during the public review period have been adequately addressed in the Final EIR. Any significant effects described in such comments were avoided or substantially lessened by the mitigation measures described in the Draft and Final EIR.

4.1 FINDINGS REGARDING RECIRCULATION

The City finds that the Draft EIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5). CEQA Guidelines Section 15088.5 requires recirculation of an EIR prior to certification of the Final EIR when “significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review.” As described in CEQA Guidelines Section 15088.5:

New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it;
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

In addition, CEQA Guidelines Section 15088.5(b) provides that “recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR.” Recirculation also is not required simply because new information is added to an EIR;

indeed, new information is oftentimes added given CEQA’s public/agency comment and response process and CEQA’s post-Draft EIR circulation requirement of proposed responses to comments submitted by public agencies. In short, recirculation is “intended to be an exception rather than the general rule” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132).

As such, the City makes the following Findings:

- None of the public comments submitted to the City regarding the Draft EIR present any significant new information that would require the Draft EIR to be recirculated for public review.
- No new or modified mitigation measures are proposed that would have the potential to create new significant environmental impacts.
- The Draft EIR adequately analyzed project alternatives and there are no feasible alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project.
- The Draft EIR was not fundamentally and basically inadequate and conclusory in nature and did not preclude meaningful public review and comment.

In this legal context, the City finds that recirculation of the Draft EIR prior to certification is not required. In addition to providing responses to comments, the Final EIR includes revisions to expand upon information already presented in the Draft EIR; explain or enhance the evidentiary basis for the Draft EIR’s findings; update information; and to make clarifications, amplifications, updates, or helpful revisions to the Draft EIR. The Final EIR’s revisions, clarifications, and/or updates do not result in any new significant impacts or increase the severity of a previously identified significant impact. In sum, the Final EIR demonstrates that the proposed project would not result in any new significant impacts or increase the severity of a significant impact compared to the analysis presented in the Draft EIR. The changes reflected in the Final EIR also do not indicate that meaningful public review of the Draft EIR was precluded in the first instance. Accordingly, recirculation of the EIR is not required because revisions to the EIR are not significant as defined in Section 15088.5 of the CEQA Guidelines.

11.0 MITIGATION MONITORING AND REPORTING PROGRAM

11.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) Guidelines requires that, whenever a public agency approves a project based on a Mitigated Negative Declaration or an Environmental Impact Report (EIR), the public agency shall establish a mitigation monitoring or reporting program to ensure that all adopted mitigation measures are implemented.

The mitigation monitoring and reporting program (MMRP) contained herein is intended to satisfy this requirement of the CEQA Guidelines as it relates to the Temporary Outdoor Vehicle Storage Facility Project (project). This MMRP is intended to be used by City of Oxnard (City) staff to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the Draft EIR and finalized in the Final EIR prepared for the proposed project.

The Final EIR for the proposed project presents a detailed set of mitigation measures required for implementation. As noted above, the intent of the MMRP is to ensure the effective implementation and enforcement of all adopted mitigation measures. The MMRP will also provide for monitoring of construction activities, as necessary, and in the field identification and resolution of environmental concerns.

11.2 PURPOSE OF THE MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a sufficient manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements. The MMRP table has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies each mitigation measure or standard condition; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring conditions; and the agency or party responsible for ensuring that the monitoring is performed. The numbering of mitigation measures and standard conditions follows the numbering sequence found in the Final EIR.

11.3 ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City,

at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. The City would be responsible for overall administration of the MMRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure.

Section 21081.6 of the Public Resources Code requires the lead agency to identify the “custodian of documents and other material” which constitutes the “record of proceedings” upon which the action on the project was based. Inquiries should be directed to:

City of Oxnard Community Development Department
Planning & Environmental Services Division
214 South C Street
Oxnard, California, 93030

11.4 REPORTING

Upon completion of the project, the City’s Planning Manager shall prepare a monitoring report on the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall also be compiled and explained in monthly or annual reports, as relevant. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

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5.1 AESTHETICS					
Implementation of the proposed project could substantially degrade the visual character/quality of the site and its surroundings (Threshold AES-3).	SC AES-1: Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans.	Prior to the issuance of building permits.	One time prior to issuance of building permits.	Applicant	
	SC AES-2: Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems.	Prior to the issuance of a certificate of occupancy.	Installation occurs one time prior to the issuance of a certificate of occupancy.	Applicant	
	SC AES-3: Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods.	Prior to the issuance of a certificate of occupancy.	Provision of water schedule occurs one time prior to the issuance of a certificate of occupancy. Recommendations of the watering schedule must be implemented throughout project implementation.	Applicant	
	SC AES-4: The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure.	During project construction and prior to project operation.	Installation occurs one time during project construction. Ongoing maintenance should occur when necessary during project implementation to ensure sufficiency of irrigation system.	Applicant	

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	SC AES-5: All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	SC AES-6: The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	SC AES-7: The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	MM AES-1: The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-2: In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-3: Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.	Prior to vegetation maturation that effectively buffers views onto the project site.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Applicant	

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			Applicant should regularly assess vegetation to determine whether screening fabric or other alternative temporary measures are necessary. Once vegetation has matured to effectively buffered views to the project site, the Applicant should remove fabric screening in those areas.		
	MM AES-4: The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.	During project construction and prior to project operation.	Installation occurs during project construction. Visual screening methods should complement the screening established for the project. Applicant should regularly assess screening to ensure it is sufficient and address any degradation.	Applicant	
Implementation of the proposed project could create a source of substantial light or glare, which could affect daytime and/or nighttime views in the area (Threshold AES-5).	SC AES-8: The project must comply with the Outdoor Lighting Code & Guideline: a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:	Ongoing during project construction and operation.	Lighting installation occurs during project construction. Ongoing compliance with the Outdoor Lighting Code & Guideline is required for the life of the project during the 5-year Special Use Permit, consistent	Applicant	

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	i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up. ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to on 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up. c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected.		with the Oxnard City Code.		

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	SC-AES-9: Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature).	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
	SC AES-10: Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians.	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
5.4 Biological Resources					
The proposed project could have a substantial adverse effect on sensitive or special status biological resources, or riparian habitats, or natural communities (Threshold BIO-1, Threshold BIO-2).	MM BIO-1: To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.	Conduct survey during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative, or if habitat can be avoided.	Initial survey and reporting. Conduct monitoring if required to comply with Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act.	Applicant	

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	If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities. The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.	Comply with Fish and Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act if surveys are positive and habitat cannot be avoided. Incorporate measures into construction contracts, as relevant.			

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	In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.				
5.5 CULTURAL AND TRIBAL CULTURAL RESOURCES					
The proposed project could result in a substantial adverse change in the significance of a unique archaeological resource pursuant to state CEQA Guidelines Section 15064.5 (Threshold CTC-2).	MM CUL-1: Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal)	A Principal Investigator/Archaeologist shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground				

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	disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.				
	MM-CUL-2: Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to	A Native American/Tribal Monitor shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.				
5.7 GEOLOGY AND SOILS					
Implementation of the proposed project could result in the risk of loss, injury, or death due to strong seismic ground shaking (Threshold GEO-1b).	MM GEO-1: Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.	Prior to issuance of grading permits	Report must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during site grading and construction on an ongoing basis during construction activities.	Applicant Review by City of Oxnard Building and Engineering Division.	
5.9 HAZARDOUS MATERIALS USE, GENERATION, TRANSPORT, OR DISPOSAL					
The proposed project could result in an increased risk of upset associated with the routine use, generation, transport, or disposal of hazardous materials (Threshold HAZ-1).	SC HAZ-1: Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments.	Prior to issuance of grading permits	Safety Plan must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during project operation on an ongoing basis.	Applicant Review by City of Oxnard Fire and Planning Departments	
5.10 HYDROLOGY AND WATER QUALITY					
The proposed project could cause a violation	SC HYD-1: The Applicant shall design project to minimize degradation of stormwater quality by	During project design.	Stormwater quality calculations and	Applicant	

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of any adopted water quality standards or waste discharge requirements (Threshold HYD-1).	complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM).	Stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first).	associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first). Ongoing compliance with the MS4 permit is required during the life of the project.		
	SC HYD-2: The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations.	Stormwater quality calculations and infiltration plans must be determined during project design. Engineering and architectural recommendations shall be implemented throughout the life of the project.	Stormwater issues will be addressed during project design. Ongoing compliance with the 2011 Technical Guidance Manual for Stormwater Control Measures is required throughout the life of the project.	Applicant Recommendations required from a geotechnical engineer, and if applicable, a landscape architect	

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	SC HYD-3: Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City.	During project design and prior to issuance of grading and building permits (whichever comes first).	Ongoing long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations.	Applicant The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design.	
	SC HYD-4: The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM).	Installation occurs once during project construction.	Ongoing maintenance as needed to ensure the system is sufficient.	Applicant	

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5.17 POLICE PROTECTION					
The proposed project could increase the demand for police protection service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects (Threshold PP-1) .	MM PP-1: Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others: - At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road. - At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions. - If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.	Traffic Control Plan must be developed prior to construction, and must be implemented during project construction.	Ongoing implementation during project construction. No action required during project operation.	Applicant Review by City Traffic Engineer required.	

RESOLUTION NO. 2022 - 36

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OXNARD APPROVING PLANNING AND ZONING PERMIT NO. 18-500-02 (SPECIAL USE PERMIT) TO ALLOW FOR THE CONSTRUCTION OF A TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY WITH A MOBILE GUARDHOUSE/OFFICE, PORTABLE RESTROOM, PORTABLE LIGHT FIXTURES, DRAINAGE IMPROVEMENTS, CAPACITY FOR 4,944 VEHICLES ON A GRAVEL SURFACE, LANDSCAPING AND FENCING ON TWO LOTS (FOR A TOTAL OF APPROXIMATELY 34 ACRES), LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christina Birdsey (the **"Applicant"** and/or **"Permittee"**) submitted a request to approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located a the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the **"Project"**); and

WHEREAS, the the City of Oxnard as the Lead Agency, has prepared an EIR (State Clearinghouse No. 2020069039) in accordance with the requirements of the California Environmental Quality Act (CEQA, Public resources Code § 21000, et seq.), the regulations promulgated thereunder (14 California Code of Regulations, §15000, et seq., CEQA Guidelines), and the City's Environmental Review Guidelines; and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard (**"Planning Commission"**) conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the proposed Project, in accordance with Sections 16-536 and 16-651 of the Oxnard City Code (OCC) and considered the Certification of Final Environmental Impact Report (Final EIR) No. 22-01 pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, on October 20, 2022, the Planning Commission certified Final EIR No. 22-01 pursuant to the CEQA for approval of the Project and found that the Final EIR was completed in compliance with CEQA and reflects the independent judgment of the City; and

WHEREAS, Sections 16-536 and 16-651 of the OCC authorize the Planning Commission to approve a Special Use Permit; and

WHEREAS, the Planning Commission finds, after due study, deliberation and public hearing, that the project meets the criteria set out in Sections 16-536 and 16-651 of the OCC; and

WHEREAS, the Project has been reviewed by the Development Advisory Committee (DAC) and the DAC has prepared conditions of approval that are incorporated within the recommended permits; and

WHEREAS, the Planning Commission finds that the Project conforms to the City of Oxnard 2030 General Plan elements thereof and the Oxnard City Code for the reasons set forth in the Planning Commission Staff Report; and

WHEREAS, the Planning Commission finds after due study and deliberation that the applicant agrees with the necessity of and accepts all elements, requirements, and conditions of this Resolution as being a reasonable manner of preserving, protecting, providing for, and fostering the health, safety, and welfare of the citizenry in general and the persons who work, visit or live in this development in particular.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF OXNARD:

SECTION 1. Based on the entire record before the Planning Commission and all written and oral evidence presented, including the Special Use Permit Staff Report and all attachments thereto, the Planning Commission finds:

1. The proposed use is in conformance with the General Plan and other adopted policies of the City of Oxnard.

The Project site has 2030 General Plan land use designations of Industrial Limited (ILT) and Park (PRK) and a zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD). The proposed project includes the development of temporary structures for temporary vehicle storage. Given the temporary use of the site for outdoor vehicle storage for a maximum of five years and that the proposed project does not include permanent structures, the proposed project does not preclude future development for park land or other industrial land uses. As discussed in detail in the Planning Commission Staff Report (Sections 6 b, c, Attachment D, and Attachment E) the Project, as designed and conditioned, meets all applicable development standards. Therefore, the proposed project is in compliance with the 2030 General Plan and other adopted policies of the City of Oxnard and meets this Finding.

2. The nature, condition and development of adjacent uses, buildings and structures shall be considered, and no proposed Special Use Permit shall be granted if the approval body finds such use will adversely affect or be materially

detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

As described in the Staff Report, pursuant to the 2030 General Plan land use designation of Industrial Limited (ILT) and Park (PRK) and the zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD), the proposed use of the project site as a temporary vehicle storage facility, is an allowed use, subject to a Special Use Permit (OCC §16-163). The surrounding uses are characterized by light industrial, commercial, and residential uses, which are predominantly light industrial facilities (commercial trucking facility, Advanced Water Purification Facility), commercial shopping centers, a four lane road (Hueneme Road), single-family residences, railroad tracks and open space. Construction activities, anticipated uses, and development design will be subject to standard construction requirements of the Building, Fire, and Traffic Codes. Therefore, the proposed use and improvements, as conditioned, will not adversely affect or be materially detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

- 3. The site that is subject to the Special Use Permit shall be adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and items which may be required by Section 16-532 (Conditions).**

As described in the Staff Report, the project as designed and conditioned meets the development standards of the Light Manufacturing with Planned Development Additive Zone (M-1-PD) zone as described above in Finding Section 1(1). Pursuant to the Zoning Code, the Project has been designed to be consistent with the maximum building height, front, side and rear setbacks, and lot coverage. As detailed in the Staff report, the project site is approximately 34 acres which is adequate to accommodate the required 12 employee parking spaces and the required 30-foot landscape buffer along Hueneme Road. As such, the subject site is adequate in terms of size and as developed the development meets or exceeds City's design standards.

- 4. The site that is subject to the Special Use Permit shall be served by highways adequate in width and improved as necessary to carry the kind and quantity of traffic such use will generate.**

As described in the Staff Report, the project site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed driveway access would provide sufficient access to the site and would allow for adequate circulation around the site. As described in the EIR, the project will have less than significant impacts to the City roadway network and roadway improvements are not required as a result of the project. Therefore, the site has sufficient access to streets and highways that are adequate in size and existing intersections adjacent to the project site will operate at acceptable levels of service.

5. The site that is subject to the Special Use Permit shall be provided with adequate sewerage, water, fire protection and storm drainage facilities.

As described in the Staff Report, the project includes a portable restroom that will be serviced as needed by a waste-services provider. The project also includes a temporary guardhouse/office building that does not require water. The site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed Project includes drainage improvements along the southeastern side of the site. Furthermore, the Project was reviewed by the Development Advisory Committee for adequate utilities and services. In accordance with the Stormwater Quality Conditions of this Resolution, the Project's design will comply with stormwater control measures as required by the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system ("MS4") permit. The Project is consistent with the level of development identified under the General Plan and Oxnard City Code, and therefore is within the anticipated level of development. The project is not anticipated to result in any significant impacts to utilities and public services. Therefore, the site for the proposed use will be provided with adequate sewage, water, fire protection and storm drainage facilities.

SECTION 2. The Planning Commission, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. Based on the findings set forth herein and the Staff Report and all attachments thereto, the Planning Commission hereby approves Planning and Zoning Permit No. 18-500-02 (Special Use Permit), subject to the attached conditions of approval.

SECTION 4. The decision of the Planning Commission shall be final unless an appeal of the action is filed in accordance with the provisions of Section 16-545 of the Oxnard City Code.

SECTION 5. The Secretary shall certify the adoption of this Resolution.

CONDITIONS OF APPROVAL

Note: The abbreviations below identify the City department or division responsible for determining compliance with these standard conditions. The first department or division listed has responsibility for compliance at plan check, the second during inspection and the third at final inspection, prior to issuance of a certificate of occupancy, or at a later date, as specified in the condition. If more than one department or division is listed, the first will check the plans or inspect the project

before the second confirms compliance with the condition. The italicized code at the end of each condition provides internal information on the source of each condition: Some are standard permit conditions (e.g. *G-1*) while some are taken from environmental documents (e.g. *MND-S2*).

DEPARTMENTS AND DIVISIONS			
CA	City Attorney	PL	Planning
DS	Dev Services/Eng Dev/Inspectors	TR	Traffic
PD	Police	B	Building Plan Checker
SC	Source Control	FD	Fire
PK	Landscape Design	CE	Code Enforcement

GENERAL PROJECT CONDITIONS

1. This permit is granted for the property described in the application on file with the Planning Division, and may not be transferred from one property to another. (PL, *G-1*).
2. This permit is granted for the plans dated October 20, 2022, (“the plans”) on file with the Planning Division. The project shall conform to the plans, except as otherwise specified in these conditions, or unless a minor modification to the plans is approved by the Planning and Environmental Services Manager (“Planning Manager”) or a major modification to the plans is approved by the Planning Commission. A minor modification may be granted for minimal changes or increases in the extent of use or size of structures or of the design, materials or colors of structures or masonry walls. A major modification shall be required for substantial changes or increases in such items. (PL, *G-2*)
3. This permit shall automatically become null and void 36 months from the date of its issuance, unless Developer has diligently developed the proposed project, as shown by the issuance of a grading, foundation, or building permit and the construction of substantial improvements. (PL, *G-3*)
4. All required off-site and on-site improvements for the project, including structures, paving, and landscaping, shall be completed prior to occupancy unless the Development Services Manager allows the Developer to provide security or an executed agreement approved by the City Attorney to ensure completion of such improvements. (DS, *G-4*)
5. By commencing any activity related to the project or using any structure authorized by this permit, Developer accepts all of the conditions and obligations imposed by this permit and waives any challenge to the validity of the conditions and obligations stated therein. (CA, *G-5*)

6. Developer agrees, as a condition of adoption of this resolution, at Developer's own expense, to indemnify, defend and hold harmless the City and its agents, officers and employees from and against any claim, action or proceeding to attack, review, set aside, void or annul the approval of the resolution or any condition attached thereto or any proceedings, acts or determinations taken, done or made prior to the approval of such resolution that were part of the approval process. (CA, G-6)
7. Any covenants, conditions, and restrictions (CC&Rs) applicable to the project property shall be consistent with the terms of this permit and the City Code. If there is a conflict between the CC&Rs and the City Code or this permit, the City Code or this permit shall prevail. (CA, G-7)
8. Developer shall complete the "Notice of Land Use Restrictions and Conditions" form, using the form provided by the City, for recording with the Ventura County Recorder. Before the City issues building permits, Developer shall submit the original completed, signed and notarized document, together with the required fees to the Planning Manager. (PL, G-8)
9. Developer shall provide off-street parking for the project, including the number of spaces, stall size, paving, striping, location, and access, as required by the City Code. (PL/B, G-9)
10. Before placing or constructing any signs on the project property, Developer shall obtain a sign permit from the City. Except as provided in the sign permit, Developer may not change any signs on the project property. (PL/B, G-10)
11. Developer shall obtain a building permit for any new construction or modifications to structures, including interior modifications, authorized by this permit. (B, G-11)
12. Developer shall not permit any combustible refuse or other flammable materials to be burned on the project property. (FD, G-12)
13. Developer shall not permit any materials classified as flammable, combustible, radioactive, carcinogenic or otherwise potentially hazardous to human health to be handled, stored or used on the project property, except as provided in a permit issued by the Fire Chief. (FD, G-13)
14. If Developer, owner or tenant fails to comply with any of the conditions of this permit, the Developer, owner or tenant shall be subject to a civil fine pursuant to the City Code. (CA, G-14)
15. Prior to issuance of building permits, Developer shall correct all violations of the City Code existing on the project property for which the Code Compliance Division has open cases. (PL, G-15).

LANDSCAPE CONDITIONS

16. Prior to submittal of landscape and irrigation plans, Developer shall obtain approval of the Planning Manager or designee of a plan showing on the project property all existing trees and identifying the trees to be saved, transplanted or removed. (PK, PK-1)
17. Prior to issuance of building permits or the proposed use is initiated, whichever comes first, Developer shall submit two copies of landscape and irrigation plans, along with the appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (PK/DS, PK-2)
18. Prior to issuance of a certificate of occupancy, Developer shall install landscape and automatic irrigation systems that have been approved by the Parks and Facilities Superintendent. (PK, PK-3)
19. Developer shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by this permit. Failure of Developer to do so may result in the revocation of this permit and initiation of legal proceedings against Developer to ensue compliance (PK, PK-4)
20. Prior to the issuance of City issues a certificate of occupancy, Developer shall provide a watering schedule to the building owner or manager and to Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. (PK, PK-5)
21. All trees planted or placed on the property by Developer shall be at least 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by this permit. (PK, PK-6)
22. At the time of landscape plan check submittal, the landscape planting and irrigation plans shall comply with the current title 23 Model Water Efficient Landscape Ordinance (MWELo). (PK, PK-7.1)
23. Developer shall install an irrigation system that includes a water sensor shut off device as a water conservation measure. (PK, PK-22)
24. At time of submittal to the Building and Engineering Division for plan check, Developer's Landscape Architect or Architect shall provide the City with written confirmation that they have reviewed the civil engineering construction drawings and that the NPDES requirements are not in conflict with meeting the City's landscape requirements. (PK, PK-23)
25. Developer shall include a note on the Landscape Plans submitted to the Building and Engineering Division for a building permit that "all landscaping and irrigation comply with Ordinance No. 2822, which adopted the City of Oxnard Landscape Water Conservation Standards, and applicable water conservation requirements of the State of California". (PK, PK-24)

26. At the time of Plan Check submittal, the landscape plans shall contain an exhibit titled "Tree Tabulation Chart". The Tree Tabulation Chart shall contain a listing of all existing trees on site and shall refer to them by number as identified in the Arborist's Tree Report. The Tree Tabulation Chart shall clearly list all trees to remain, be removed or transplanted. The Chart shall contain the Arborist's economic appraisal value of each tree(s) removed as well as computations and calculations showing how the value of the removed tree(s) was put back into new tree sizes for the project that are in addition to meeting the City's minimum tree size of 24" box. (PK)
27. Consistent with the City Council Resolution 15,569 which declared a continuance of the Stage 2 water shortage condition within the City of Oxnard, the project is required to implement and maintain the mandatory water conservation requirements for as long as City Council Resolution 15,569 is in effect or is amended/replaced by the City of Oxnard.

PLANNING DIVISION CONDITIONS

28. Plans submitted by Developer with building permit applications shall show on the building elevation sheets all exterior building materials and colors, including product and finish manufacturer name, color name and number, and surface finish type (such as: stucco with sand finish, plaster with smooth finish) to be used in construction. (PL/B, PL-1)
29. Any application for a minor modification to the project shall be accompanied by four copies of plans reflecting the requested modification, together with applicable processing fees. (PL, PL-2)
30. Before the City issues building permits, Developer shall include a reproduction of all conditions of this permit as adopted by resolution of the Planning Commission and/or the City Council in all sets of construction documents and specifications for the project. (PL, PL-3)
31. Before the City issues building permits, Developer shall provide to the Planning Division Manager color photographic reductions (8 1/2" by 11") of full-size colored elevations and any other colored exhibit approved by the Planning Commission. Developer may retain the full-size colored elevations after the reductions are so provided. (PL, PL-4)
32. Developer may not modify any use approved by this permit unless the Planning Division Manager determines that Developer has provided the parking required by the City Code for the modified use. (PL, PL-7)
33. During the plan check review process, the Developer shall provide a lighting plan that provides design details (light standards, bollards, wall mounted packs, etc.) and illumination site information within alleyways, pathways, streetscapes, and open spaces proposed throughout the development. An electrical engineer shall prepare the site lighting plan demonstrating that adequate lighting ranges will be provided throughout the development without creating light spillover, light pollution, or conflicts with surrounding factors such as tree locations, off-site or adjacent lighting. (PL)

34. Prior to issuance of building permits, Developer shall demonstrate that light standards illustrated on conceptual lighting plan do not conflict with tree locations. Developer shall submit a plan showing both the lighting and landscape on the same sheet.
35. Project on-site lighting shall be of a type and in a location that does not constitute a hazard to vehicular traffic, either on private property or on adjoining streets. To prevent damage from vehicles, standards in parking areas shall be mounted on reinforced concrete pedestals or otherwise protected. Developer shall recess or conceal under-canopy lighting elements so as not to be directly visible from a public street. Developer shall submit a lighting plan showing standard heights and light materials for design review and approval of the Planning Division Manager. (PL/B, *PL-8*)
36. In order to minimize light and glare on the project property, all parking lot and exterior structure light fixtures shall be high cut-off type that divert lighting downward onto the property and shall not cast light on any adjacent property or roadway. (PL, *PL-9*)
37. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (B/DS, *PL-11*)
38. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code section 23114, with special attention to sub sections 23114(b)(2)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
 - b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (B/DS, *PL-12*)
39. Developer shall provide for dust control at all times during project property preparation and construction activities. (B/DS, *PL-13*)
40. Developer agrees to participate in a water conservation program that includes refitting water fixtures existing on the project property with water conserving devices within residences or businesses in the City's water service area, if such a program is in effect when building permits are issued for this project. Among the requirements of such a program might be refitting existing toilets, faucets, shower heads, landscaping irrigation or other fixtures and items that consume water within the structure. (PL, *PL-14*)
41. Because of water limitations placed upon the City by its water providers, approval of this permit does not guarantee that the City will issue building permits. Issuance of building

permits may be delayed as a result of implementation of a water conservation or allocation plan. (PL, PL-15)

42. Prior to issuance of building permits, Developer shall pay a document imaging fee for the planning files in an amount calculated by planning staff at the time of building permit review based on fees then in effect. (PL/B, PL-16)
43. Developer shall participate in the City's Public Art Program by paying the Public Art fee prior to issuance of building permits, in accordance with City Council Resolution No. 14,124. (PL, PL-50)
44. For any exterior utility meter panels, Developer shall paint such panels to match the structure upon which it is located. Such panels shall be located to take advantage of screening (e.g. landscaping or other building elements) from public right-of-ways, to the maximum extent feasible. (PL, PL-43)
45. Prior to issuance of a certificate of occupancy, Developer shall remove all construction materials and vehicles from the subject property. (PL/B, PL-47)
46. Developer shall remove any and all graffiti from the project premises, within 24 hours of its appearance. The surface of such affected areas shall be matched to blend in with the underlying colors and/or design, and shall not look like a paint patch. (PL)
47. Before the City issues building permits, Developer shall provide a Graffiti Deterrent Plan, subject to approval of the Planning Division Manager. The plan shall include such elements as clear film on windows and/or mirrors, as well as washable paint and sealers on the building and perimeter walls. (PL)
48. Developer shall ensure that all construction equipment is maintained and tuned to recommended manufacturer's specifications. (MND, C-1)
49. At all times during construction activities, Developer shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust. (MND, C-2)
50. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (MND, C-3)
51. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code §23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

- b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (MND, C-4)
- 52. During construction, Developer shall post and maintain onsite signs, in highly visible areas, restricting all vehicular traffic to 15 miles per hour or less. (MND, C-5)
- 53. During periods of high winds (i.e. wind speed sufficient to cause fugitive dust to impact adjacent properties), Developer shall cease all clearing, grading, earth moving, and excavation operations to prevent fugitive dust from being a nuisance or creating a hazard, either onsite or offsite. (MND, C-6)
- 54. The Permittee shall comply with the provisions of applicable VCAPCD Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance), Rule 55 (Fugitive Dust), and Rule 55.1 (Removal of Visible Roadway Accumulations). (MND, C-7)
- 55. Developer shall mitigate air quality emissions associated with development of the subject site through a contribution to the City's Transportation Demand Management (TDM) program. Such fee shall be calculated at the time of building permit issuance in accordance with the Ventura County Air Quality Assessment Guidelines, as amended. Such fee shall be collected in full prior to building permit issuance. (MND, C-9)
- 56. Prior to grading permit approval, Developer shall include on the grading plans a reproduction of all conditions of this permit pertaining to dust control requirements. (PL)
- 57. The proposed vehicle storage use shall be granted for a time period not to exceed five years from the date of Final Inspection and commencement of the approved use. Upon the expiration of the five (5) year period the site shall be returned to its existing condition within ninety (90) days as follows:
 - a. The facility may be used to store vehicles only after final Building Permit approval. All vehicles shall be removed from the site no later than five years from the Final Building Permit Inspection.
 - b. The site shall be returned to its existing condition (the condition prior to development) subject to the required City permits and a plan to be reviewed and approved by the Community Development Director with the following conditions: the drainage improvements, landscaping, and fencing shall remain on the site and be maintained by the property owner..
 - c. Prior to the issuance of any Building or Grading Permits for the Project, the Developer (Oxnard Harbor District) or Property Owner shall submit to the City of Oxnard a performance bond of at least \$1,500,000.00 for the restoration of the Project site in accordance with Condition of Approval 57(b). The performance bond shall be in a form approved by the City Attorney. The performance bond

shall be released upon the completion of all onsite work, to the satisfaction of the Community Development Director.

58. Applicant shall submit payment for all outstanding discretionary permit and environmental processing fees associated with the development project. Funds shall be deposited prior to issuance of a grading permit. (PL).
59. Applicant shall deposit \$5,000.00 for mitigation monitoring and reporting associated with the development project, PZ 18-500-02. Such funds shall be deposited prior to issuance of a grading permit. Additional funds may be required throughout the life of the permit as needed for cost recovery related to environmental monitoring. Any additional required funds shall be requested in writing by the Community Development Director and shall be deposited within 10 days of written notification. (PL)

PLANNING ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURES AND CONDITIONS

60. Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (SC AES-1)
61. Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. (SC AES-2)
62. Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices. (SC AES-3)
63. The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. (SC AES-4)
64. All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. (SC AES-5)
65. The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. (SC AES-6)
66. The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts. (SC AES-7)

67. The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants. (MM AES-1)
68. In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site. (MM AES-2)
69. Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chainlink fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation. (MM AES-3)
70. The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project. (MM AES-4)
71. The project must comply with the Outdoor Lighting Code & Guideline:
 - a. a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings.
 - b. b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:
 - i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up.
 - ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to on 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up.
 - c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected. (SC AES-8)
72. Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature). (SC AES-9)
73. Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians. (SC AES-10)

74. To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided. (MM BIO-1)

75. Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification,

evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center. (MM CUL-1)

76. Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities. (MM CUL-2)
77. Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction. (MM GEO-1)

78. Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments. (SC HAZ-1)
79. The Applicant shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM). (SC HYD-1)
80. The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of sitespecific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (SC HYD-2)
81. Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (SC HYD-3)
82. The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM). (SC HYD-4)

83. Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:
- a. At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
 - b. At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
 - c. If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes. (MM PP-1)

POLICE DEPARTMENT CONDITIONS

84. Light poles shall be no taller than 26-feet tall. Gas, propane or other hydrocarbon powered generators are not allowed to power the lighting instruments.
85. Lighting on the site shall follow the perimeter fencing but shall not create "light trespass" off the project area or glare to traffic on adjacent streets. The lighting instruments shall illuminate a corridor that follows the fence-line on the interior perimeter between 1 and 7-foot candles and shall be in operation from dusk to dawn. It is not the intent of this condition to illuminate the whole parking field, but merely that area adjacent to and including the fence line.
86. Lighting instruments shall be LED flat lens with cut-off shields where "light trespass" may be an issue. The flat lens shall be directed toward the ground and shall not be canted to expand the lighting area of coverage.
87. Wall packs are not permitted.
88. A berm, 24-inches above grade, shall run parallel between the fence and the Public-Right-of-Way along Hueneme Road and Perkins Road sides of the project as well as the eastern fence which runs south from Hueneme Road. This berm is intended to supplement the fencing as a security measure. A break in the berm shall exist for gated exit driveways. The berm shall be sufficiently landscaped to deter erosion. Landscape shall be sufficiently irrigated to maintain plantings through the life of the project.
89. Landscape plans shall be submitted to, and approved by, the Planning and Police Departments prior to the issuance of building permits. Landscape plans shall include a table of species to be planted, and include a map of where various species will be located on the site, and call-outs identifying locations of berms, gates and fences.
90. Keys shall not be left in any vehicle on the premises without a responsible party in the vehicle. If the keys to vehicles stored at the site are maintained in the security facility, then the keys must be secured in a locked cabinet securely affixed to the interior wall of the facility or other means to ensure the keys are not easily removed from the premises.

91. A "Knox Box" shall be installed at each gate of the facility to facilitate Fire Department access.
92. No trespass, and no loitering signs shall be placed on each gate to the site. Signs shall be worded: No Trespassing – No Loitering, Forbidden by Law, No Drinking of Alcoholic Beverages, Violators will be subject to arrest or citation pursuant to 602 PC & 7-125 OXO.
93. Prior to the issuance of building permits, the design of all gates shall be approved by Planning and Police Departments. Gate design shall be developed so that vehicle ramming will not collapse the gate.
94. Security cameras shall be installed to monitor the facility. The camera system shall comply with these minimum standards:
 - a) Cameras and supporting equipment shall supply digital color images under normal lighting conditions. Greyscale images are required for infra-red lighting.
 - b) Cameras shall be made by a reputable manufacturer and maintained to current industry standards.
 - c) Cameras shall have low light capability to capture identifiable images.
 - d) The video system shall utilize a Digital Video Recorder (DVR). VHS and other formats are prohibited.
 - e) The video system shall allow recording, live viewing and playback of recorded video for a period of at least 30 days.
 - f) Recorded images shall bear a date and time stamp that cannot be altered.
 - g) Prior to the installation of a security camera system, applicant shall submit a plan showing location of cameras and the scope of their capture area. The plan shall include a list of components.
 - h) Signage shall be posted at each entrance which states in 2 inch letters: "These premises are monitored by a security camera system".
 - i) Cameras in domed casings are required as their area of focus is not easily determined by a casual observer.
 - j) All exterior cameras shall have the capability of capturing identifiable images in minimum lighting or during hours of darkness.
 - k) The DVR shall be stored in a locked secure cabinet at the site.
 - l) Security personnel shall be authorized to transfer images from the security camera system to any member of the Oxnard Police Department conducting a criminal investigation at or near the premises.
95. Security cameras shall be placed at these locations at a minimum:
 - a) At each gate a pole mounted camera shall be placed on the inside of the security fence capturing the entire opening of the gate threshold.
 - b) Camera(s) shall be mounted near the security shack to capture images of all persons entering and exiting the shack.
96. The address for the facility shall be 5600 Perkins Road. A sign shall be posted on the fence on the Perkins Road side of the facility stating in 4-inch tall letters: "5600 Perkins Road".

97. An authorized member of the Oxnard Police Department or Code Compliance Division may inspect the site for compliance with these conditions anytime vehicles are stored at the site pursuant to this permit.

FIRE DEPARTMENT CONDITIONS

98. Developer shall construct all vehicle access driveways on the project property to be at least 26 feet wide, exclusive of shoulders. Developer shall mark curbs adjacent to designated fire lanes in parking lots to prohibit stopping and parking in the fire lanes. Developer shall mark all designated fire lanes in accordance with the California Vehicle Code. (FD/B, *F-1*)
99. The project shall meet the minimum requirements of the "Fire Protection Planning Guide" published by the Fire Department. (FD, *F-6*)
100. At all times during construction, Developer shall maintain surfaces capable of handling loads of 76,000 pounds which will provide access for firefighting apparatus to all parts of the project property. (FD/DS, *F-7*)
101. Developer shall identify all hydrants and fire protection equipment on the project property as required by the Fire Chief. (FD, *F-8*)
102. Developer shall install security devices and measures, including walkway and vehicle control gates, entrance telephones, intercoms and similar features, subject to approval of the Police Chief and the Fire Chief. Vehicle control gates shall be operable by City approved radio equipment. (FD/PD, *F-9*)
103. The turning radius of all project property driveways and turnaround areas used for emergency access shall be approved by the City Traffic Engineering Department. (FD, *F-11*)
104. Areas designated by the Fire Marshal as Fire Lanes shall be identified by a red curb and signage per the California Department of Motor Vehicles.
105. Fire hydrants shall be operational and accessible at all times. No parking, storage or staging of equipment/supplies shall be located within 15 feet on either side of fire hydrants. Prior to final inspection, blue reflective hydrant location markers shall be placed on the access roads in accordance with Fire Department standards.
106. Before the city issues a certificate of occupancy, the developer shall install a Knox key vault at a location to be determined by the Fire Department.
107. Vegetation clearance shall be maintained at all times.
108. A minimum 20-foot clear width and 13-foot, 6-inch (13' 6") clear height emergency access lane shall be maintained free of obstructions at all times within the project site once construction starts.

109. An on-site Life safety Inspection shall be conducted by Fire Department staff to approve final configuration of the site.

DEVELOPMENT SERVICES DIVISION CONDITIONS

110. Developer shall pay plan check and processing fees in effect at the time of construction plan submittal and shall pay development fees, encroachment permit fees, and other applicable fees in effect at permit issuance. (DS-1)
111. Developer shall have the site improvement plans prepared using standard Building and Engineering Division format(s) by a civil engineer licensed in the State of California. The plans shall incorporate recommendations from soil engineering and geology reports. Prior to issuance of a grading permit, improvement plans must be approved by the City Engineer and ink-on-mylar plans filed with the Building and Engineering Division. (DS-3)
112. Developer shall submit improvement plans and drainage calculations demonstrating that storm drain runoff from the project property and all upstream areas will be safely conveyed to an approved drainage facility. The design and conveyance route shall be compatible with the City's Master Plan of Drainage and shall be approved by the City Engineer prior to approval of improvement plans. (DS-4)
113. Curb cut widths and design shall conform to City ordinances, standards, and policies in effect at the time City issues an encroachment permit. (DS-9)
114. A California licensed civil engineer shall prepare the public improvement plans and documents for this project in accordance with City standards and shall submit all such plans to the City Engineer. Submittal shall include, but not necessarily be limited to, grading, street, drainage, sewer, water and other appurtenant improvement plans, construction cost estimates, soils reports, and all pertinent engineering design calculations. City will not approve a parcel map or final map nor issue a grading, site improvement or building permit until the City Engineer has approved all improvement plans. (DS-15)
115. Prior to issuance of a site improvement permit, Developer shall provide to the Building and Engineering Division a compact Disc (CD) containing digital copies of all project maps, address map, and/or civil improvements drawings in DWG format. Prior to improvement bond release, Developer shall provide an updated CD containing all changes that occur during construction. (DS-16)
116. The conditions of this resolution shall prevail over all omissions, conflicting notations, specifications, dimensions, typical sections, and the like, that may or may not be shown on the improvement plans. (DS-21)
117. Developer shall pay the cost of all inspections of on site and off site improvements. (DS-22)

118. Developer shall be responsible for all project related actions of Developer's employees, contractors, subcontractors, and agents until City accepts the improvements. (DS-23)
119. Prior to beginning construction, Developer shall designate in writing an authorized agent who shall have complete authority to represent and to act for Developer. The authorized agent shall be present at the work site whenever work is in progress. Developer or the authorized agent shall make arrangements acceptable to City for any emergency work. When City gives orders to the authorized agent to do work required for the convenience and safety of the general public because of inclement weather or any other cause, and the orders are not immediately acted upon by the authorized agent, City may do or have such work done by others at Developer's expense. (DS-24)
120. "Standard Specifications for Public Works Construction" latest edition (including modifications thereto by City) and applicable City Standard Plates and Design Criteria shall be the project specifications, except as noted otherwise on the approved improvement plans. City reserves the right to upgrade, add to, or revise these specifications and plans and all other City ordinances, policies, and standards. If the improvements required of this project are not completed within 12 months from the date of City's approval of the improvement plans, Developer shall comply with and conform to any and all upgraded, additional or revised specifications, plans, ordinances, policies and standards. (DS-27)
121. Prior to issuance of a grading/site improvement permit, developer shall obtain Development Services Director approval for any proposed construction phasing. The improvement plans (and associated phasing plans) shall clearly indicate any interim or off site improvements required by City. (DS-28)
122. Developer shall retain a California licensed Civil Engineer to ensure that the construction work conforms to the approved improvement plans and specifications and to provide certified "as built" plans after project completion. Developer's submittal of certified "as built" plans is a condition of City's final acceptance of the project and release of any associated security. (DS-29)
123. All grading shall conform to City's standard grading notes, City Code, and recommendations of Developer's soils engineer as approved by the City Engineer. (DS-30)
124. Developer shall construct sufficient drainage facilities concurrent with rough grading operations to mitigate any potential flooding or erosion affecting adjacent properties and public rights-of-way. (DS-31)
125. Developer shall design all slopes steeper than 5 (horizontal) to 1 (vertical) with a minimum 18 inch wide level area (at both top and bottom of slope) where it adjoins a wall, fence, sidewalk, trail, curb or similar improvement. (DS-32)
126. Prior to issuance of a site improvement permit, Developer shall provide to the City Engineer easements or written consent (as determined appropriate by the Development Services

- Director) from all affected landowners for any diversion of historical flows or change in drainage conditions caused by the project. (DS-36)
127. Developer shall submit a landscape irrigation plan prepared by a licensed professional, showing proper water meter size, backflow prevention devices, and cross connection control. (DS-59)
 128. Developer shall provide adequate vehicle sight distance as specified by CalTrans specifications at all driveways and intersections. (TR-71)
 129. Using forms provided by the Building and Engineering Division, Developer shall submit a stormwater quality control measures maintenance and operations plan ("the Plan") for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, Developer shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the City Engineer approves the Plan and Developer provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (DS-82)
 130. Developer's stormwater quality control measures maintenance and operations plan shall include: 1) Requirement to clean on-site storm drains at least twice a year; once immediately before the first of October (the beginning of the rainy season) and once in January. The City Engineer may require additional cleaning; 2) Requirement to maintain parking lots free of litter and debris. Developer shall sweep sidewalks, drive aisles, and parking lots regularly to prevent the accumulation of litter and debris. When swept or cleaned, debris must be trapped and collected to prevent entry into the storm drain system. Developer may not discharge any cleaning agent into the storm drain system; 3) Requirement to label all on-site storm drain inlets with the message "Don't Dump - Drains to Ocean" in accordance with City standards. (DS-83)
 131. Developer's engineer shall submit written confirmation that the project landscape drawings comply with the landscape requirements of the Technical Guidance Manual for Stormwater Quality Control Measures for all landscape based stormwater quality best management practices. (DS-84)
 132. Developer shall provide pre-treatment for all infiltration based stormwater quality Best Management Practices ("BMPs".) Pre-treatment devices must effectively reduce sediment load entering infiltration BMPs to minimize occlusion of underlying soils and reduce long term maintenance requirements and thereby maintain the infiltration capacity of the BMP. 2011 TGM compliant pre-treatment such as vegetated swales are an approved form of pre-treatment. Proprietary pre-treatment devices must be capable of removing 80% of 50 micron particles to be considered adequate pre-treatment. Typical catch basin inserts do not provide the sufficient sediment storage to provide pre-treatment. (DS-85)

133. Prior to issuance of a grading, building or demolition permit and prior to commencement of any clearing, grading or excavation, Developer shall provide evidence of assignment of a permit identification number by the California State Water Resources Control Board indicating submittal of a Notice of Intent (NOI) by the Developer in accordance with the NPDES Construction General Permit. Developer shall comply with all requirements of the General Permit and the Ventura Countywide MS4 Permit, including preparation of a Stormwater Pollution Prevention Plan (SWPPP). Developer shall keep the SWPPP updated to reflect current site conditions and a copy of the SWPPP shall be kept onsite and available for City or designated representative to review upon request. (DS-86)
134. Developer shall install 'Full Capture System Devices' ("Devices") certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments ("Amendments") in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures ("TGM"). (DS-88)
135. Developer shall design all points of vehicular access (driveways) such that all vehicles exiting the site traverse a minimum of 25-feet of solid pavement (e.g., asphalt or concrete) on the private side of the property line. The solid pavement shall extend into the public right-of-way until it joins the existing road paving and includes appropriate turning transitions. This pavement requirement is intended to minimize the conveyance of soil or gravel into the public right-of-way by vehicles exiting the site. (DS)
136. The project meets the definition of "Parking Lot" as defined by the Ventura Countywide MS4 Permit Order No. R4-2010-0108 and the 2011 Technical Guidance Manual for Stormwater Quality Control Measures ("TGM") as a land area or facility for parking or storage of vehicles used for businesses, commerce, commercial, and industry use. The MS4 Permit and the TGM require projects that meet the definition of a Parking Lot with 25 or more spaces, regardless of the amount of impervious area proposed, shall design and implement post-construction stormwater management control measures. Developer shall update the drainage report and design the post-construction stormwater management control measures in accordance with the MS4 Permit to the satisfaction of the City Engineer. (DS)
137. Developer shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system ("MS4") permit (Order R4-2010-0108 including all revisions) as a new development project. Developer shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures ("2011 TGM"). (DS)
138. Developer shall submit stormwater quality calculations to include site-specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for

the design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (DS)

139. Gravel and packed earthen surfaces used for parking lots and storage areas that are anticipated to receive vehicular loading shall be treated as impervious in the stormwater quality calculations. (DS)
140. If permeable pavement design is proposed, Developer shall demonstrate to the satisfaction of the City Engineer that the soil surface will not be compacted during the construction of the project and regular use during the temporary use permit. The City Engineer shall consider all soil surfaces receiving compaction, regardless of the compaction level, to be impervious. Developer may submit to the City Engineer the project-specific soil compaction and infiltration testing data for review and consideration for any compaction proposed. The testing data shall demonstrate how the soils will maintain permeability with the compaction level proposed, similar to the pre-development undisturbed soil conditions. The data is subject to review and approval by the City Engineer. (DS)
141. Developer shall provide evidence that the pipes conveying stormwater from this site under the adjacent railroad tracks are free of obstruction to provide the required discharge capacity. In addition, Developer shall provide evidence that the pipes currently have the sufficient structural integrity to perform their intended purpose for the life of the project. (DS)
142. Developer shall provide a drainage report demonstrating that the site drainage facilities are capable of safely conveying project stormwater (up to and including a 1% chance storm) to a safe point of discharge without negatively affecting the neighboring properties. (DS)
143. Developer shall comply with the drainage requirements imposed by Ventura County Watershed Protection District. (DS)
144. This project is subject to the "Special Projects" provision of the City's Traffic Impact Fee resolution. The proposed use of the property is not adequately represented by a rate previously adopted by the City Council and the Institute of Transportation Engineers Trip Generation Manual as it does not provide appropriate trip generation statistics. Therefore, the Traffic Impact Fee will be based on a site specific traffic study, acceptable to the City Engineer, which calculates the average daily vehicular trips generated by the project. The fee will be based on the current rate per trip times the average daily vehicular trips. Currently, that rate is \$1,035/ADT. (DS)

TRAFFIC DIVISION CONDITIONS

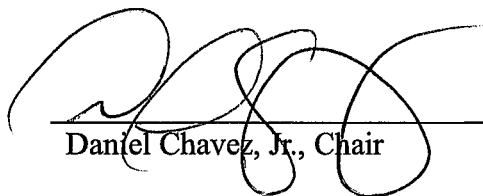
145. Developer shall design and construct the proposed emergency vehicle entrance/exit driveway along Hueneme Road. Final design, location and width of the driveway shall be reviewed and approved by the City Traffic Engineer in accordance with the Fire Department. (TR)
146. Developer shall install a sign "For Emergency Vehicle Use Only" on the proposed gate for the proposed emergency vehicle entrance/exit driveway along Hueneme Road. (TR)
147. Developer shall prohibit parking between the project's property line and the proposed fencing along Hueneme Road along Perkins Road. Developer shall be responsible in enforcing the no parking restrictions. (TR)

ENVIRONMENTAL RESOURCES DIVISION

148. Developer shall arrange for materials collection during construction, demolition, and occupancy with the City's Environmental Resources Division or Developer shall arrange for self-hauling.
149. Any landscaping maintenance resulting in organic material needing disposal, if performed in-house or via third party, must not be placed in the trash. All organic materials are required to be diverted from landfill disposal. Any third-party contract/service agreement must stipulate this requirement and be verified through the Environmental Resources Division.
150. Developer shall dispose of sewage and solid waste from the project by City's wastewater and solid waste systems in a manner approved by the City Engineer.

[Signatures on next page]

PASSED, APPROVED, AND ADOPTED by the Planning Commission of the City of Oxnard on this 20th day of October 2022.



Daniel Chavez, Jr., Chair

I hereby certify that the foregoing is a true copy of a Resolution adopted by the Planning Commission of the City of Oxnard at a meeting held on the 20th day of October 2022, and carried by the following vote:

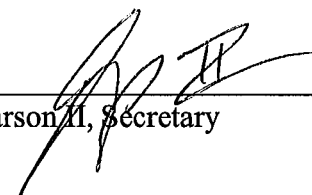
AYES: Commissioner(s): Chavez, Arruejo, Connelly, Zielsdorf

NOES: Commissioner(s): Nash

ABSENT: Commissioner(s):

ABSTAIN: Commissioner(s):

RECUSED: Commissioner(s): Meyer, Lopez



Joe Pearson II, Secretary

November 7, 2022

Via Email and Courier Service

City Clerk
City of Oxnard
300 West Third Street
Fourth Floor
Oxnard, CA 93030
Email: cityclerk@oxnard.org

Re: Appeal from Planning Commission Discretionary Approval of Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Members of the Oxnard City Council:

On behalf of The Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”) (collectively, “Community & Environmental Groups”) we write to appeal the approval of the Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project- specifically the Oxnard Planning Commission’s certification of the Final Environmental Impact Report No. 22-01 (“FEIR”) and its approval of Planning and Zoning Permit No. PZ 18-500-02 (“Special Use Permit”) for vehicle storage facility (“Project”). Despite receiving hundreds of public comments highlighting the serious inadequacies of the Project’s FEIR under the California Environmental Quality Act (“CEQA”), the long-term harm that the Project would bring to the region and the community of South Oxnard, and the viable alternatives that make this Project unnecessary, the Planning Commission (“Commission”) approved the Special Use Permit and certified the FEIR without carefully weighing these comments.

APPEAL OF THE PROJECT FEIR CERTIFICATION AND SPECIAL USE PERMIT APPROVAL

This letter serves as a formal request to appeal the Commission’s approval of the Project and the FEIR.¹ As described in further detail below, this appeal is premised on the following errors and omissions impacting key elements that are vital to the City of Oxnard Planning Division’s (“Lead Agency”) environmental review process:

¹ See Oxnard City Code §16-545. In the interest of ensuring a timely appeal request was filed, we reserve an opportunity to supplement this appeal letter with briefing regarding overriding concerns with the Project and the Environmental Review Process in a yet to be filed supplemental statement to be submitted once the hearing date has been set. This supplemental statement will provide further detail and discussion concerning the areas in which the Commission’s resolution to certify the FEIR and approve the Special Use Permit was unsupported by substantial evidence and contrary to applicable law. We also aim to provide the City Council with a presentation of this appeal at the hearing.

- 1) **The FEIR is replete with inconsistencies, omissions, and misrepresentation of facts by Oxnard Harbor District and the Lead Agency that tainted environmental review.** The FEIR has several inconsistencies. During the October 20, 2022 Planning Commission hearing, these inconsistencies were once again made evident in the answers given by the Oxnard Harbor District (hereinafter “Applicant” or “Port”) and the Lead Agency to questions by the Commission.² The Commission abused its discretion by ignoring these inconsistencies and certifying the FEIR. A table of these inconsistencies is attached as Exhibit A.
- 2) **The Commission erred in certifying a flawed Environmental Impact Report.** The Commission certified an FEIR that failed to comply with CEQA and contained numerous flaws that made it unreliable as an environmental review document. These flaws include unlawful piecemealing of the Project; failure to assess the cumulative impacts; failure to consider reasonable alternatives that would avoid building a parking lot near environmental justice communities and sensitive habitats such as wetlands; failure to properly mitigate environmental impacts, as well as inaccurate and inconsistent assessment of impacts related to traffic, air pollution, biological resources, cultural resources, toxic hazards, and environmental justice. As a result, Oxnard residents and this City Council have been deprived of the necessary information and analysis concerning this Project’s true near and long-term environmental impact.
- 3) **Public engagement and outreach failed to provide a meaningful opportunity for public comment by ignoring clear language access barriers.** Despite knowing that the impacted South Oxnard neighborhoods have a high percentage of households where English is not a dominant language, and after hearing numerous calls to translate the FEIR documents and provide simultaneous interpretation of public workshops and hearings, the Lead Agency refused to do so—creating additional barriers to meaningful participation in the environmental review process.
- 4) **Questions remain as to the temporary nature of this Project and concrete steps for fixing this issue remain vague.** During the October 20, 2022 Planning Commission hearing, commissioners raised concerns regarding the temporary nature of the Project and the site’s future remediation. For example, Commissioner Arruejo stated, “I do have ... serious concerns that it may not be temporary or even if it is that the cleanup will not happen in the manner that is put in the conditions of approval and so I intend to offer an amendment to ensure that there is more confidence by the community and Planning Commission that there is going to be a cleanup.”³ Additional concerns were raised by Commissioner Nash, who stated, “I do not find this Project as being a reasonable manner of preserving, protecting, providing for, and fostering the health safety and welfare of the citizenry in general, and the persons who work, visit, or live in this development in

² Despite Community & Environmental Groups’ efforts to obtain a formal transcript, no formal transcript was made available. See Exhibit B, Email dated Oct. 27, 2022, from Earthjustice to Ms. Chaparro, Mr. Rozell, and Mr. Dobrowalski requesting a formal transcript. As such, we have used the YouTube link available at: https://www.youtube.com/watch?v=_kxoKMFqoLo and the quotes and timestamps provided herein are our best approximation.

³ Planning Commission Hearing Oct. 20, 2022 at 5:03:32.

particular.”⁴ This was especially concerning in light of the Port’s admission that they are anticipating “one and a half million” in restoration costs, that should not be borne by the taxpayer.⁵ Residents and City leaders deserve to know how the site might continue to impact the region in the years ahead. Concrete plans need to be in place to address these serious concerns. For example, the final resolution could include amendments explaining how restoration should be carried out (e.g., including access points to the beach in South Oxnard, wetlands restoration, and consideration of how it the restored area could become an educational site where residents can learn and connect to the land), which experts the Lead Agency will work with to ensure sensitive habitats and species are adequately considered, what process will be in place to engage the surrounding community in developing the restoration plans, and who would bear final restoration costs.

5) The Commission made its decision based on an incomplete record.

The Lead Agency should have ensured that the Commission had all necessary information available before the Commissioners heard the matter and voted. Yet, despite many requests to ensure a complete record, several key items were still missing prior to the hearing—calling into question whether Commissioners had all records necessary to decide the matter properly.

The legal inadequacies of the Project’s Draft Environmental Impact Report (“DEIR”) and the FEIR under CEQA were previously described in comment letters submitted on February 14, 2022, July 1, 2022, and October 19, 2022, as well as through verbal comments provided by representatives of Community & Environmental Groups at the Community Workshop held on March 21, 2022, and the hearing before the Commission on October 20, 2022. These previously submitted comments⁶ are incorporated herein by reference in addition to other comments submitted by environmental justice, conservation, and environmental entities and concerned individuals that took part in this process. Each of these comments must be part of the record before this Council.

⁴ *Id.* at 4:56:56 disagreeing with language of special use permit page 2 of 28 Planning Commission finding, attachment H.

⁵ *Id.* at 4:19:33.

⁶ See Attachment 1, CAUSE, et al., February 14, 2022 Comment Letter [hereinafter “Commenters’ February Letter”], Attachment 2, CAUSE, et al., July 1, 2022 Comment Letter [hereinafter “Commenters’ July Letter”], and Attachment 3, CAUSE, et al., October 19, 2022 Comment Letter [hereinafter “Commenters’ October Letter”].

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ORGANIZATIONS BRINGING THIS APPEAL

Community & Environmental Groups are groups with individual members directly affected by the Commission's decision on this Project and entities whose mission to protect the environment will be impacted by the Project's effects on the region and the environment.

Community & Environmental Groups bring this appeal pursuant to Oxnard City Code §16-545 I. A general description of each organization follows:

- **CAUSE** is a base-building organization with deep roots in the City of Oxnard. CAUSE has worked closely with Oxnard residents to organize around social, economic, and environmental justice issues for over two decades. CAUSE works to protect communities from the environmental hazards of liquified gas terminals, power plants, and metal scrapyards. For years, CAUSE has collaborated with South Oxnard residents working towards a vision to deindustrialize and protect the Oxnard coast and open community access to Ormond Beach, where the environmental restoration of hundreds of acres of wetlands is underway. Many of CAUSE's members live, work, and attend school in and around the Project. They have a direct interest in the City Council's careful analysis regarding the impact of this Project on their neighborhoods and the region.
- **Earthjustice** is a non-profit public interest environmental law organization serving grassroots environmental justice organizations across the country to preserve irreplaceable wildlands, protect biodiversity, safeguard clean air and water, and protect frontline communities, like South Oxnard, from polluting industries. Earthjustice has represented several non-profit organizations, community groups, and grassroots coalitions in Ventura County on many environmental issues that could impact air and water quality, biodiversity, public health, and introduce harmful toxics.
- **NRDC** is a non-profit organization that works to safeguard the Earth, including its people, its plants and animals, and the natural systems on which all life depends. NRDC combines the power of hundreds of thousands of members and activists, including approximately 30 in South Oxnard and Port Hueneme, with the expertise of lawyers, scientists, and policy advocates across the globe to ensure the rights of all people to the air, the water, and the environment.
- **Wishtoyo Chumash Foundation** is a California 501(c)(3) non-profit public interest organization founded in 1997, with members composed of Chumash Native Americans, First Nations People, and Santa Barbara, Ventura, and Los Angeles County residents. Wishtoyo is a place, organization, and movement inspiring people to live in harmony with our Earth again. Wishtoyo serves as a "rainbow bridge" linking Chumash and Indigenous lifeways with the protection of natural and cultural resources, utilizing traditional ecological knowledge to provide environmental and cultural preservation and justice, education, research, and advocacy. Wishtoyo is deeply concerned with preserving cultural resources in the area and has commented on how the review of environmental impacts has ignored the fact that the Chumash people live in Oxnard today, have strong

connections to the Project area, and currently utilize natural cultural resources in the Project area, and that Chumash bands, tribes, and clans are sovereign entities.

PROJECT SITE LOCATION AND HISTORY

The Project site encompasses 34 acres of currently undeveloped land located at the southeast corner of Hueneme Road and Perkins Road.⁷ The Project site is bordered by the Ormond Lagoon Waterway to the south.⁸ The site is surrounded by residential neighborhoods, commercial uses to the north, a water purification facility to the south, and a proposed 3-acre trailer truck storage facility to the east.⁹

A portion of the Project site is designated as “Industrial Light” under the City’s General Plan and another portion is designated as “Park.”¹⁰ The zoning designation is “Light Manufacturing Zone with Planned Development Additive Zone.”¹¹ The Project site shows evidence of historical agricultural use¹²—yet there is no evidence that the land is currently being used for agricultural purposes.¹³

The City’s 2030 General Plan designated a portion of the 34-acre site as intended for park use. With its proximity to Ormond Beach and Ormond Beach Wetlands, the Project site is situated near two access points to both natural areas through Perkins Road.¹⁴ While commercial, industrial, and residential activity has surrounded the Project site in recent decades, it has been largely undeveloped except for historical agricultural use.

PROCEDURAL HISTORY

The Port submitted an application to the City of Oxnard on March 29, 2018, for a special use permit to convert two unused lots at Hueneme Road and Perkins Avenue into a temporary vehicle storage lot. The Project Lead issued a Mitigated Negative Declaration (“MND”) for the Project on December 13, 2018, which Community & Environmental Groups maintain failed to meet the City’s legal obligations under CEQA that required a full EIR. The Lead Agency received over 200 comments on the MND, including comments from CAUSE and the Wishtoyo.

On June 24, 2020, the Project Lead issued a Notice of Preparation (“NOP”) of a DEIR for the Project and initiated a scoping process. CAUSE, Wishtoyo, NRDC, and others submitted a comment letter on July 24, 2020, describing the impacts the EIR should consider and analyze. The Lead Agency did not provide substantive updates on the DEIR for over two years. The Lead Agency issued a Notice of Availability ahead of the winter holidays on December 16, 2021, and circulated a voluminous DEIR and appendices for public comment. Despite the DEIR’s length,

⁷ FEIR, Section 5.1.5, p. 5.1-11.

⁸ FEIR, Section 5.5.3, p. 5.5-13; FEIR, Section 3.4, p. 3-13

⁹ FEIR, Section 3.4, p. 3-13.

¹⁰ FEIR, Section 3.0, p. 3-2.

¹¹ FEIR, Section 3.2.2, p. 3-2.

¹² FEIR, Section 5.1.5, p. 5.1-10.

¹³ FEIR, Section 5.2.5, p.5.2-5.

¹⁴ Commenters February Letter, at p. 70; citing to Ormond Beach Restoration and Public Access Project: Preliminary Restoration Plan, pp. 4-11 through 4-19;

there were numerous deficiencies in the document’s methodology, analysis, and conclusions. Community & Environmental Groups submitted extensive comments on the DEIR along with over 110 organizations and individuals who opposed the DEIR and/or the Project.

Despite requests to hold a public hearing on the DEIR before the close of the public comment period, the Project Lead instead held a virtual Community Workshop after the close of public comment on March 21, 2022. The Workshop included a staff presentation and a presentation from the Port. During this meeting, the Project Lead solicited additional written comments from the public on the Project. In response to the request for additional input and as a result of new information that became publicly available following the close of the public comment period, Community & Environmental Groups submitted a supplemental comment letter on July 1, 2022, further substantiating the DEIR’s failure to adequately evaluate the impacts from the Project under CEQA.

Although Community & Environmental Groups’ supplemental letter was included in Staff’s Report to the Planning Commission, the numerous documents produced by the Port in response to Public Records Act requests and attached to the letter were left out of the record. Out of an abundance of caution, Community & Environmental Groups submitted their comments with these previously submitted documents. The record remains incomplete, with deficiencies further identified below.

The Lead Agency issued and circulated an FEIR for the Project on Indigenous Peoples’ Day, October 10, 2022—a day many agencies are closed. The Project and FEIR were scheduled to be considered by the Oxnard Planning Commission during a public hearing on October 20, 2022. Community & Environmental Groups submitted written comments before the Planning Commission hearing and were joined by many in-person and virtual speakers who attended the public hearing to raise concerns and voice their opposition to yet another polluting project in south Oxnard. Following hours of public comment on October 20, the Oxnard Planning Commission voted 4-1 to approve the FEIR and the Special Use Permit, with amendments to the resolution and two commissioners recusing themselves from the vote. This appeal is timely brought within 18 days of the decision pursuant to Oxnard City Code, Sec. 16-545(a).

GROUND OFS OF APPEAL

I. The Record is Replete with Inconsistencies, Omissions, and Misrepresentation of Facts by the Applicant and the Lead Agency That Make the FEIR Unreliable

Statements made by the Port, Glovis, and Commissioners at the October 20, 2022 public hearing highlighted many glaring discrepancies between the Project impacts claimed in the FEIR and the true purpose of the Project and impacts that the community will face. Exhibit A, attached, lists the full table of inconsistent statements. To highlight a few:

- At the hearing, Commissioner Nash stated that the automobile storage use facilitated by Project 34 will transition to the 250-acre site and that this link should have been analyzed in the FEIR. The FEIR fails to analyze the 250-acre site, thus failing to address the full scope of the Project and its cumulative impacts.

- The FEIR disingenuously notes that “the 250-acre Multimodal Logistics Park site was conceptual” and that “future development of a 250-acre site is unspecified and uncertain.”¹⁵
- But as Commissioners noted: “[w]hat happens after five years and the answer obviously is the use will transition to another parcel. So...where will that parcel be.... it’s going to be, you know, that [site] people have mentioned as a multimodal site so that to me that should have been included in the EIR.”¹⁶
- During the public hearing, Glovis and Port representatives claimed that the automobile industry is growing and that Project 34 is necessary to accommodate this growth. Thus, the intent of the Project is to increase the Port’s capacity, increase automobile throughput, and bring in more ships. This contradicts the FEIR, which claims that there would be no increase in automobile throughput as a result of the Project.
 - The FEIR disingenuously notes that the Port anticipates reductions in car throughputs.¹⁷
 - But the Port and Glovis admitted, “we want to continue to grow and grow.... The automobile industry right now it is scheduled to be back on par in 2024 with 16.5 million cars coming to America for sale . . . and we want Hueneme to be a part of that.”¹⁸
- During the public hearing, Port staff claimed the 34-acre Project would bring in more ships and vehicles, creating hundreds of stevedoring jobs from the increase in processing. However, the FEIR states that there would be no increase in vehicles or vessels.
 - The FEIR disingenuously notes, “[n]ew cars that would be stored at the vehicle storage facility would not require additional ships to arrive at the Port.”¹⁹
 - Yet the Port also claims that the Project will create “hundreds of jobs for the stevedoring for our longshoremen if you’re bringing in more vessels more vehicles...”²⁰
- The FEIR only analyzes the impact of 14 jobs being created, compared to the hundreds claimed by Port staff during the hearing.
 - The FEIR notes that “the proposed Project would be staffed by 14 employees: three security guards, up to ten vehicle drivers, and one shuttle van driver.”²¹

¹⁵ FEIR, Section 12.4.2, p. 12-9.

¹⁶ Public Hearing Oct. 20, 2022 at 4:48:17.

¹⁷ FEIR, Section 3.6, p. 3-15.

¹⁸ Public Hearing Oct. 20, 2022 at 42:53 - 43:15.

¹⁹ FEIR, Section 3.6, p. 3-17.

²⁰ Public Hearing Oct. 20, 2022 at 4:21:46; *see also* Oxnard Harbor District, Annual Comprehensive Financial Report, For the Years Ended June 30, 2021 and 2020 (2022), p. 21, available at https://www.portofhueneme.org/wp-content/uploads/2022/01/OHD_2021_ACFR-Final_Submitted.pdf (showing a 10% increase in imports and an 18% increase in exports – the Port is also already seeing increases in automobile throughput.).

²¹ FEIR, Section 7.1, p. 7-3.

- The Port, however, claimed that the Project would also “support hundreds of unions stevedoring and logistic jobs on Port”²² without answering the fundamental question of how it would do so if it is truly temporary.
- The Port stated at the public hearing that the Project would require the use of car-carrying trucks to carry cars from the Navy Base to distribution lots. The FEIR fails to analyze the environmental impacts of this part of the Project and falsely claims that no diesel-emission trucks would be involved.
 - The EIR disingenuously notes that the Project does not involve the use or storage of trucks or diesel-powered vehicles.²³
 - The Port admitted that “ultimately yes these vehicles do get to distribution from the Navy base by truck.”²⁴

These inconsistencies undermine the credibility and reliability of the FEIR and its analysis of the Project. As Commissioner Nash astutely noted, “the words environmentally friendly and green industry were used but ... saying so doesn’t make it so.”²⁵

Which is it – will automobile cargo processing increase or stay the same? Will there be more ships and trucks carrying cars into and through the community or will there be no changes to throughput? Will there be 14 new jobs, or hundreds? Will this Project be temporary, or is there a longer-term plan that involves vehicle storage not discussed in the FEIR? The Lead Agency cannot have it both ways. Either the FEIR is wrong, or the information given to the Commission and the public before the vote was misleading. Either way, CEQA has been violated²⁶, and the FEIR must be decertified.

II. The FEIR Omits Critical Information and Analysis in Violation of CEQA

As described in further detail below, rather than transparently disclosing the full extent of the environmental impacts, the FEIR arbitrarily and improperly limits the scope of this Project to the 34-acre set of parcels and the immediate area surrounding those parcels. In doing so, the FEIR fails to consider the impact of the Project when viewed in context alongside a much larger 250-acre storage site being planned just east of this Project and the massive expansion of port operations to the north and west. These fundamental omissions not only skew the analysis of cumulative and growth impacts and amount to unlawful piecemealing of this Project, but also render the FEIR legally deficient. The FEIR also fails to properly consider feasible, superior mitigation measures that are most effective in reducing air quality, health hazards, traffic, greenhouse gas emissions impacts, threats to biodiversity, and environmental justice. The following sections offer an overview of the ways in which the FEIR violates CEQA.

²² Public Hearing Oct. 20, 2022 at 33:38.

²³ FEIR, Executive Summary, p. 1-9.

²⁴ Public Hearing Oct. 20, 2022 at 4:29:00.

²⁵ Public Hearing Oct. 20, 2022 at 4:46:53.

²⁶ Public Hearing Oct. 20, 2022 at 4:14:03: City staff did prepare a mitigated negative declaration that was available for public review as a result of that public review City staff received over 200 Public comments as a result of all of those comments received the Lead Agency staff elected to prepare an environmental impact report (misleading statement – since the MND was deemed insufficient by City Council).

III. The FEIR Improperly Piecemeals the Project and Fails to Respond to Substantial Evidence

The FEIR misstates the true scope of the 34-acre site, leading to an incorrect analysis regarding the design of the Project. The FEIR also fails to respond to substantial evidence and its flawed Project Description violates CEQA.

The law requires that an EIR include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project, and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects. Furthermore, “even though further discretionary approvals may be required before development can occur, the agency’s environmental review must extend to the development envisioned by the initial approvals.”²⁷ There is ample evidence indicates that beginning in 2018, the 250-acre site was reasonably foreseeable.²⁸ The Port and the Lead Agency are contemplating multiple projects with a singular goal: to reduce capacity constraints for vehicle storage.

Most egregiously, the FEIR ignores evidence showing that the Lead Agency itself *knew* about the 250-acre site. In a document titled “Collaboration Call with City of Oxnard,” the Port provides information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.²⁹ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that “[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail.”³⁰ Thus, the Lead Agency was well aware that the 250-acre site was a reasonably foreseeable extension of the 34-acre site.

Furthermore, although the Global Response to Comments tries to explain how the 250-acre Multimodal Logistics Park site “was *conceptual*” and is “*one possible concept* for potential future development,” the evidence shows that this isn’t the case.³¹ The Port’s communications to landowners, the Memoranda of Understanding (“MOU”), and Letters of Intent (“LOI”) between

²⁷ See Kostka, et al., *Practice Under the California Environmental Quality Act*, § 6.52, p. 298; see also *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1451 (1989) (a **temporary** interim detention facility was to eventually make way for more permanent facilities. The Court held that where an EIR could be considered one small part of a larger goal – here, to ease jail crowding, some future action on a temporary project to a reasonably contemplated and therefore had to be incorporated in the EIR.)

²⁸ Commenters’ February Letter, pp. 9-11; see also Commenters’ July Letter, pp. 4-5.

²⁹ Commenters’ July Letter, p. 8 (citing OHD, Collaboration Call with City of Oxnard at p. 2) (Commenters also noted that “Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.”).

³⁰ Commenters’ July Letter, p. 8 (citing City of Oxnard & The Port of Hueneme: Partners in Economic Development, *Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard*).

³¹ FEIR, Section 12.4.2, p. 12-493.

Glovis and the Port demonstrate that concrete steps have indeed been taken to bring the project into fruition and render the 250-acre site very far from merely “conceptual.”³²

Ignoring this mountain of evidence, the FEIR erroneously claims that the 250-acre site does not need to be integrated into this project description and that no environmental analysis needs to be conducted because: (1) “the City of Oxnard has not received an application for proposed development of a 250-acre site”³³; and (2) a 250-acre parcel would require annexation which would be subject to future environmental review.³⁴

Neither of these stated excuses are authorized under CEQA. Whether a project is a “reasonably foreseeable consequence of the initial project” does not depend upon whether the Lead Agency has received an application for it or whether that project might trigger additional CEQA review. The Lead Agency also cannot use the fact that the entitlement will be subject to further environmental review as an excuse to avoid integrating the extension in its analysis currently.

As Commissioner Nash accurately summarized, “if we wanted to have a truly robust EIR ...[we must look at] what happens after five years and the answer obviously is the use will transition to another parcel. So...where will that parcel be.... it’s going to be [on the site] you know that people have mentioned as a multimodal site so that to me that should have been included in the EIR. [Not to] do an EIR that fulfills the basic legal obligations does the greater community a disservice.”³⁵

IV. The FEIR Inadequately Addresses Cumulative Impacts

The FEIR pays mere lip service to numerous Port projects that are in development and fails to include them in its cumulative analysis. Although the FEIR notes that several projects such as the 250-acre Multimodal Logistics Park, channel deepening, berth widening, on-dock expansions, expansion of rail lines, the Structure for Transfer of Automobiles Creating Key Economic Development (STACKED) Project, off-Port Cargo storage yards and overall expansion of Port Operations, the INVEST Project, the BUILD Project, and the Port Intermodal Corridor (Hueneme Modernization Project) are in development, the Project Lead ultimately rejects these projects because they are deemed to be speculative and not within the FEIR’s arbitrary geographic zones.³⁶

These objections are unfounded.

Community & Environmental Groups have explained with supporting evidence demonstrating why several projects that must be considered for cumulative impacts are not

³² Commenters’ July Letter, pp. 6-8 (citing Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019); *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020); Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020); OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing)).

³³ FEIR, Section 12.4.2, p. 12-9.

³⁴ *Id.*

³⁵ Planning Commission Hearing Oct. 20, 2022 at 4:48:17.

³⁶ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

speculative.³⁷ These projects include the proposed widening of Hueneme Road to four lanes included in the Roads and Transportation Five-Year Capital Improvement Program; how the Port has invested in a new rail line with Glovis; and the capital investments to deepen berths to accommodate larger capacity vessels.³⁸ The Lead Agency makes no effort to engage with the record evidence disproving the Lead Agency's conclusion that these projects are "speculative"³⁹ by showing how concrete steps were taken to move the projects forward.

The FEIR's arbitrary geographic boundaries have not been supported by reason. Delineating a line for any project "within the Port of Hueneme" is legally void, particularly given how the Port is viewing its many expansion projects as interconnected and in furtherance of its stated goal of expanding throughput. Furthermore, the lines drawn at Bard Road, Ventura Road, and Edison Drive are internally inconsistent because these boundaries are expanded elsewhere in the same FEIR.⁴⁰ The Lead Agency cannot cherry-pick instances in which to apply these arbitrary boundaries in a self-serving manner. The Lead Agency cites to no authority for setting these specific limitations. Furthermore, even within these arbitrary boundaries, several projects have at least some portion of their operations within this geographic region. The Lead Agency cannot dismiss all these projects as outside the geographic area without taking a hard look at the impacts that portions of these proposed projects will likely have.

In addition to being unfounded, the objections are simply not supported by the Port and Glovis' own admissions during the October 20, 2022, hearing:

- Despite stating in the FEIR that "the Port anticipates reductions in car throughputs,"⁴¹ the Port went on to state that "what this increased capacity is really doing is ... creating our capacity to bring more volumes through."⁴² Glovis supported these statements noting that "the automobile industry right now it is scheduled to be back on par in 2024 with 16.5 million cars coming to America for sale . . . and we want Hueneme to be a part of that."⁴³

The FEIR does not consider these growth expectations in the cumulative impact assessment.

³⁷ Commenters' February Letter, pp. 19-20 (citing INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary, PROD-00002504; INFRA FY20 Application Project Summary; [2020 OHD Comprehensive Economic Development Strategy](#), PHCN0002370; [2020 OHD Comprehensive Economic Development Strategy](#), PROD-PHCN0002353; INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project, PROD-PHCN00005158; OHD Board of Commissioners Meeting Agenda- September 11, 2017-Press Report Attachment, PROD-00002699; The Hueneme Modernization Project BCA Appendix - March 17 2021, PROD-0004367; The Hueneme Modernization Project INFRA Grant Application FY2021, PROD-0003201; Ventura County Freight Corridor Study, (October 2021), Prepared by Iteris, Inc., on behalf of Southern California Council of Governments, The Port of Hueneme, Caltrans and Ventura County Transportation Commission at 36, PROD-PHCN0001900-2126).

³⁸ *Id.*

³⁹ FEIR, Section 12.5, Response to Comment Letter #206, Response Nos. 206-35 to 206-38, pp. 12-1186 to 12-1187.

⁴⁰ FEIR, Section 5.33, p. 5.3-8 (Addressing air quality concerns arising from Port operations and agricultural use which are outside these boundaries); Section 12.4.2, p. 12-13 (Extending the VMT analysis to Camarillo Airport and Tuff shed – both of which are outside these arbitrary lines).

⁴¹ FEIR p. 3-15

⁴² Planning Commission Hearing Oct. 20, 2022 at 4:30:30

⁴³ Planning Commission Hearing Oct. 20, 2022 at 43:15.

- Despite stating in the FEIR that the Project “would not require additional ships to arrive at the Port,”⁴⁴ the Port contradicted itself during the hearing noting that the project will create “. . . hundreds of jobs for the stevedoring for our longshoremen if you’re bringing in more vessels more vehicles.”⁴⁵

The FEIR does not consider the increases in shipping (and associated berth-widening projects) in the cumulative impact assessment.

- Despite stating in the FEIR that “[n]o vehicle carrier trucks would be used to load or offload vehicles at the facility,”⁴⁶ the Port admitted during the hearing that “these vehicles do get to distribution from the Navy base by truck.”⁴⁷

The FEIR does not consider added diesel emissions from trucking or locomotives in the cumulative impact assessment.

- The FEIR does acknowledge some of the existing pollution sources, including nearby industries and superfund sites.⁴⁸ Indeed as Commissioner Nash highlighted, “South Oxnard continues to be impacted by the continuing operation of the . . . Ormond Beach Generating Station . . . and there are many other . . . industrial uses south of Hueneme Road that . . . cumulatively impact the environmental health of South Oxnard.”

The FEIR does not consider these existing pollution burdens and the cumulative impacts of new burdens on South Oxnard communities.

The FEIR’s cumulative impacts analysis remains deficient such that the FEIR cannot be certified.

V. The FEIR’s Air Quality and Health Risk Assessment is Insufficient

The FEIR erroneously concludes that the Project’s air quality impacts from both construction and operation would be “less than significant.”⁴⁹ This conclusion is fatally flawed as it is based on an arbitrarily restrictive definition of the project, as discussed in greater detail above. This determination also neglects to consider the true growth-inducing effects of the project and the emissions that will result from the encroachment of port-related storage and other goods movement activities, first at the Project site and later at the 250-Acre Multimodal Logistics Park already being planned.

By unlawfully bifurcating two phases of this Project—one immediately tied to the 34-acre site and the other linked to the much larger 250-acre multimodal logistics park—the FEIR

⁴⁴ FEIR, Section 3.6, p. 3-17

⁴⁵ Planning Commission Hearing Oct. 20, 2022 at 4:21:46

⁴⁶ FEIR, Section 12.4.2, p. 12-10.

⁴⁷ Planning Commission Hearing Oct. 20, 2022 at 4:29:00

⁴⁸ FEIR Global Response GR-5: Environmental Justice, p. 12-11.

⁴⁹ FEIR, Section 5.3-1, p. 5.3-1.

only discloses and analyzes a fraction of the emissions, air pollution, and accompanying health risks this Project is likely to bring to the region. This fundamental omission taints even the minimal air quality review the FEIR offers, making the conclusions reached entirely unreliable.

A. The FEIR offers an incomplete picture of Air Quality Impacts

Each phase of this Project will bring air quality impacts in the construction and operations of the vehicle storage and other port-related storage activities that the bifurcated plan will usher in. The FEIR fails to consider the true scope of these impacts by limiting its study of air emissions to only those trips generated for the 34-acre site. Even within this limited scope, the FEIR fails to offer a true assessment of the multiple trips that will occur to and from port-side roll-on/roll-off terminals to the 34-acre site, the number of additional employee commutes that will be generated for the vehicle storage operations, and shuttle service to the site.⁵⁰ This would be in addition to the alleged hundreds of jobs the Port claims the Project will generate.⁵¹ When considering the failure to include the reasonably foreseeable expansion to the 250-acre multimodal logistics park, the flaws in the FEIR's analysis of air quality impacts are fatal.

Moreover, the FEIR ignores the fact that this Project will facilitate growth and increase cargo and vessel throughput at the Port. Even if the Project does somehow decrease the diesel car carriers that deliver cars to temporary storage, the Project is slated to facilitate increased throughput at the Port by expanding the capacity to receive additional cargo. There is substantial evidence confirming that the Port is already undergoing efforts for significant expansion of Port activity, including deepening its harbor to bring in more imports⁵² and expanding off-port into various parts of the adjacent communities.⁵³ These expansion efforts will likely also require more cargo handling equipment, rail, and truck visits, resulting in higher localized pollution concentrations.

By their own admission, the applicant Port and the Lead Agency have indicated that rail will play a significant role in shipping cars out after being stored at the Project site.⁵⁴ This will undoubtedly raise pollution levels as the latest inventory shows that locomotives servicing the Port use older, more heavily polluting technology,⁵⁵ and since 2008, locomotive emissions at the

⁵⁰ See Commenters' February Letter, p. 28.

⁵¹ Public Hearing Oct. 20, 2022 at 4:21:46.

⁵² See, Mike Harris, *Army Corps of Engineers dredging Port of Hueneme channel, to replenish Hueneme Beach*, Ventura County Star, January 8, 2021, available at: <https://www.vcstar.com/story/news/local/communities/port-hueneme/2021/01/08/port-hueneme-army-corps-of-engineers-beach/4143430001/> (Berths 1 and 2 were deepened to 40 feet last year); see also Wendy Leung, *Construction to begin to deepen Port of Hueneme channel by 5 feet*, Ventura County Star, February 22, 2019, available at: <https://www.vcstar.com/story/news/2019/02/22/construction-being-deepen-port-hueneme-channel-five-feet/2887612002/>

⁵³ See, Oxnard Harbor District, Oxnard Harbor District Comprehensive Economic Development Strategy 2020, (Spring 2020), p. 32 available at: <https://www.portofhueneme.org/wp-content/uploads/2020/04/OHD-2020-CEDS-FINAL-04-08-2020.pdf> [hereinafter "2020 OHD Comprehensive Economic Development Strategy"]. The Port is also already seeing increases in automobile throughput. Oxnard Harbor District, Annual Comprehensive Financial Report, For the Years Ended June 30, 2021 and 2020 (2022), p. 21, available at https://www.portofhueneme.org/wp-content/uploads/2022/01/OHD_2021_ACFR-Final_Submitted.pdf (showing a 10% increase in imports and an 18% increase in exports).

⁵⁴ Commenters' February Letter, pp. 18-19.

⁵⁵ Commenters' February Letter, p. 29

Port have increased by 41%.⁵⁶ By omitting these elements from the FEIR and ignoring the full scope of impacts, the Project Lead has produced an FEIR that cannot support certification or the issuance of a special use permit.

Along similar lines, the FEIR ignores how this Project will bring air pollution triggered by port-related activities into new neighborhoods – further broadening air pollution exposure to more Oxnard residents. The proposed Oxnard site is across the street from Southwinds, one of Oxnard’s most densely populated neighborhoods.⁵⁷ To reach the 34-acre site, traffic will pass by five elementary schools, one high school, two community parks, low-income housing, and a community health clinic, impacting several thousand young children who are more sensitive to air pollution, residents who may be seeking treatment for conditions exacerbated by poor air quality, and comprise a population that already experiences disproportionately high levels of air pollution.⁵⁸

The FEIR fails to analyze the Project’s impact on these vulnerable populations by shifting air pollution toward them. Much like in *City of Long Beach v. City of Los Angeles*, where the court faulted the EIR for failing to address the fact that the Project would shift areas of high PM10 concentration to areas with homes and schools,⁵⁹ here, too, the FEIR ignores this prospect that Project will create similar burden shifting. The Project Lead cannot avoid this obligation by relying on the circular argument that because the FEIR announces a “less-than-significant impact” from emissions and claims the Project will consolidate operations without actually committing to shutting down existing sites, the FEIR is exempt from performing this crucial analysis to protect public health. Not only must the FEIR fully assess impacts from the entire Project—not just the piecemealed 34-acre site—but it must also review the localized impact the shift in activity will have on the Southwinds neighborhood and South Oxnard.

B. The FEIR’s Fundamental Modeling Errors and Omissions further tarnish the reliability of its Emissions Findings

The FEIR’s conclusions concerning air quality impacts are also premised on flawed modeling, unsubstantiated adjustments, and omission of key information as part of the California Emissions Estimator Model (CalEEMod) used to calculate emissions for the Project. Unsubstantiated input parameters were used to estimate the Project’s emissions and construction lengths, which artificially reduced the Project’s construction and operational emissions. This flawed modeling calls into question the FEIR conclusion that there are “less-than-significant” impacts from the Project.⁶⁰

With respect to construction phase lengths, the FEIR continues to include several unsubstantiated and unjustified changes to default construction phase lengths used in CalEEMod.

⁵⁶ *Id.* (citing Port of Hueneme Draft Emissions Inventory, Calendar Years 2018, 2017, and 2008, pp. 81, 89).

⁵⁷ *Id.*

⁵⁸ CAUSE Fact Sheet, pp. 1-2.; Commenters’ February Letter, pp. 30-31.

⁵⁹ *See, City of Long Beach v. City of Los Angeles* (2018) 19 Cal. App. 5th 465, 487.

⁶⁰ *See*, Letter from Matt Hagemann and Dr. Paul E. Rosenfeld (February 9, 2022) [hereinafter “Hagemann & Rosenfeld February Letter”], attached as Attachment 4; *See also* supplemental Letter from Matt Hagemann and Dr. Paul E. Rosenfeld (October 18, 2022) [hereinafter “Hagemann & Rosenfeld October Letter”], attached as Attachment 5.

Although the Project Lead claims to rely on applicant-provided information for changing these defaults, it fails to disclose the underlying information—making verification impossible. As a result, there are changes in the modeling that are not supported by “substantial evidence as required by CEQA.”⁶¹ These unsubstantiated changes ultimately skew construction emissions by improperly spreading them out over longer periods of time for certain phases over others— thus offering an incomplete picture of the Project’s true impacts.⁶² If done properly, each construction phase would reflect the different emissions activities associated with it and provide a more accurate portrayal of emissions associated with site preparation, installation of structures, and grading.⁶³

Moreover, the Project Lead included several construction-related mitigation measures such as “Reduced Vehicle Speed on Unpaved Roads” and utilization of “Water Exposed Area” to address fugitive dust and other emissions without properly committing to their implementation.⁶⁴ These mitigation measures were inserted into the modeling to project emissions resulting from construction. Without justifying these changes, however, the modeling may underestimate the Project’s construction-related emissions.⁶⁵

Similarly, the CalEEMod model used included several unsubstantiated changes to off-road construction equipment that would be used during the construction phase. Without justification, these changes amount to significant modeling errors that make it difficult to verify the emissions projections.⁶⁶ The FEIR failed to provide substantial evidence to support adjustments to the off-road construction equipment unit amounts, making the Project’s CalEEMod model unsubstantiated and the FEIR’s “less-than-significant” air quality impact conclusion unreliable.⁶⁷

C. Greenhouse Gas Emissions Assessment is Insufficient

The FEIR’s conclusion that greenhouse gas emission impacts are “less-than-significant”⁶⁸ relies on the same arbitrarily restrictive project description—thus limiting its assessment of GHG emissions to only the construction and operation of the 34-acre site. This ignores the port-activity expansion the Project will usher in, especially in light of the 250-acre multimodal logistics park it will help facilitate. Without accounting for the full scope of the Project, the FEIR wrongly concludes that there is a “less-than-significant” impact on global climate change and that mitigation measures are not required.

The FEIR further relies on the incorrect and unsubstantiated air modeling described above. Specifically, the FEIR failed to provide the underlying “Client provided” data that the Project Lead used to adjust CalEEMod models. Without this specific data and justifications for

⁶¹ Hagemann & Rosenfeld October Letter, p.3.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ Hagemann & Rosenfeld February Letter, p. 14.

⁶⁵ *Id.*

⁶⁶ Hagemann & Rosenfeld October Letter, p.3.

⁶⁷ *Id.* p.4.

⁶⁸ FEIR, Section 1.5, Table 1-4, Summary of Environmental Impacts and Mitigation Measures, p.1-28.

using it, the quantitative GHG analysis continues to underestimate emissions associated with the Project.⁶⁹

Moreover, the FEIR relies on outdated thresholds, which the Lead Agency fails to justify through substantial evidence. Due to these errors, the FEIR has failed to adequately identify potentially significant GHG impacts from the Project. For projects like this one being evaluated post-2022, the thresholds should be revised based on a new gap analysis that examines the development and reduction potentials out of the next GHG reduction milestones of 2030 or 2050.⁷⁰ The thresholds for this Project should be revised to reflect more updated GHG reduction targets.

This council recently considered the City's Draft Climate Action and Adaptation Plan (CAAP), which is being finalized. The CAAP stems from the City's 2030 General Plan and aims to update the City's sustainability goals and policies. The CAAP establishes a target—to reduce greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2030, consistent with state law. The CAAP will set strategies and actions to reduce emissions and help the community adapt to a changing climate.⁷¹ To meet these climate and sustainability goals, the City must have a complete and accurate inventory of GHG emissions from all projects within its jurisdiction and surrounding areas to more accurately set and meet these goals.

This FEIR simply fails to provide the information necessary for the public and City officials to clearly understand the GHG impact the Project will have during construction and operations. If the City is truly committed to meeting the targets set out in its CAAP, it must demand more from its agencies to more accurately predict the impact this and other projects will have on the region.

D. The FEIR Ignores Many Feasible Mitigation Measures Available to Reduce Emissions

The flawed air quality and GHG impacts analysis in the FEIR highlight the potentially significant impacts that will go unmitigated unless the FEIR is revised and done properly. As a result, the FEIR ignores significant mitigation measures that would apply to the Project and serve to reduce air quality and GHG impacts from both construction and operations.⁷²

Air Quality Mitigation Measures include measures to reduce substantial effects related to violating air quality standards, such as minimizing land disturbance, suspending grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent

⁶⁹ Hagemann & Rosenfeld October Letter, p.6.

⁷⁰ *Id.*, p.7.

⁷¹ See City of Oxnard, Climate Action and Adaptation Updates website, available at: <https://www.oxnard.org/climate-action-plan/>; last visited October 31, 2022.

⁷² Hagemann & Rosenfeld October Letter, pp. 10-13, *referencing*; “4.0 Mitigation Measures.” Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocial_addendum_4_mitigationmeasures.pdf?1606004420, pp. 4.0-2 to 4.0-10; pp. 4.0-19 – 4.0-23; See also: “Certified Final Connect SoCal Program Environmental Impact Report.” Southern California Association of Governments (SCAG), May 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocial_complete.pdf?1607981618.

plumes, covering trucks when hauling dirt, stabilizing the surface dirt piles if not removed immediately, limiting vehicle paths on unpaved surfaces and stabilizing temporary roads, minimizing unnecessary vehicular and machinery activities, sweeping paved streets at least once per day where dirt has been carried to the roadway, minimizing idling times to five minutes, providing operational water truck on-site at all times and using water trucks to minimize dust, developing a traffic plan that minimizes traffic flow interference from construction activities, and many other mitigation measures outlined in Southern California Association of Government guidelines.⁷³ The FEIR fails to exhaust this comprehensive list of mitigation measures designed to protect air quality and surrounding communities from diesel particulate matter, dust, and other emissions related to the Project's construction and operation.

Similarly, the FEIR ignores many of the Greenhouse Gas Project Level Mitigation Measures available for projects in the region.⁷⁴ These include measures to incorporate Best Available Control Technology during the Project's design, construction, and operation to minimize GHG emissions. The measures that the FEIR omits include some of the basic tools currently available to mitigate GHG emissions, such as using energy and fuel-efficient vehicles and equipment, deploying zero and near-zero emissions technologies, using a minimum feasible amount of GHG-emitting construction materials, incorporating design measures to reduce water consumption, as well as other measures that would reduce the impact to GHG emissions. Instead, the FEIR unjustifiably concludes that "less-than-significant" impacts would result, and therefore no mitigation is offered.⁷⁵

E. The FEIR ignores the City's obligations to meet regional air quality attainment standards

The FEIR also fails to assess how the Project's emissions will contribute to the region's ability to meet state and federal air quality standards. The Project is in the Ventura County Air Pollution Control District (VCAPCD), which is in serious nonattainment of the state and federal 8-hour ozone Standard,⁷⁶ and state particulate matter standards (PM10).⁷⁷ Increases in ozone pollution and particulate matter could impact the VCAPCD's ability to meet the standards, and mitigation measures should be developed and included in the FEIR to account for the Project's contributions to already high levels of air pollution. By omitting consideration of the full scope of this project, the FEIR fails to discuss indirect air quality impacts from both phases of the Project. One indirect impact could be increased emission of criteria pollutants from reasonably foreseeable off-site activities caused by the Project. The Lead Agency must evaluate the significance of criteria air pollutants emitted by off-site activities that are a "reasonably foreseeable physical change to the environment."⁷⁸ For example, an EIR for a refinery expansion must analyze how the expansion will impact the movement of rail cars and the impacts on air quality from those rail changes.⁷⁹ Here, the FEIR misses this critical examination required under

⁷³ Id.

⁷⁴ Hagemann & Rosenfeld October Letter, pp. 9-12.

⁷⁵ FEIR, Section 1.5, p. 1-28.

⁷⁶ Environmental Protection Agency, Air Quality Greenbook, Current Nonattainment Counties for All Criteria Pollutants, as of October 31, 2022; available at <https://www3.epa.gov/airquality/greenbook/anc1.html>

⁷⁷ FEIR, Section 5.3.2, p. 5.3-3.

⁷⁸ *Ass'n of Irrigated Residents v. Kern County Bd. Of Supervisors*, *supra*, 17 Cal.App.5th at 753.

⁷⁹ *Id.* at pp. 750-51.

CEQA and, in doing so, fails to offer a complete picture of air quality impacts and their effect on regional attainment goals.

VI. FEIR ignores the City's obligation to undertake a Health Risk Assessment

The FEIR improperly concludes that the Project will have less-than-significant health risk impacts without conducting a health risk impact assessment. To justify this omission from its analysis, the FEIR claims that the proposed Project would not be a potential source of Toxic Air Contaminants (TACs) because it is a temporary vehicle storage facility.⁸⁰ This cursory analysis of the Project's potential exposure to nearby sensitive receptors is flawed, and the conclusion that TAC impacts would be less than significant is incorrect for several reasons, including the following.

- **The FEIR fails to include a Health Risk Assessment.** The FEIR wrongly concludes that the Project will have a less-than-significant health risk impact without conducting a quantified construction or operational Health Risk Assessment (HRA). By failing to prepare a quantified construction and operational HRA, the Project is inconsistent with CEQA requirements to correlate the Project's emissions to adverse impacts on human health.⁸¹ When considering the larger 250-acre site, health risk impacts would be amplified as construction and operations emissions would greatly increase.⁸² This omission further ignores the Office of Environmental Health Hazard Assessment's guidelines recommending that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.⁸³ The FEIR also fails to compare the excess health risk impact of the Project to VCAPCD's Air Quality Assessment Guidelines' specific numeric threshold of 10 in one million.⁸⁴
- **The FEIR fails to examine cumulative health risks from increased air impacts.** The FEIR neglects to examine the health impacts of the Project's air quality impacts to residents stemming from expanded operations.⁸⁵ The short- and long-term effects of exposure to high levels of ambient air pollution on children, and adults, is a major concern based on a large body of research documenting associations between exposure to pollution from traffic-related sources and illness.⁸⁶ Here, the Project has the potential of

⁸⁰ FEIR, Section 5.3.5, p. 5.3-14.

⁸¹ Hagemann & Rosenfeld February Letter, p.16.

⁸² Id.

⁸³ Id, pp. 16-17.

⁸⁴ Ventura County Air Quality Assessment Guidelines." Ventura County Air Pollution Control District (VCAPCD), October 2003, available at: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>, p. 3-5 (hereinafter "October 2003 VCAPCD Guidelines"); See also, Hagemann & Rosenfeld February Letter, p. 17.

⁸⁵ *Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal. App. 4th 1344, 1364, 1367, 1371. (Holding that the Port of Oakland's EIR was insufficient because it did not analyze the health effects of toxic air contaminants from mobile sources on residents near the airport).

⁸⁶ See, e.g., Univ. S. Cal., *USC Children's Health Study: Study Findings*, <https://healthstudy.usc.edu/study-findings/> (last accessed Oct. 1, 2019); "The Children's Health Study," <https://ww3.arb.ca.gov/research/chs/chs.htm> (last accessed Oct. 1, 2019); John M. Peters, Univ. S. Cal., *Epidemiologic investigation to identify chronic effects of ambient air pollutants in Southern California* (2004), available at https://ww3.arb.ca.gov/research/singleproject.php?row_id=60245; Andrea Hricko, Glovioell Rowland, Sandrah Eckel, Angelo Logan, Maryam Taher, and

highly localized health hazards near busy roadways, including high levels of particulate matter and TAC exposures due to the expansion of freight corridor activity due to expanded Port operational capacity. A “good faith reasoned analysis” of the health effects of any increase in TACs caused by the Project is required.⁸⁷

- **The FEIR fails to adequately evaluate and mitigate Hazards and Hazardous Materials.** The City of Oxnard’s 2030 General Plan Safety and Hazards Chapter, Policy SH-7.12 Hazardous Material Studies, requires the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project.⁸⁸ The FEIR simply ignores this requirement and misrepresents the health risks that may be associated with the Project.

Due to the potential impact on human health at stake here, at a minimum, the FEIR should conduct a deeper analysis of the following: 1) particulate matter analyzed not only for the construction and operation of the Project, but in connection with the larger expansion efforts that include port capacity-building projects and the Multimodal Logistics Park that this Project is a part of; 2) diesel exhaust, also analyzed in context with Project’s role in facilitating the larger Multimodal Logistics Park that it will help support as well as the Port’s expansion endeavors; and 3) nitrogen oxides and ground-level ozone generated from the increase in port-related goods movement.⁸⁹

VII. The FEIR’s Vehicle Miles Traveled and Traffic Analysis is Flawed

The Lead Agency admits that neither it nor the Port Hueneme has adopted guidelines or significant criteria for assessing Vehicle Miles Traveled (“VMT”)⁹⁰ by development projects⁹¹ — a requirement under California Public Resources Code §21099 and 14 Cal. Code Regs § 156064.3 (CEQA Guidelines). Rather than conducting a robust VMT analysis for the Project, the FEIR concludes that no impact will result without providing sufficient information to appreciate the full scope of traffic impacts. The FEIR’s conclusion that no VMT impacts would result from the Project is unsupported by what little analysis is offered for three key reasons.

- **Improper threshold screening used to exclude the Project from further scrutiny.** The FEIR fails to adopt any specific methodology or criteria for its evaluation of the Project’s VMT that would make its conclusions verifiable. It inappropriately adopts a screening threshold found in the Governor’s Office of Planning and Research’s (“OPR”) Technical

John Wilson, *Global Trade, Local Impacts: Lessons from California on Health Impacts and Environmental Justice Concerns for Residents Living near Freight Rail Yards*, INT. J. ENVIRON. RES. PUBLIC HEALTH (2014), available at <https://doi.org/10.3390/ijerph110201914>. Cited in Commenters’ February Letter, p.36.

⁸⁷ Commenters letter, February 2022, pp.36-37.

⁸⁸ Hagemann & Rosenfeld October Letter, pp.1-2; see also Hagemann & Rosenfeld February Letter, pp. 20-24.

⁸⁹ Commenters letter, February 2022, pp.36-37.

⁹⁰ VMT is a measure used in transportation planning. It measures the amount of travel for all vehicles in a geographic region over a given period of time, typically over an annual period. It is calculated as the sum of the number of miles traveled by each vehicle over that time period. The FEIR does not make clear the precise timescale of the VMT analysis.

⁹¹ FEIR, Section 12.4.2, p. 12-13.

Advisory on Evaluating Transportation Impacts (“Technical Advisory”).⁹² However, no such threshold applies to this Project. The FEIR misapplies the qualitative analysis outlined in the Technical Advisory to conclude that a more robust VMT analysis is not required. Therefore, the FEIR’s conclusions that no VMT or traffic impacts are present are unreliable.

- **The FEIR’s Conclusion of Less-than-significant Traffic Impact relies on contradictory assumptions about the Project.** In its assessment of alleged VMT reductions, the FEIR assumes the elimination of two existing vehicle storage facilities to conclude that overall VMT reduction will result, while at the same time claiming that the traffic analysis was conducted “under existing and cumulative conditions, with due consideration of other related projects in the area.”⁹³ Existing conditions, of course, would include the same two existing vehicle storage sites the FEIR assumes will be eliminated- thus calling into question the reliability of the less-than-significant conclusion concerning traffic impacts.
- **The Traffic Report that the FEIR relies on for its assessment of VMT and Traffic was merely rubber-stamped and does not represent a comprehensive analysis of traffic.** Public records have revealed that the traffic report that undergirds much of the FEIR analysis on traffic was created in a way to offer cover for predetermined conclusions. Emails between Port staff and a land-use planning specialist suggest that the City might forgo a traffic report altogether by providing a letter, claiming, “the City just needs a paper trail - this way they can cover themselves with a letter from a professional.”⁹⁴ In subsequent emails, the hired consultant confirmed that they would prepare the trip generation analysis based solely on the Project Description and a Design letter⁹⁵— without considering the requirements outlined in CEQA guidelines or the recommendations found in the Ventura County Freight Corridors Study.

Given the cursory manner in which the traffic study and VMT analysis were conducted, it is unsurprising that the FEIR is replete with inconsistencies and contradictions that call into question its reliability as an informational document. Until these errors are corrected, the FEIR fails to meet basic standards under CEQA.

VIII. The FEIR Relies on Inadequate Analysis and Ignores Critical Evidence to Reach its Conclusion that there are no Impacts on Biological Resources

The FEIR ignores all evidence presented by Community & Environmental Groups and other commenters, including the California Department of Fish and Wildlife (“CDFW”), which raised similar concerns about the DEIR’s analysis and conclusions. Despite significant evidence to the contrary, the Lead Agency concludes that the Project site is not ecologically valuable and, therefore, no special-status species would be impacted by turning 34 acres of land into a parking lot for up to five years. The reasoning applied to reach this conclusion is entirely self-serving and fails to address the evidence raised by Dr. Shawn Smallwood, the Wishtoyo Chumash

⁹² FEIR, Section 5.19.5, pp. 5.19-18 to 5.19-19.

⁹³ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-51, pp. 12-1166 to 12-1167.

⁹⁴ Commenters’ July Letter (citing emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018)).

⁹⁵ *Id.* (citing emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018)).

Foundation, the CDFW, Brenton Spies, and many other commenters. As a result, the FEIR incorrectly concludes that the impacts from the Project with mitigation would not exceed significance thresholds for habitat loss (BIO-1, BIO-2), wildlife movement (BIO-4), or conflict with protective policies, ordinances, and plans (BIO-5, BIO-6), either directly or cumulatively.⁹⁶

The record contradicts the Lead Agency's conclusions and demonstrates that not only have special-status species (including listed species) been seen using the Project site, but also there is a high likelihood that many more special-status species⁹⁷ and sensitive plant life⁹⁸ depend on this property and the adjacent Ormond Lagoon Waterway, Beach, and Beach Wetlands for habitat, foraging, nesting, breeding, refuge, and migration. For example, the CDFW asserted that despite historical disturbances to the land, the Project could crush or fill active burrowing owl burrows and "will remove burrowing owl foraging habitat by eliminating native vegetation that supports essential rodent, insect, and reptile that are prey for the burrowing owl."⁹⁹ The CDFW's letter also stated that ground clearing and construction could lead to the mortality of special status species as well as a loss of land used for foraging, nesting, roosting, or refuge.¹⁰⁰ Dr. Smallwood's surveys and analysis substantiate these concerns; he estimates that the Project could deny California 190,720 birds over the next century due solely to the loss of this habitat. Moreover, the Project may impact sensitive species that use adjacent habitats, such as the northern tidewater goby.¹⁰¹

The analysis and data included in the FEIR remain incomplete and cursory. The two "reconnaissance surveys" conducted by Rincon Consultants were insufficient to document the presence or use by special-status species due to the time of year, the time spent on a property of

⁹⁶ FEIR, Section 5.4.1, p. 5.4-1.

⁹⁷ Dr. Smallwood identified 47 species of vertebrate wildlife, including 12 special status species and a keystone species, the ground squirrel. See Attachment 6, Commenters' February Letter, Smallwood Addendum B, pp. 1-9, 16. See also FEIR, Section 12.5, Comment Letter #208 from The Nature Conservancy, p. 12-1225 ("Considering the proximity of the site to sensitive habitats, there is a significant likelihood of the presence of sensitive species not detected during the limited biological surveys conducted (1 hour in 2018[sic], and 1 hour in 2020).")

⁹⁸ FEIR, Section 12.5, Comment Letter #216 from California Department of Fish and Wildlife, p. 12-1317 (describing concerns about impacts on Ventura marsh milk-vetch, Coulter's goldfields, Salt marsh bird's-beak, and Mexican malacothrix). There is also evidence that there could be wetlands habitat on the Project site. FEIR, Section 12.5, Comment Letter #76 from Larry Godwin, p. 12-323 ("In personal discussions I had with Wayne Ferren [author of the 2000 wetland delineation study] about [locations where wetlands were identified on p. 12-323], he stated 'it is not unusual for wetlands like this to be dry and dormant during dry seasons, but will reappear with a wet season.'"); see also attached testimony from Wayne Ferrens on p. 12-327 that describes his observation of *Atriplex argentea* on the property, a plant species whose presence "suggests strongly that at least a portion of the property supports wetland habitat in spite of the disturbed state as a result of disking." Another commenter also raised concerns that the City was taking a different approach to wetlands for this Project than it had for previous construction proposed in Oxnard. FEIR, Section 12.5, Comment Letter #108a from Barbara Macri-Ortiz, p. 12-466 (discussing the extensive care taken to protect wetland resources in the development of College Park, as compared to discounting of wetland resources here).

⁹⁹ FEIR, Section 12.5, Comment Letter #212 from South Oxnard Residents in Support of the Temporary Use Permit Application [hereinafter, "CDFW Comment Letter"], p. 12-1320.

¹⁰⁰ FEIR, CDFW Comment Letter, p. 12-1322.

¹⁰¹ Brendan Spies describes how construction and operation of the Project site could increase flow and runoff into the Waterway, impact air and water quality within the Ormond Lagoon Waterway and Beach, and result in harmful light pollution. "All these indirect effects from the Project could potentially cause the channel habitat near the Project site to no longer be suitable and occupied by tidewater gobies, which could pose future threats to the Ormond Lagoon population and metapopulation dynamics of the L.A./Ventura County Recovery Unit." Commenters' February Letter, Spies Addendum C, pp. 1-2.

this size, and the failure to follow survey protocols.¹⁰² Dr. Smallwood concluded that he was confident listed species use the site and that another 4 or 5 hours of surveying would have allowed for their detection.¹⁰³ The CDFW similarly stated that “[t]wo total hours of survey on a parcel of this size does not appear to provide adequate time to capture the range of biological resources on the property.”¹⁰⁴ Moreover, the FEIR continues to rely on the California Natural Diversity Database (“CNDDDB”) and inadequate surveys as the sole basis for determining that a species is not present on the site, rather than as a starting point for its analysis. This is despite both Community & Environmental Groups and the CDFW raising concerns about this improper database use.¹⁰⁵ Rather than engaging with the Community & Environmental Groups’ concerns and CDFW’s recommendation to carry out additional on-site surveys for plants and reptiles, and recirculating its DEIR, the Lead Agency instead concluded, based entirely on flawed surveys and a database review, that there was a low or no likelihood that species used the site—again, despite special-status species being seen on-site¹⁰⁶ or occurring as close as half a mile from the Project site.¹⁰⁷

FEIR also continues to erroneously assert that the property can be converted back to an ecologically valuable habitat following up to five years of use as a parking lot. This is not supported by any analysis or evidence but is merely stated as a conclusory statement. On the other hand, there is evidence in the record that once the site is converted to this use, the grading of the 34 acres and the packing of the soil as a result of hundreds of thousands of parked cars will permanently degrade the soil and reduce the habitat values of the property.¹⁰⁸ There also remain concerns that the runoff, air pollution, and light pollution from Project construction and operations could impact surrounding habitats, such as the Ormond Lagoon Waterway and the surrounding wetlands,¹⁰⁹ as well as species using those habitats.¹¹⁰

Due to the FEIR’s failure to adequately compile and evaluate a list of projects that cause or will cause related impacts, the FEIR falls short of considering the full harm this Project could cumulatively have on biological resources. Instead, FEIR concluded that compliance with federal, state, and city regulations means that cumulative impacts will not exist. This is not the definition of cumulative impacts under CEQA.¹¹¹

¹⁰² FEIR, Section 12.5, Comment Letter #216 from California Department of Fish and Wildlife, pp. 12-1316 (plant species); 12-1320 (burrowing owls); 12-1322 (reptiles). Commenters’ February Letter, p. 40 (citing Smallwood Addendum B, pp. 14-17).

¹⁰³ Commenters’ February Letter, Smallwood Addendum B, p. 13.

¹⁰⁴ FEIR, Response Letter #212, CDFW Comment Letter, p. 12-1316.

¹⁰⁵ FEIR, Response Letter #212, CDFW Comment Letter, p. 12-1316; Commenters’ February Letter, p. 40 (citing Smallwood Addendum B, p. 15)

¹⁰⁶ Commenters’ February Letter, pp. 41-42 (citing Smallwood Addendum B, pp. 1-17); see also *id.* Spies Addendum C, p. 1.

¹⁰⁷ See, e.g., FEIR, Appendix FA, p. FA-4 (concluding that Coulter’s goldfields cannot be present on-site despite a recent documented occurrence 0.4 miles from the site and that Mexican malacothrix was not expected to occur despite the last recorded occurrence being at Port Hueneme Beach Park).

¹⁰⁸ Commenters’ February Letter, Smallwood Addendum B, p. 21; Wishtoyo letter, p. 14.

¹⁰⁹ See Commenters’ February Letter, Spies Addendum C, pp. 1-2 (impact on Waterway); Wishtoyo Letter, pp. 4-6.

¹¹⁰ See Commenters’ February Letter, Smallwood Addendum B, pp. 22 (artificial lighting impacts on wildlife); Wishtoyo Letter, pp. 8-14; FEIR, Section 12.5, Comment Letter #191 from EarthAlert, p. 12-829.

¹¹¹ CCR, tit. 14, 15065(a)(3) (defines “cumulatively considerable” as when “the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects”).

Given that the FEIR's analysis is so cursory and incomplete, the City Council does not have enough information to evaluate the Project's full impacts. Nevertheless, based on the evidence of significant impacts and harms to special status species and habitats in the record, the proposed mitigation falls short of addressing these impacts from the Project. The CDFW, the Wishtoyo Chumash Foundation, Brenton Spies, and Dr. Smallwood included many recommendations and possible feasible mitigation measures, which the Lead Agency ignored almost entirely.¹¹² The slight update to the proposed mitigation measures will not address the Project impacts. A pre-construction survey is unlikely to detect species that are notoriously difficult to detect in surveys, such as the burrowing owl.¹¹³ It will not prevent the permanent loss of habitat, lighting impacts, or contamination of surrounding habitat from runoff and air pollution because of this Project.

Should the City Council approve the certification of this flawed FEIR, it will send a clear signal that it values building a temporary parking lot over preserving this unique and crucial habitat in south Oxnard and protecting the health of south Oxnard residents, all while risking permanent and serious harm to the health of this ecosystem. The City Council can and must do better to protect south Oxnard.

IX. The FEIR Failed to Properly Consider and Respond to Concerns About the Project's Impacts on Cultural Resources

The Lead Agency's supplemental analysis in the FEIR failed to supplement the Lead Agency's previous analysis of cultural resources.¹¹⁴ Despite the Lead Agency's clarified definition of archaeological and cultural sites, the FEIR misuses the term "cultural site" by using it synonymously with "archeological site" showing a clear lack of understanding of what a cultural site is.¹¹⁵ Archeological sites are locations identified to be of archeological value to researchers.¹¹⁶ Cultural sites include archeological sites, but also include many locations that are of little interest to archeologists, such as village sites where the ground has been previously disturbed and areas where sedimentation has relocated Chumash artifacts.¹¹⁷ Furthermore, cultural sites also include but are not limited to sacred sites, gathering locations, and cultural landscapes.¹¹⁸

Ormond Lagoon, its subwatershed, and surrounding wetlands make up important cultural resources, sites, and cultural landscapes for Chumash peoples. According to historical ecological assessments, the Santa Clara River ("Utom") lagoon system was once located at Port Hueneme and Ormond.¹¹⁹ Utom's estuary and lagoon system is a vital cultural resource to Chumash

¹¹² FEIR, CDFW Comment Letter, p. 12-1327 to 12-1334; Commenters' February Letter, Smallwood Addendum B; Wishtoyo Letter, p. 6.

¹¹³ See Attachment 7, Smallwood Reply Letter (Oct. 18, 2022), at pp. 8-9.

¹¹⁴ FEIR, Section 5.5, p. 5.5-1.

¹¹⁵ Id. at p. 5.5-16; FEIR, Response 184-12; See also, Attachment 8, Wishtoyo Chumash Foundation, February 14, 2022 Comment Letter at pp.3-4 [hereinafter "Wishtoyo February Letter"].

¹¹⁶ Wishtoyo February Letter, p.3 [hereinafter "Wishtoyo February Letter"].

¹¹⁷ Id.

¹¹⁸ Id.

¹¹⁹ Beller, EE, RM Grossinger, MN Salomon, SJ Dark, ED Stein, BK Orr, PW Downs, TR Longcore, GC Coffman, AA Whipple, RA Askevold, B Stanford, JR Beagle, *A report of SFEI's Historical Ecology Program: Historical ecology of the lower Santa Clara River, Ventura River, and Oxnard Plain: an analysis of terrestrial, riverine, and*

peoples of the region, providing abundant gathering opportunities for cultural keystone species like California tule (stapan) and southern steelhead (isha'kowoch).¹²⁰ Though the Santa Clara River has shifted course through time, Ormond Beach Wetlands and the surrounding areas have remained important cultural sites for Chumash peoples, where members of Chumash communities continue to visit to gather in ceremonies, practice traditional ecological knowledge, and enjoy wildlife viewing. The FEIR completely failed to address the Project's impacts on these cultural uses and cultural sites and utterly failed to address the region's ecological history and how it influences the cultural and archaeological resources that may be present at the Project site.

X. The FEIR fails to consider a Reasonable Range of Alternatives and Improperly Rejects Existing Alternatives

A major function of an EIR is the lead agency's full assessment of a reasonable range of alternatives stemming from a well-prepared project description and statement of objectives.¹²¹ Where a project description is inadequate or overly narrow—as is the case here—the alternatives analysis risks being equally flawed. As discussed in Community & Environmental Groups' February, July, and October comment letters,¹²² the project objectives were so narrowly tailored that they allowed the Lead Agency to improperly reject a host of alternatives that could have delivered substantial environmental advantages and public health protections. The resulting FEIR contained a flawed and incomplete analysis of alternatives tainting the Commission's decision to approve the SUP for a project that can be avoided.

The lack of detail provided in the EIR prevented a meaningful public review and reasonable choice of alternatives from being considered.¹²³ It is impossible, for instance, to know, based on the lack of detail in the FEIR, whether there are no feasible alternative sites for car storage that could meet the stated objectives.¹²⁴ Moreover, lead agencies must disclose their reasons for concluding no feasible alternative locations exist.¹²⁵ However, as discussed in Community & Environmental Groups' prior letters, the Lead Agency failed to consider the Navy Base Ventura County ("Navy") property in the FEIR and instead gave a cursory response in "Global Response"—failing to comply with CEQA.¹²⁶

coastal habitats (Prepared for the State Coastal Conservancy), San Francisco Estuary Institute Publication #641 at pp. 72-73 (2011) (Attached hereto as Exhibit C).

¹²⁰ *Id.* at pp. 8, 28-29, and 149.

¹²¹ Cal. Pub. Resources Code, § 21002; Cal.Code Regs., tit.14, § 15124(b); *Laurel Heights Improvement Ass'n v. Regents of the Univ. of California* (1988) 47 Cal.3d 376, 400; *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1163, citing Cal.Code Regs., tit.14, § 15124(b).

¹²² See, Commenters' February Letter, pp.68-82; See also Commenters' July Letter, p.15; and, Commenters' October Letter, p.7.

¹²³ See *Residents Ad Hoc Stadium Com. v. Board of Trustees*(1979) 89 Cal.App.3d 274, 287 ("Absolute perfection is not required; but what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.")

¹²⁴ FEIR, Section 1.5, pp. 1-11 to 1-12.

¹²⁵ Cal.Code Regs., tit.14, § 15126.6(f)(2)(B); see also *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405, as modified on denial of reh'g (Jan. 26, 1989) ("Those alternatives and the reasons they were rejected, however, must be discussed in the EIR in sufficient detail to enable meaningful participation and criticism by the public." (citations omitted))

¹²⁶ Commenters' October Letter, p.7.

The FEIR further improperly rejects alternatives simply because they are claimed to be beyond the Lead Agency's jurisdiction. There is no such limitation under CEQA,¹²⁷ and in fact, such a position ignores the definition of feasibility under CEQA.¹²⁸

Finally, this overly restrictive view of alternatives blinded the Commission's consideration of additional alternatives, potentially including the availability of zero-emissions technology that would mitigate traffic and emissions. This is despite Glovis being touted as a leading regional maker of heavy-duty Class 8 zero-emissions trucks. There are several mitigation measures related to the deployment of zero-emissions technology that the Lead Agency simply ignored in addressing the Project's air quality impacts.¹²⁹

In short, the Lead Agency's environmental review of this Project failed to consider viable and reasonably available alternatives that would have made this Project entirely unnecessary.

XI. FEIR Fails to Fully Consider Environmental Justice Impacts or Develop Appropriate Mitigation Measures and Alternatives

The temporary 34-acre storage site is located next to low-income, densely populated neighborhoods in south Oxnard. According to the most recent U.S. Environmental Protection Agency's ("U.S. EPA") Environmental Justice Screening and Mapping Tool, the neighborhoods next to the Project are, on average, in the 96 percentiles for diesel particulate matter exposure, in the 97 percentiles for traffic proximity, and in the 99% for Superfund site proximity in low-income communities of color across the country.¹³⁰ There is an elementary school and a health clinic only 780 feet from the Project site, and four elementary schools, one high school, two community parks, and low-income housing in the surrounding area. As a result, thousands of residents, including young children, would be exposed to worsened air quality from the planned Port expansions, including this Project. Numerous studies substantiate the toxic harms from diesel-powered trucking and freight, which fall disproportionately on communities of color and low-income communities.¹³¹ Children and other sensitive individuals are especially vulnerable to permanent and severe health impacts from exposure to diesel PM and other harmful vehicle emissions.¹³²

¹²⁷ See, *Residents Ad Hoc Stadium Com. v. Board of Trustees*, 89 Cal.App. at 286-287 ("[I]t is not appropriate to disregard alternatives simply because the alternative may be beyond the scope of expertise of the agency or because the alternative may require implementing legislation since CEQA was intended to provide a basis for consideration and choice by all branches of government.")

¹²⁸ CEQA Guidelines define feasibility as capable of "being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Cal.Code Regs., tit.14, § 15364.

¹²⁹ See Commenters' October Letter, p.9, Attachment 4, pp. 12-13

¹³⁰ See <https://ejscreen.epa.gov/mapper/>; see also <https://www.epa.gov/ejscreen/ej-and-supplemental-indexes-ejscreen#EJ> (explanation of EJ Index).

¹³¹ FEIR, Section 12.5, Responses to Comment Letter #206, p.12-1189 (citing Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in California*, fact sheet (Feb. 2019), available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>).

¹³² FEIR, Section 12.5, Comment Letter #203 from the University of Southern California Department of Population and Public Health Science at the Keck School of Medicine, pp. 12-887 to 12-891.

Lead agencies are required to study the environmental justice impacts of projects and to mitigate those impacts.¹³³ This discussion must include an evaluation of the Project's location because the significance of an impact on people and the environment may change based on the Project's setting.¹³⁴ Nevertheless, the FEIR continues to ignore the disproportionate harms that this Project would force surrounding communities to shoulder. The Lead Agency comes to its conclusion based entirely on the assertion that the Project site is "not located in an area with poor circulation or heavy traffic." The record contains no evidence that supports this conclusion, and, in fact, the Lead Agency has conveniently omitted from its analysis several reasonably foreseeable projects that could increase traffic and emission patterns.

The FEIR also fails to provide support for its conclusion that the Project is too far from nearby power plants, a superfund site, and factories to create a significant hazard to the public.¹³⁵ The City Council should require the Lead Agency to properly study the possible impacts of adding another industrial project to an already overburdened corridor – especially where the health and safety of vulnerable populations and overburdened communities are at stake.

The FEIR fails to discuss and develop mitigation measures and alternatives to the Project to address environmental justice impacts.¹³⁶ If the implementation of the Project will affect communities that are disproportionately people of color and low-income people already overburdened with pollution and health risks, mitigation is required to address those environmental justice concerns. This exploration of mitigation measures and alternatives to avoid or address harms to communities of color and low-income communities is absent from the FEIR, in violation of CEQA and Gov. Code 11135.

Indeed, as certain Commissioners noted, existing alternatives would be "environmentally superior to the proposed Project."¹³⁷

This cursory evaluation of the environmental justice impacts of the Project is a clear abnegation of the City's duty to its most burdened and marginalized residents. It shows a disregard for the health and dignity of this community. South Oxnard deserves better.

¹³³ Office of the California Attorney General, *Environmental Justice at the Local and Regional Level* (2012), p. 3, available at https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf; see also Government Code section 11135, subdivision (a), which provides in relevant part:

No person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state . . .

¹³⁴ *Id.*

¹³⁵ FEIR, Section 12.4.2, p. 12-11

¹³⁶ According to the Office of the Attorney General, "[w]here a local agency has determined that a project may cause significant impacts to a particular community or sensitive subgroup, the alternative and mitigation analyses should address ways to reduce or eliminate the project's impacts to that community or subgroup." *OAG Report* at 4; see also CEQA Guidelines, §15041(a).

¹³⁷ Planning Commission Hearing Oct. 20, 2022, at 4:55:20 referencing FEIR 3.2.2 Alternative Two.

INCOMPLETE RECORD

Section 12 of the FEIR describes the comments received in response to the DEIR and purports to include all comment letters. However, Section 12 of the FEIR excludes several comment letters, two of which seem to be detailed letters opposing the Project and raising serious concerns with the DEIR and to which the Lead Agency provided some responses. The first is a letter from the Wishtoyo Chumash Foundation (Mati Waiya, Tevin Schmitt, and Eva Pagaling).¹³⁸ The second comment letter excluded from the record is from Christina Zubko.¹³⁹

Lastly, the record also excludes several comment letters where the Lead Agency provided significantly fewer responses, which should nevertheless be part of the CEQA record. These include letters from the West Ventura County Business Alliance (Nancy Lindholm)¹⁴⁰ and from Carolina Gallardo Magaña from the Southwinds Neighborhood Council.¹⁴¹ The Lead Agency must confirm that all letters submitted as comments on the DEIR and FEIR (including Commenters' supplemental letter and attachments submitted in July) are included in the record for the City Council's consideration.

CONCLUSION

For the foregoing reasons, the Commission's certification of the FEIR and approval of the SUP do not comply with CEQA. The FEIR contains an incomplete project description, a deficient cumulative impact analysis that omits relevant projects and impacts, inadequate alternatives analysis, and an incomplete evaluation of environmental justice, air quality, traffic, language access, public health, and biological resources impacts. We urge the City Council to overturn the Planning Commission's decision, reject certification of the flawed FEIR, deny the requested Special Use Permit, and remand the Project back to the Planning Commission to address existing deficiencies in the Project's environmental review.

¹³⁸ See FEIR, Response to Comment Letter #182, p. 12-777 (containing only the email from Tevin Schmitt to City Planner Jay Dobrowsalski without any of the six attachments).

¹³⁹ FEIR, Response to Comment Letter #146, p. 12-627 (containing only an email from Christina Zubko to City Planner Jay Dobrowsalski without the attachment).

¹⁴⁰ FEIR, Response to Comment Letter #177, pp. 12-753 to 12-754 (containing only an email from Nancy Lindholm to City Planner Jay Dobrowsalski without the attachment).

¹⁴¹ FEIR, Response to Comment Letter #208, p. 12-1249 (containing only an email from Carolina Gallardo Magaña to City Planner Jay Dobrowsalski without the attachment).

Respectfully submitted,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtoyo Chumash Foundation

Cc: Jay Dobrowalski, Senior Planner, Oxnard Planning Division (Via Courier and Email)
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EXHIBIT A

Exhibit A**Table 1. Inconsistent and/or Inaccurate Statements regarding Project 34¹**

Description	Statement(s) in FEIR	Statement(s) at Oct. 20, 2022 Hearing
Improper Piecemealing		
The 250-acre site is foreseeable and should be accounted in the project description and cumulative impacts, contrary to the FEIR statements. At the Planning Commission Meeting held on October 20, 2022, Commissioner Nash testified that the automobile storage use facilitated by Project 34 will transition to the 250-acre project site, and that this site should have been analyzed in the EIR.	“The “250-acre Multimodal Logistics Park” site was conceptual at the time of the Notice of Preparation and is one possible concept for potential future development. To date, the City of Oxnard has not received an application for proposed development of a 250-acre site. Currently, the City of Oxnard does not have a vacant 250-acre parcel located within City limits. Thus, the potential development of a 250-acre parcel would require annexation into the City of Oxnard and entitlement of that site to allow for that use. Pursuant to CEQA, any discretionary land use entitlement would be subject to environmental review. Since future development of a 250-acre site is unspecified and uncertain, the City has determined that potential future development of a 250-acre site is not reasonably foreseeable and is speculative.” (FEIR p. 12-9)	“I think if we wanted to have a truly robust EIR ...why aren’t we looking at the cumulative project scenario . . . what happens after five years and the answer obviously is the use will transition to another parcel. So...where will that parcel be.... it’s going to be [on the site] you know that people have mentioned as a multimodal site so that to me that should have been included in the EIR... [not to] do an EIR that fulfills the basic legal obligations does the greater community a disservice” (Commissioner Nash, 4:48:17)

¹ Despite appellants efforts to obtain a formal transcript, no formal transcript was made available. See Exhibit B, Email dated Oct. 27, 2022, from Earthjustice to Ms. Chaparro, Mr. Rozell, and Mr. Dobrowalski requesting a formal transcript. As such, we have used the Youtube link available at: https://www.youtube.com/watch?v=_kxoKMFqoLo and the quotes and timestamps provided herein are our best approximation.

	“In addition, the City does not consider conceptual long-range projects under the jurisdiction of another lead agency to be reasonably foreseeable, and therefore, the development of the 250-acre development project mentioned by the commenter is speculative.” (FEIR pp. 12-17 to 12-18)	
Failure to Consider Cumulative Impacts and Growth		
Increases in automobile throughput is clearly anticipated by the Port and Glovis, contradicting assumptions stated in the FEIR. During the public hearing, Glovis and Port representatives claimed that the automobile industry is growing and that Project 34 is necessary to accommodate this growth. Thus, the intent of the Project is to increase the Port’s capacity, increase automobile throughput, and bring in more ships. This contradicts the FEIR which claims that the automobile industry is slated to decline, and that there would be no increase in automobile throughput as a result of the project. These growth assumptions must be accounted for in the cumulative impacts section. Currently, this is ignored by the Port and the City.	“The auto industry is predicting national car sales reductions of two to three percent annually in the next several years. The Port anticipates reductions in car throughputs as a result of this economic trend, and this project would help to create storage space for up to 30,000 cars annually, which would offset an anticipated throughput reduction of approximately the same number of vehicles.” (FEIR p. 3-15)	“We want to continue to grow and grow most recently because of space constraints we just diverted three vessels away from the Port of Hueneme and that was the 30-2500 cars per vessel . . . we ask that you support this so that we continue to grow” (Glovis representative, 42:53) “We want to continue to grow . . . the automobile industry right now it is scheduled to be back on par in 2024 with 16.5 million cars coming to America for sale . . . and we want Hueneme to be a part of that.” (Glovis representative, 43:15) “what we’re seeing now is that industry start to recalibrate those semiconductor chips come back to these vehicles and w . . . what we’re seeing on the front end of the supply chain is as these chips are getting back into the supply chain back into our vehicles, we’re seeing volumes go up” (Kristen Decas, 4:01:54- 4:03:20)

		“Our customer Glovis earlier today mentioned that they’re actively turning some business away right now because they don’t have enough space for that business to land. A lot of the business actually that’s wanting to come to the port is EVs. Some of these customers are looking for ports and options to actually ship their vehicles on the west coast. The port of Hueneme is a great location for them but they can’t come if we don’t have the space.” (Donna Lacayo, 4:04:51) “What this increased capacity is really doing is giving us more staging area off Port because we only have a 200/120 acre facility so it’s not going to get any processing things not going to happen there it’s just creating our capacity to bring more volumes through” (Kristen Decas, 4:30:30) “What happens in our case is we only have 120 acre footprint and we have all these extensions of the port off Port so when cargo lands at the Port of Hueneme the cars literally will sit there a few days and then they need a place to go to go get processed and so the cars move out to these processing centers at these extension support up port and so what this increased capacity is really doing is giving us more staging area off Port ... it’s just creating
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		our capacity to bring more volumes through then they would go back to GLOVIS’ processing center and get it out to Market” (Kristen Decas, 4:30:15)
Increases in vehicles and vessels are anticipated contradicting assumptions stated in the FEIR. During the public hearing, Port staff claimed the 34-acre project will bring in more ships and more vehicles, creating hundreds of stevedoring jobs from the increase in processing. However, the FEIR states that there would be no increase in vehicles or vessels.	“New cars that would be stored at the vehicle storage facility would not require additional ships to arrive at the Port, because the current fleets of scheduled vessels have enough capacity to add cars without any need for additional vessel calls. Any increased volume of new vehicles is anticipated to be offset by the softening of the market for other auto customer vehicles moving through the Port.” (FEIR p. 3-17)	The project “also supports hundreds of unions stevedoring and logistic jobs on Port.” (33:38) The project will create “. . . hundreds of jobs for the stevedoring for our longshoremen if you’re bringing in more vessels more vehicles, you’re going to see a lot more union work from that from that side of it and then the processing side as well” (Kristen Decas, 4:21:46)
There is clearly trucking and trucking related emissions involved in this Project – which have not been considered in the FEIR. The Port stated at the public hearing that the Project will require the use of car carrying trucks to carry cars from the Navy Base to distribution lots. The FEIR fails to analyze the environmental impacts of this part of the Project, and falsely claims that no trucks would be involved.	“It should be noted that while the project does contemplate the use of a limited number of diesel-powered vehicles during construction, the project does not involve the use or storage of trucks or diesel-powered vehicles (Draft EIR, Section 1.3, Project Summary, pp. 1-5 and Section 5.3.5, Project Impacts and Mitigation Measures, p. 5.3-15). The project would reduce the need for car carrier truck movement to distribute vehicles, reducing the need for heavy duty truck movement. No vehicle carrier trucks would be used to load or offload vehicles at the facility. The vehicle fleet mix traveling to and from the vehicle storage facility would include only passenger cars and shuttle vans; no semi-	“Ultimately yes these vehicles do get to distribution from the Navy base by truck. That’s how they get into auto shops in retail. But from that support logistics piece of it just moving them back and forth between the port and the Navy base you take that truck piece out.” (Kristen Decas, 4:29:00)

	trucks or other heavy transports would be used (Draft EIR, Section 1.3, Project Summary, pp. 1-5, and Section 3.6, Project Description pp. 3-22).” (FEIR p. 12-10)	
The FEIR fails to recognize that the 34 acre project would add to pollution the South Oxnard community already faces from several existing industrial sources. Although the FEIR does acknowledge some of the existing pollution sources in response to comments made by the public, it fails to analyze the environmental justice or cumulative impacts of the 34-acre project added to these existing pollution sources.	“Lastly, regarding commenters’ concerns associated with nearby power plant, superfund site, and nearby factories, additional information regarding the Halaco Superfund Site has been added to this Final EIR (see Section 5.9.5, Project Impacts and Mitigation Measures, Threshold HAZ-4, pp. 5.9-12). The Halaco Superfund Site is located approximately 0.5 miles south of the proposed project. However, due to the distance between the project and the Halaco Superfund Site, the project would not create a significant hazard to the public or the environment in association with this site. In addition, additional resources from the Cortese list have been referenced in the Final EIR (see Final EIR, Section 5.9.5, Project Impacts and Mitigation Measures, Threshold HAZ-4, pp. 5.9-12). As discussed in this section, although various Leaking Underground Storage Tank (LUST) cleanup cases were identified in the vicinity of the site in the GeoTracker database, these cases have been closed and would not result in significant hazards to the public and the environment. ¹⁰¹ The existing GenOn	“South Oxnard continues to be impacted by the continuing operation of the . . . Ormond Beach Generating Station . . . and there are many other . . . industrial uses south of Hueneme Road that you know do cumulatively impact the environmental health of South Oxnard.” (Commissioner Nash, 4:42:48)

	power producer is located approximately 1.2 miles southeast of the project site and therefore, due to the distance to the project site, the project would not create a significant hazard to the public or the environment in association with this facility.” (FEIR 12-11 to 12-12)	
Inaccurate Descriptions of Project and Project Surroundings		
The FEIR incorrectly states that the proposed project is surrounded by urban development. Commissioner Nash testified that there is a wetlands bordering the southern portion of the project.	“The project site is vacant and undeveloped, and the surrounding area to the north, west, and east is developed and urbanized.” (FEIR 5.2-5)	The project “is bounded on much of the South by an upper wetlands interface and the fact that there’s a railroad track there that it never gets used really doesn’t change that dynamic” (Commissioner Nash, 4:46:18) No response from the Port or the City on this misstatement.
The FEIR incorrectly states that the City of Oxnard is highly urbanized and built out, so that it would not be feasible to obtain another site of similar size. Commissioner Nash testified that he believes this statement to be false.	“The City is mostly developed, with the exception of some undeveloped land to the south of the project site, where the Ormond Lagoon and various undeveloped parcels are located. Therefore, there are very limited areas of approximately equivalent size to the project site that could be used for the project. In addition, the project applicant does not control another site within the City of comparable land area that is available for development of the proposed project. One of the factors for feasibility of an alternative is “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.” Because the City is	“I think this is that this is a false statement and again renders the EIR inadequate” (Commissioner Nash, 4:54:55) No response from the Port or the City on this misstatement.

	highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible.” (FEIR p. 6-4)	
The FEIR only assesses the impact of 14 jobs, compared to hundreds that the Port stated in the public hearing.	“The proposed project would be staffed by 14 employees: three security guards, up to ten vehicle drivers, and one shuttle van driver. It is anticipated that the employees would be from the local population and existing workforce in the area. Thus, the employment growth associated with the proposed project can be accommodated in the City of Oxnard and surrounding cities and would not be considered growth inducing with respect to unanticipated economic expansion.” (FEIR p. 7-3)	“The project would create 30 good paying local jobs. This includes 14 direct jobs and 16 indirect jobs. It also supports hundreds of unions stevedoring and logistic jobs on Port.” (33:38)
Failure to Consider Alternatives and Mitigation		
The FEIR incorrectly states that electric car carrier trucks are not anticipated to be available through the life of the project. Commissioner Nash testified that electric trucks are currently being developed by several manufacturers and are in use by other Ports in Southern California. ²	“Additionally, to the knowledge of the Port Customer, there are no commercially available electric car carrier trucks. Therefore, electric car carrier trucks are not anticipated to be commercially available feasible for the Port or City to acquire during the five-year life of the proposed project. Therefore, under this alternative without the use of traditional car carrier trucks, vehicle transport would	“I did a little bit of research and . . . at least Volvo, Hyundai and Daimler are developing hydrogen fuel cell trucks and Nicola one is developing a hydrogen fuel cell battery truck we heard San Diego the Port of San Diego you know mentioned as having these vehicles I read where the ports of Long Beach and Los Angeles um have these vehicles and they’re on the road they’re available so I

² Commenters’ February Letter, pp. 71-83; Commenters’ July Letter, p. 15 (and related Attachment 6). There are companies working on developing zero-emissions Class 6-8 car carrier trucks and a commitment by the Port to order and use these carriers could drive additional investments in this type of technology. See Namrita Chow, Electric car carriers promise to pack a punch, Automotive Logistics, access Oct. 17, 2022 at 4:52pm, <https://www.automotivelogistics.media/finished-vehicle-logistics/electric-car-carriers-promise-to-pack-a-punch/42868.article>.

	not be able to occur and this alternative would be infeasible.” (FEIR p. 1-11)	don’t I don’t understand why this wasn’t um explored more fully in the EIR this lack of consideration for a truly green alternative renders the EIR inadequate” (Commissioner Nash, 4:52:18) Neither the Port nor the City had any response to the commercial availability of EV car carriers.
Although the project is supposedly temporary, permanent additions such as fences hinder future restoration efforts. The FEIR offers an uncertain future for the project site that could conflict with the Ormond Beach restoration plan and potential use of the site as a Gateway Park. The FEIR states that the 6-foot-high chain link fence would remain in place after the 5-year life of the project. Commissioner Nash testified that this would close off the ability for the site to become part of Gateway Park.	“The Applicant is requesting approval of the Special Use Permit for a maximum of five years. The permit would be subject to a condition of approval to require the removal of the vehicle parking area, the guard house, portable restroom, perimeter site lighting, and gravel surface. The 6-foot-high chain-link fencing, landscaping, drainage and associated infrastructure improvements would remain on-site and be maintained by the property owner.” (FEIR p. 1-10)	“It’s been the wish and desire of the Groups I’m interested in the Ormond Beach Wetlands restoration plan to have this site as a Gateway park” and pointing out inconsistency with 2030 general plan policy to work with Oxnard resident to provide access to visitor centers and access to scenic areas. (Commissioner Nash, 4:58:04) “Once we put a fence around this parcel then we've kind of closed off the um the ability for this for this site to be part of a . . . Gateway Park” (Commissioner Nash, 4:44:25)

EXHIBIT B

César Nije

From: Radhika Kannan
Sent: Thursday, October 27, 2022 10:16 AM
To: cityclerk@oxnard.org; Rozell, Kenneth; Dobrowalski, Jay
Cc: Fernando Gaytan; Ospina, Natalia; Kryczka, Heather
Subject: Request for Formal Transcript: Planning Commission Hearing Oct. 20, 2022

Dear Ms. Chaparro, Mr. Rozell, and Mr. Dobrowalski,

I am writing to request a formal written transcript of the Planning Commission Meeting held on October 20, 2022. If there are any fees associated with the transcript, please let me know what these fees would be. We would like this formal transcript to become part of the administrative record for Temporary Outdoor Vehicle Storage Facility Project (State Clearinghouse #2020069039) and PZ 18-500-02 (Special Use Permit).

Sincerely,
Radhika Kannan

Radhika Kannan
Pronouns: she/her/hers
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EXHIBIT C

HISTORICAL ECOLOGY

of the lower Santa Clara River, Ventura River, and Oxnard Plain: an analysis of terrestrial, riverine, and coastal habitats



San Francisco Estuary Institute

7770 Pardee Lane, 2nd Flr, Oakland, CA 94621

p: 510-746-7334 (SFEI), f: 510-746-7300, www.sfei.org

HISTORICAL ECOLOGY PROGRAM
CONTRIBUTION NO. 641 • AUGUST 2011

HISTORICAL ECOLOGY
of the lower Santa Clara River, Ventura River, and Oxnard Plain:
an analysis of terrestrial, riverine, and coastal habitats

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Report and GIS layers are available on SFEI’s website, at www.sfei.org/projects/VenturaHE.

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Front cover, from left to right: Detail of cross section (by Jen Natali); 19th century Ventura River (Unknown ca. 1890, courtesy of the Museum of Ventura County); modern Santa Clara River (courtesy of Gretchen Coffman); diseño map (U.S. District Court ca. 1840c, courtesy of The Bancroft Library, UC Berkeley)



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HISTORICAL CONDITIONS, EARLY 1800S

Coastal and Estuarine Habitats

- Ocean
- Beach/Dune
- Lagoon
- Tidal Flat
- Salt/Brackish Marsh and Tidal Marsh
- Salt Flat/Seasonal Pond/ Marsh Panne
- High Marsh Transition Zone

Palustrine and Terrestrial Habitat

- Perennial Freshwater Pond
- Valley Freshwater Marsh
- Willow Thicket
- Wet Meadow
- Alkali Meadow
- Alkali Meadow/Flat
- Oaks and Sycamores
- Grassland/Coastal Sage Scrub

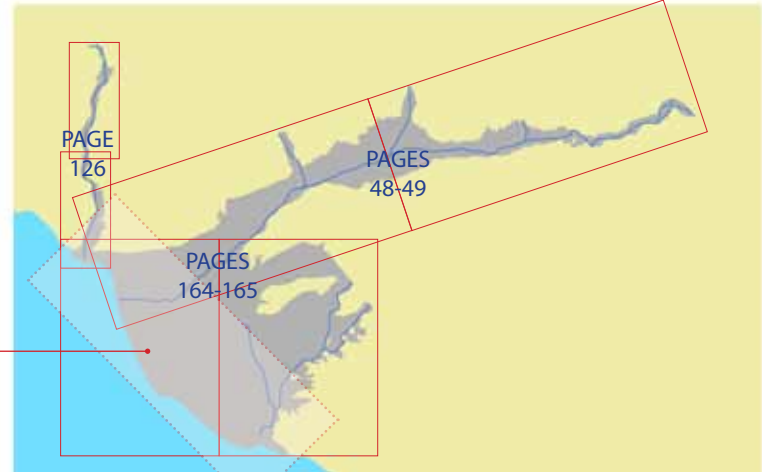
Characteristic Riparian Habitat

- Willow-Cottonwood Forested Wetland
- Other In-Channel Riparian

Hydrology

- Intermittent or Ephemeral
- Perennial
- Distributary
- Outer River Bank
- Spring

This map reconstructs the habitat characteristics of lowland Ventura County prior to significant Euro-American modification (early 1800s). More detailed views are provided in the map sections shown to the right. Some habitat classifications combined here (e.g., beach/ dune) are separated in finer-scale maps (see pages at right).





The State Coastal Conservancy is proud to have funded this study of historical coastal wetlands, rivers, and other habitats of Ventura County. The project was led by the San Francisco Estuary Institute, the leading authority in the analysis of California coastal historical ecology. In this study, they have teamed with a number of experts on Southern California rivers and coastal wetlands, including Stillwater Sciences, Southern California Coastal Water Research Project, California State University Northridge, and other institutions.

This study uses history – namely, the interpretation and integration of historical documents with environmental sciences – to provide a new perspective on how the Ventura County landscape has changed since the early 19th century. Synthesizing over two centuries of local documents, this report and accompanying GIS layers significantly improve our understanding of the natural forces that have shaped the local landscape. The study provides guidelines and inspiration for improvement of the environmental health of this region, which is the goal of the Coastal Conservancy and the governmental agencies and conservation organizations who are our valued partners in Ventura County.

The work of the Coastal Conservancy is to protect, restore, and make accessible the lands and waters of the California coast. SFEI's study will assist us and our partners in several ways. First, it shows us what elements of Ventura County's natural heritage have been lost, and suggests where those might be recovered. Secondly, the study helps us understand the physical and ecological processes still influencing systems today, enabling us design more effective, cost-efficient projects. In fact, the study identifies a number of opportunities to take advantage of intact natural processes to make more self-sustaining projects. Finally, and perhaps most importantly, we hope this new information will involve the Ventura community in considering the natural history of their region and its potential for the future. What underlies the built environment of this area? Through this research, we can now discover and uncover what came before European settlement of Ventura County. Though it will never be the same again, much of this until-now forgotten landscape can be restored, along with the sights and sounds of the species that have long depended on it. These lessons from history can help us make our landscape healthier and more resilient in the coming decades.

This study is dedicated to the people of Ventura County, supporters and sustainers of our work together, so that they can better love and understand the place where they live.

PETER S. BRAND

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C a l i f o r n i a S t a t e C o a s t a l C o n s e r v a n c y

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REGIONAL SUMMARY

Great changes have swept through Ventura County over the past 250 years. Willows and live oaks have been cut down, and eucalyptus and other non-native street trees have been planted. Wetlands have been drained and cultivated. Creeks have been straightened and connected to larger streams. Rivers have been hydrologically and ecologically altered by levees, flow diversions, and timber cutting, and have lost floodplain area to farms and cities.

Despite these changes, lowland Ventura County retains substantial high quality ecological resources, particularly in comparison to other, more urbanized, areas of coastal southern California. The two major rivers in the region—the Ventura and the Santa Clara—possess significant restoration potential. The Santa Clara River has remained unchannelized and relatively unregulated by dams, and as a result has retained much of its former reach-scale flow variability, geomorphic process, and riparian heterogeneity. The Ventura River, due in part to relatively limited urban development and floodplain encroachment, has also retained substantial portions of its former hydrologic and ecological patterns, despite the presence of Matilija and Casitas dams. Current management activities, such as the proposed removal of the dam and the Parkway projects ongoing on both rivers, recognize and take advantage of this potential.

This report documents the historical ecological and hydrological patterns and dynamics of the Ventura River valley, the lower Santa Clara River valley, the Oxnard Plain, and the Ventura County shoreline. To do so, we integrated hundreds of historical cartographic, textual, and visual accounts to create a heterogeneous but substantial dataset describing hydrologic, geomorphic, and riparian characteristics back to 1769—the date of the first non-native, land-based exploration of the region. These data were synthesized to provide detailed analysis of landscape-level pattern and process in the region prior to substantial Euro-American modifications, and to better understand the impacts of modifications over the past two and a half centuries. The goal of this process is to provide scientists and managers in Ventura County with detailed, readily accessible information about the region’s historical ecological landscape, with particular focus on historical habitat patterns and riverine processes. (The report does not address the historical fauna of Ventura County in detail.)

Our findings reveal an ecologically diverse landscape, with vegetation and drainage patterns reflective of both underlying, long-term physical drivers and temporally and spatially dynamic processes. Valley floor habitats were relatively dry overall, with extensive open grasslands and scrublands predominating in the Santa Clara River valley, lower Ventura River valley, and large portions of the Oxnard Plain. Live oaks and sycamores colonized terraces in the Ventura River valley, in addition to many alluvial fan surfaces north of the Santa Clara River. With few exceptions (notably,

Saticoy Springs), non-riparian wetlands were concentrated on the Oxnard Plain. This included coastal brackish and saline wetlands, freshwater ponds and marshes along the eastern foothills in the Calleguas Creek watershed, and (comprising the great majority of the total) the seasonal alkaline wetlands of the Oxnard Plain.

Wetland distribution on the plain has been largely shaped by the migration of the Santa Clara River over geologic time: the river deposited sediments that formed higher and drier zones above the alkaline lowland, which were colonized by grassland and scrub. This migration also created a pattern of coastal lagoon systems along the shoreline, leaving a legacy of perched and closed lagoons marking former river mouths (and separated from the ocean by dunes whose sediment was largely supplied by the river). At least three types of coastal estuarine systems are represented on the Ventura shoreline: seasonally or intermittently closing freshwater-brackish estuaries associated with the Santa Clara and Ventura river mouths, dune-dammed non-tidal lagoons associated with now-abandoned Santa Clara River mouths, and the large, more open wetland system at Mugu. These features formed a near-continuous sequence of coastal wetlands from Mugu Lagoon all the way to the Ventura River mouth: the eastern edge of the Ventura River floodplain was separated from the northwestern edge of the Santa Clara River floodplain (today’s Ventura Marina area) by less than one mile.

Then as now, the Santa Clara River dominated the region; even its delta (the Oxnard Plain) was referred to as the lower Santa Clara River valley in the 19th century. Geologic and climatic parameters influenced the river’s form and flow, creating a stream with reach-scale variability in channel morphology and the presence of summer surface water. In turn, these elements were linked to heterogeneous riparian patterns along the river, with nodes of broad willow-cottonwood riparian forest and in-channel wetlands separated by reaches characterized by scrub and patchy forest. As a result, riparian forest did not form a continuous corridor along the river, instead occurring in discrete patches corresponding to variations in groundwater-surface water interactions.

Like the Santa Clara, the Ventura River occupied a broad river corridor, with reach-scale variability in hydrology, morphology, and riparian patterns. The Ventura River also maintained large willow-cottonwood forests at its mouth, in addition to a dense riparian corridor along much of the perennial reaches. The intermittent reach of the river was characterized by in-channel live oaks, sycamores, and scrub on established bars and islands, a vegetation community not documented anywhere along the Santa Clara River mainstem.

The research described in this report is designed to provide insight into the Ventura County that once was. We have tried to bring our research alive such that current residents, scientists, and planners may inhabit—if briefly, and imaginatively—the landscape that early Chumash inhabited and later residents inherited. We document historical patterns, as well as the layers of

use and modification accumulated over the past centuries, some of which is still evident today to the keen eye. We do not suggest that future restoration efforts should necessarily aim to recreate the former features discussed here, or that these patterns should directly dictate what should or should not be done. Instead, this report seeks to provide insight into the dynamics and processes that shaped—and in many cases, continue to shape—the Ventura landscape, and to be a tool for understanding the past and imagining the future. It is a starting point for conversations about the goals and values of restoration, providing guidelines and framework for what may be desirable or possible.

The primary findings of this study are summarized below, as well as at the end of each relevant chapter. Management implications may be found at the end of each chapter. Taken together with an understanding of modern conditions, these findings can support scientists and managers working to identify restoration opportunities in the Ventura region.

Santa Clara River and Valley

1. **The historical (early 1800s) Santa Clara River valley supported a diverse array of natural habitats**, from the willow groves and wetlands of Saticoy Springs to the sycamores and oaks found on alluvial fans near Santa Paula and Fillmore (page 51). However, the valley floor was dominated by grassland and coastal sage scrub, with trees occurring singly or in stands and along creeks and rivers. Valley oaks were not documented in the Ventura County portion of the valley.
2. **Most substantial freshwater wetland complexes occurred within the river corridor of the Santa Clara River, not on the valley floor (page 87)**. A rich array of aquatic habitats were found within the river corridor, including ponds, sloughs, and freshwater marshes in perennial reaches, and a suite of saline and brackish aquatic habitats associated with the estuary at the river mouth.
3. **Prior to modification, most small tributaries did not connect to the Santa Clara River (page 76)**. With few exceptions, intermittent small creeks commonly sank into their alluvial fans before reaching the Santa Clara River, a characteristic common to many intermittent tributaries across California. Rather than maintaining defined channels all the way to the river, these creeks were connected hydrologically to the river through subsurface flow and poorly defined, transitory surface channels. Most of these creeks have now been connected to the Santa Clara River through constructed channels, increasing valley drainage density (that is, stream length per unit area).
4. **From the late 19th to the early 20th century, the position of the Santa Clara River corridor remained relatively laterally stable (page 66)**. Inter-annual variability in the relative vegetation cover of the active channel and bottomlands is evident in the historical record, with

widespread changes occurring after each major flood. However, our findings support the overall lateral stability of the river even through the St. Francis Dam break in 1928.

5. **In the relatively recent geologic past, the lower Santa Clara River shifted its outlet from near Point Hueneme to its present location (page 71).** While the date of this shift is not clear, it may have occurred in the past 200-500 years based on edaphic, ecological, and ethnographic evidence. This shift is reflected in historical alkalinity patterns on the Oxnard Plain (see page 177).
6. **The Santa Clara River was an interrupted perennial stream,** with alternating perennial and intermittent (summer dry) reaches (page 77). Only two intermittent reaches were clearly documented on the river, near Saticoy and Piru (though additional intermittent reaches may have been present). The location of perennial reaches was informed by a variety of factors, including artesian influence, tributary inputs, valley narrowing, and geologic constraints. Many of these factors continue to affect surface flow patterns today.
7. **The Santa Clara River supported a diverse mix of riparian species,** including trees such as sycamore, live oak, willow, cottonwood, box elder, and alder; scrub species such as scalebroom, buckwheat, mulefat, golden-aster, sagebrush, black sage, and cactus; and understory species such as wild grape and wild blackberry (page 83).
8. **Dense, persistent riparian forest and in-channel wetlands occurred in discrete patches along the Santa Clara River (page 85).** Rather than a continuous corridor, willow-cottonwood riparian forest was found at a few notable locations along the river, corresponding with areas of rising or perched groundwater. Other reaches supported a different matrix of non-vegetated riverwash, willow scrub, mulefat, and alluvial scrub. This longitudinal heterogeneity tied to patterns in groundwater-surface water interactions suggests that different restoration targets are appropriate for different reaches. It suggests nodes for riparian forest restoration centered around former persistent wetland riparian areas, as well as a focus on maintaining the water resources (rising groundwater) that would support these habitats.
9. **Alluvial scrub was a likely component of the driest portions of the Santa Clara River (page 92).** While more research is needed, compiled data suggest that alluvial scrub is a more suitable riparian restoration target for drier reaches (notably the Piru reach) than riparian forest.
10. **Live oaks and sycamores occurred frequently on the Santa Clara River river outer banks (page 85).** Numerous live oaks and sycamores were documented on high banks on the edge of the river corridor. Live oaks and sycamores documented within the river corridor occurred largely in Santa Paula and Sespe creeks (likely on higher bars or islands)

and as individuals within large areas of willow-cottonwood forest on the mainstem Santa Clara River.

Ventura River and Valley

1. **The historical Ventura River valley supported a diverse array of natural habitats,** including valley freshwater marsh, grassland, coastal sage scrub, oaks, and sycamores (page 124). While we were unable to map the valley floor in detail, our data indicate a broad transition from grassland in the lower valley (Avenue area) to predominantly oaks, sycamores, and scrub above Foster Park to Matilija Dam. As in the Santa Clara River valley, valley oaks were not documented anywhere in the valley. Only one wetland feature was documented on the valley floor within the study area (not including Mirror Lake).
2. **Most substantial freshwater wetland complexes occurred within the Ventura River corridor.** Aquatic habitats such as ponds, sloughs, and freshwater marshes were likely found in many perennial reaches (page 138), and a suite of saline and brackish aquatic habitats was associated with the estuary at the river mouth.
3. **The Ventura River supported a broad range of riparian species,** including trees such as sycamore, live oak, willow, cottonwood, box elder, alder, and walnut; understory species such as wild grape, wild rose, and wild blackberry; and mulefat and alluvial scrub species (page 138).
4. **Unlike on the Santa Clara River, live oaks and sycamores were common within the river corridor of the Ventura River (page 138).** While on the Santa Clara River live oaks and sycamores were almost exclusively found bordering the river’s high (outer) bank, both trees were common on benches, bars, and islands in the Ventura River channel, particularly in the intermittent Oak View reach.
5. **The Ventura River mouth has shifted location numerous times over the past several hundred years,** from the hills west of the river mouth to Figueroa Street in Ventura. Many of these former river mouth areas are still susceptible to flooding (page 130). A brackish lagoon, formerly at the site of what is now the Derby Club across from Seaside Park, marked the route of one of these former river mouths.
6. **The Ventura River was generally perennial for much of its length (page 135).** The uppermost reach (below the present-day location of Matilija Dam) consistently supported year-round surface water, as did the lower half of the river (below the San Antonio Creek confluence). In contrast, the middle reach, through the western Ojai Valley and downstream of Oak View, was typically dry during the summer. The precise extent and location of summer water fluctuated in response to annual variations in rainfall and runoff.

Oxnard Plain

1. **The Oxnard Plain supported a diverse array of habitats**, from the freshwater wetlands and lakes of the lower Calleguas watershed to the alkali meadows and flats, grassland, coastal sage scrub, and chaparral of the broader plain (page 174). Just under half of the plain supported alkali meadows and alkali flats, with the remainder mostly covered by grassland and coastal sage scrub.
2. **The distribution of these habitats reflected underlying physical processes and characteristics (page 163)**. Topography, soils, geology, and groundwater availability were primary factors in determining historical habitat distribution.
3. **Few trees were found on the Oxnard Plain (page 174)**. Only a small number of trees were documented on the plain by 19th century observers, mostly sycamores (and one live oak) on the sand and sandy loam soils marking the former route of the Santa Clara River to Point Hueneme.
4. **Few streams traversed the Oxnard Plain, particularly in its western portion (page 167)**. The plain was notable for its extremely low drainage density (only 1.7 miles of creek per square mile). The few creeks and barrancas that did cross the plain were almost exclusively discontinuous, sinking into coarse alluvium or spreading into and across seasonally wet alkaline areas. Large sloughs such as Revolon Slough (a former channel of the Santa Clara River) formed the backbone of drainage for the central plain.
5. **Calleguas Creek did not maintain a defined channel across the Oxnard Plain**, instead spreading into a broad wash around present-day Highway 101 before re-emerging downslope near Conejo Creek (page 168). The creek terminated in a lake and distributary system near the current location of CSU Channel Islands. Calleguas Creek was hydrologically connected to Mugu Lagoon through shallow sloughs and sheet flow during floods.
6. **Calleguas and Conejo creeks were intermittent on the Oxnard Plain (page 168)**. Though sources describe readily available water located below the surface in both creek beds, they are consistently described as dry for much of the year.
7. **Sources document a concentration of perennial freshwater wetlands, ponds, and lakes along the eastern margin of the Oxnard Plain**, particularly east of Conejo and Calleguas creeks (page 182). The majority of these wetlands occurred near the base of small alluvial valleys of creeks tributary to Calleguas and Conejo creeks, near contacts between alluvial deposits and the Conejo Volcanics of the western Santa Monica Mountains.

Ventura County Shoreline

1. **A diversity of coastal systems characterized the Ventura shoreline**, each with differing habitat patterns and hydrologic dynamics (page 191). The overall habitat distribution is well documented, though available historical sources only begin to indicate the range of coastal processes that created these patterns, from Mugu Lagoon to the backbarrier lagoons, dunes, salt flats, and tidal marshes of the Oxnard Plain.
2. **Coastal wetland habitats covered about 4,300 acres**, accounting for a large proportion of former Ventura County wetlands (page 191). Differences in freshwater input, extent of vegetative cover, and closure regime led to varying support functions for native fish and wildlife.
3. **Three distinct types of coastal estuarine systems characterized the Ventura County shoreline**: the freshwater-brackish, intermittently or seasonally closed estuaries of the Ventura and Santa Clara rivers; the non-tidal lagoon complexes marking former Santa Clara River mouths; and the large, more tidally-influenced wetland system at Mugu (page 191).
4. **The Ventura and Santa Clara River estuaries were periodically open to the Pacific Ocean (page 194)**. Regular, seasonal cycles of closure were documented for the Santa Clara River mouth. The Ventura River mouth closed only occasionally (less frequently than the Santa Clara River), reflecting its greater historical volume of summer flow in the lowest reach, steeper channel gradient near the mouth, and lesser wave exposure.
5. **The estuaries of both rivers also shared similar habitat mosaics (page 194)**. Both rivers had fairly compressed estuaries, with the relatively limited saline and brackish wetland habitat near their mouths bordered by extensive freshwater habitats, most notably the willow-cottonwood forest and wetland documented at both mouths.
6. **McGrath Lake is a regionally significant feature**, unique because of its persistence over the past centuries and its freshwater character (page 203). Though the lake has persisted, its location has shifted substantially since the mid-1850s; only a small portion of its current area overlaps with its historical extent.
7. **An extensive suite of marsh, salt flats/pannes, and lagoons stretched from south of the Santa Clara River to the western edge of Mugu Lagoon (page 205)**. Prior to drainage and agricultural expansion, these systems were a significant component of the Ventura County shoreline. They exhibited a range of habitat patterns based on variable salinity gradients and hydrologic inputs, from the spring-fed brackish Laguna Hueneme to the hypersaline Salinas near Point Hueneme.

- 8. **Mugu Lagoon was the largest wetland complex in Ventura County, and the site of a broad range of coastal wetland habitats**, including salt and brackish marshes, large salt flats, and extensive tidal channel networks (page 225). Dominant habitat cover was tidal marsh. There is some indication that the complex formerly extended substantially further inland than currently recognized. Its acreage has been dramatically reduced.
- 9. **Salt flats and high marsh transition zone were major components of Mugu Lagoon (page 228)**. These transitional, high elevation habitats were particularly characteristic of the semi-arid climatic setting (Ferren et al. 2007), and have been disproportionately lost from this system. These features likely provided breeding habitat for shorebirds such as least tern and snowy plover (as small present-day remnants still do), as well as an inland migration zone for tidal marsh transgression in response to naturally rising sea level in the past.

ACKNOWLEDGEMENTS

We would like to express our appreciation to the volunteers and staff at the historical societies, libraries, archives, and agencies where we gathered the data that form the backbone of this report. Particular thanks to Charles Johnson at the Museum of Ventura County, Jan Timbrook at the Santa Barbara Museum of Natural History, and Alex Williams at the Ventura County Surveyor’s Office. We are also indebted to the volunteers and staff at the local historical societies and public libraries where we collected data, including the Ventura County Public Library, Camarillo Historical Society, Fillmore Historical Society, Ojai Valley Historical Society, Santa Paula Historical Society, Ventura County Surveyor’s Office, and Ventura County Recorder’s Office. Staff at The Bancroft Library, Water Resources Collections and Archives, Bureau of Land Management, California Historical Society, California State Library, Santa Barbara Museum of Natural History, Santa Barbara Mission Archive-Library, UC Santa Barbara Map and Imagery Library, and Huntington Library were also instrumental in the data collection effort.

Over the course of the project, a number of researchers contributed time and input to data collection and interpretation. Veronica Rojas and Michael Beland of CSU-Northridge collected data at many institutions in Southern California. Murray McEachron at United Water Conservation District, Mark Capelli at the National Marine Fisheries Service, and Mark Bandurraga at the Ventura County Watershed Protection District provided relevant contemporary literature and data layers. Assistance was also provided by a number of SFEI staff, including Chuck Striplen, Josh Collins, and Sarah Pearce.

We would like to thank our Technical Review Team for contributing their expertise to the interpretation and discussion of historical conditions and providing comments on the report. The group included Mark Capelli, Frank Davis, Tom Dudley, Dave Jacobs, Paula Schiffman, and Camm Swift. We also received support and advice from Bill Sears.

This project was funded by the California Coastal Conservancy. We would especially like to thank Peter Brand, our project manager at the Coastal Conservancy, who was critical to the success of the project.

A landscape photograph showing the Santa Clara River flowing through a valley. The river is in the foreground, surrounded by green and yellowish vegetation. In the background, there are large, rugged mountains with some snow or light-colored rock patches. The sky is clear and blue.

I • STUDY OVERVIEW AND METHODS

Every day makes a little history or a few changes on the map.

—VENTURA FREE PRESS 1914

Introduction

This report synthesizes an array of historical records to document historical landscape patterns, ecological and hydrologic dynamics and trends, and environmental management opportunities in Ventura County lowland watersheds. This report and associated geo-database provide a spatially comprehensive dataset describing the historical distribution, abundance, and (where possible) functions of habitats of the Ventura River, lower Santa Clara River, and Oxnard Plain prior to significant Euro-American modification.

While substantial ecological resources still remain, the region has been subject to extensive modification over the past 250 years. Understanding the scope of these modifications, and the nature of the historical landscape patterns formerly present in the region, is not a trivial task. Regular hydrogeomorphic and ecological monitoring was not present in the county until the 20th century, and the data that do exist are idiosyncratic, challenging to interpret, and scattered in archives across the state. Despite these impediments, historical ecology is an essential component of crafting sound, site-specific environmental restoration objectives, which demand detailed data as the basis for management strategies. Without a detailed understanding of the former characteristics of the region—and how these characteristics changed in response to human alterations of the landscape—appropriate ecological and hydrological restoration targets can be difficult to determine.

This study was designed to support acquisition and restoration efforts by the California State Coastal Conservancy, in particular through the Santa Clara River Parkway project, Ormond Beach Wetlands Restoration project, and on the Ventura River through the nascent lower Ventura River Parkway plan. The characterization of historical ecological conditions developed here aims to inform these and other restoration and conservation opportunities throughout the region, helping managers develop strategies for choosing and designing restoration projects.

A previous report prepared for the Coastal Conservancy (Stillwater Sciences 2007b) analyzes the historical geomorphology of the Santa Clara River from 1938-2005. This current study extends this documentation of

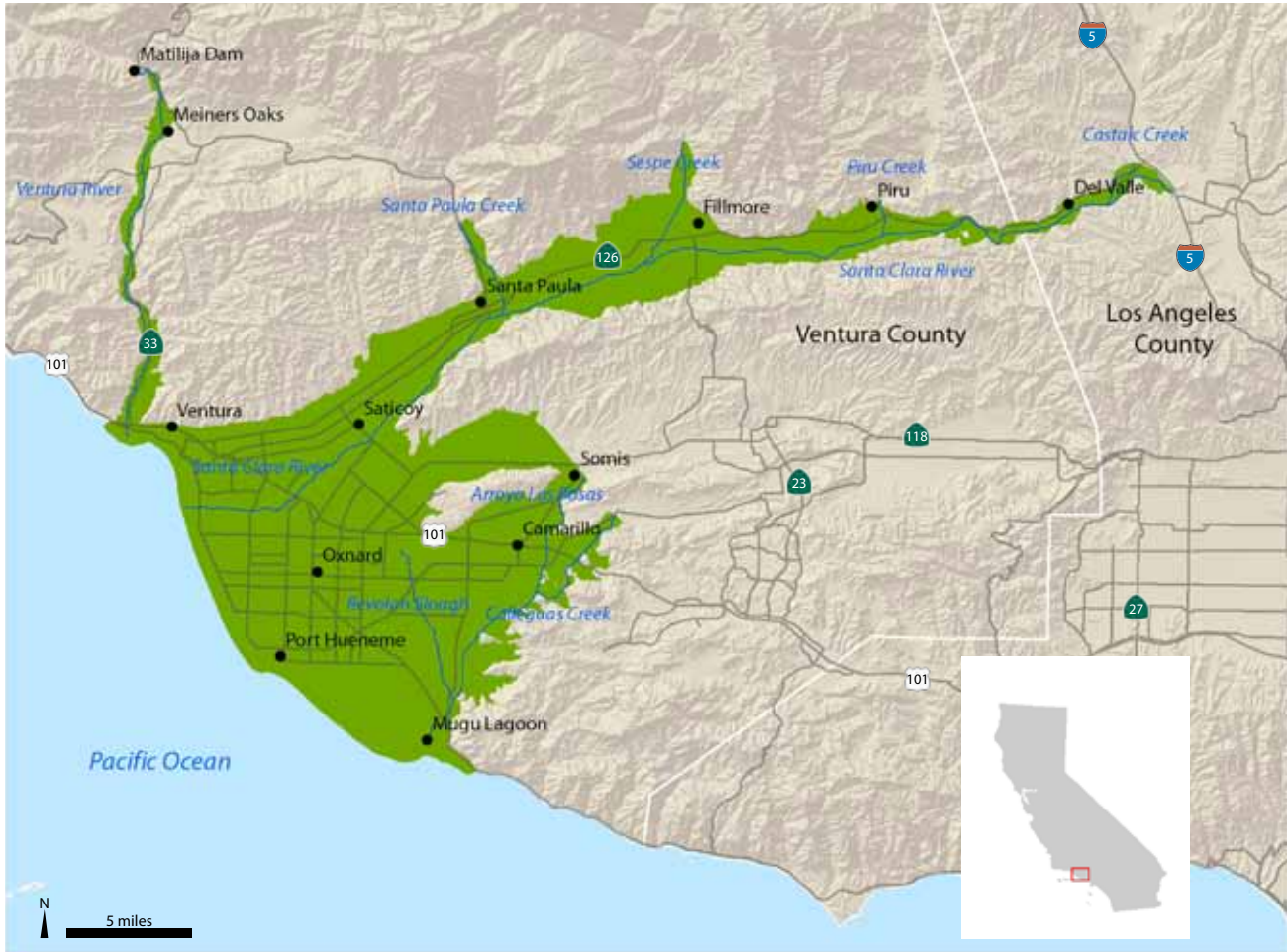
Fig. 1.1. Santa Clara River east of Santa Paula, looking north (November 2008; opposite page).

former river characteristics to include 1769-1938 by integrating historical cartographic, textual, and visual accounts to create a heterogeneous but substantial dataset describing hydrologic, geomorphic, and riparian characteristics back to 1769—the date of the first land-based European exploration of the region.

Regional Setting

This study focuses on the habitat and drainage patterns of the region’s lowlands, where change has been most pronounced. The study area encompasses three major contiguous areas: the Ventura River, the lower Santa Clara River, and the Oxnard Plain (fig. 1.2). Specifically, the geographic scope is the Ventura River and valley from its mouth to the Matilija Dam (exclusive of the Ojai Valley), and the Santa Clara River and adjacent valley floor from its mouth to its intersection with Interstate 5 in Los Angeles County (including only the lowest reaches of major tributaries, and focused on the Ventura County portion of the valley). It also includes the lowlands and coastal margins south of the lower Santa Clara River, including the Oxnard Plain and lower Calleguas Creek watershed west of Somis and the edge of the Santa Monica Mountains and south of South Mountain.

Fig. 1.2. Study area and regional geographic context. The project area included the Ventura River to Matilija Dam, the Santa Clara River to Interstate 5 in Los Angeles County, and the Oxnard Plain.



Ventura County is geologically active, with substantial uplift and lateral displacement occurring related to the San Andreas fault system. The region experiences a Mediterranean climate (cool/mild wet winters and war warm dry summers), characterized by high inter- and intra-annual variability. Most precipitation occurs from November through March. There is significant regional variation in precipitation between drier, low-lying coastal areas and wetter, more mountainous parts of the county.

Land use and population trends have taken a radically different trajectory in Ventura County than in its more urban neighbors to the south, and the region is still relatively unmodified in comparison to the other large coastal watersheds of Southern California. Major population centers in the study area include Oxnard (over 200,000, the county’s largest city), Ventura, and Camarillo. The total population of the county is just under 850,000 (Herdt 2010).

**DESIGNING RESILIENT LANDSCAPES:
HISTORICAL ECOLOGY, RESTORATION, AND CLIMATE CHANGE**

Restoration goals should be informed by knowledge of landscape conditions before modern development. Historical ecology research improves our understanding of the habitats we seek to restore, including the physical and cultural processes that governed their former distribution. Studying the landscape under earlier, less impacted conditions facilitates a landscape perspective that addresses questions fundamental to the restoration planning process: What habitats were supported where, and why? Where have certain habitats persisted? How have landscape patterns and process changed over time? Most importantly, how do we choose appropriate restoration and management targets?

Historical ecology has particular relevance to these questions in the context of global climate change. The historical Southern California landscape was well adapted to a highly variable, episodic climatic regime, and buffered the effects of environmental extremes while providing diverse ecological functions. As we anticipate a more variable climate in the future, we can learn from the ways in which dynamic historical ecosystems were able to respond and adapt to extreme conditions in the past. For example, broad floodplain surfaces along the Santa Clara and Ventura rivers would have attenuated flood peaks and recharged groundwater during high flows, while side channels and pools in perennial reaches would have provided refugia critical to the survival of native fish and other wildlife during times of drought and floods. Recovering these attributes will make systems more resilient and adaptable to climate change.

Historical ecology is an essential component of restoration design, but it is not an answer in and of itself. It is a tool for scientists and managers seeking to understand and ameliorate the dramatic landscape changes of the past 250 years. When integrated with contemporary data and future projections, historical information helps identify restoration opportunities and develop realistic management strategies. Often these would not be recognized without a historical perspective. Though controls on habitat distribution such as land use and climate may change, others, such as topography and geology, remain relatively stable. Historical ecology helps us understand which characteristics supported native species of concern and how these can be recovered or enhanced. Understanding the landscape patterns and processes of the recent past can help us establish functional, resilient systems that improve the ecological health of the region.

Lowland Ventura County is dominated by the Santa Clara River and its delta, the Oxnard Plain. The Santa Clara River watershed is one of the largest coastal watersheds in Southern California, draining approximately 1,620 mi². The last 38 miles of the river run through Ventura County, southwest through the Santa Clara River valley and across the Oxnard Plain before reaching the ocean. The Santa Clara River is regionally significant because it is relatively unchannelized and unregulated by dams, and its watershed is not as densely or extensively urbanized as other systems of comparable size in Southern California. As a result, many habitats and processes no longer viable on other comparable systems are still intact to some degree on the Santa Clara River, and there is great potential to restore former ecological and hydrogeomorphic patterns and functions.

Report Structure

The report is divided into six chapters, each of which treats a different topic or geographic region. This introductory chapter describes the project’s geographic setting and management context, data collection and mapping methodology, and our habitat and channel classification system. The second chapter includes a discussion of 19th and early 20th century trends in agricultural land use and irrigation practices in the region. The third chapter describes ecological patterns and riverine dynamics for the lower Santa Clara River and valley, and the fourth chapter discusses the same topics for the Ventura River and valley. The fifth chapter describes habitat and drainage network patterns on the Oxnard Plain, and the sixth chapter provides a brief treatment of the habitat patterns along the shoreline from the Ventura River mouth to Mugu Lagoon.

Methods

The discovery, organization, and interpretation of historical data forms the foundation of this project. The complex process through which data spanning disparate places and eras were synthesized for this study is outlined in this section.

Data Collection

A substantial variety and quantity of historical data are needed for accurate assessment of the historical landscape (Grossinger 2005). With this in mind, we assembled a diverse range of historical records spanning about two and a half centuries and compiled these data into a map of historical landscape patterns prior to substantial Euro-American modifications.

Assembled material includes: (1) textual data (e.g., Spanish explorers’ accounts, Mexican land grant case court testimonies, General Land Office records, early travelogues, and county histories and reports); (2) maps (e.g., Mexican land grant maps, early city and county maps and surveys, US Department of Agriculture soil surveys, and U.S. Geological Survey maps); and (3) photography (ground-based, aerial, and oblique) and paintings.

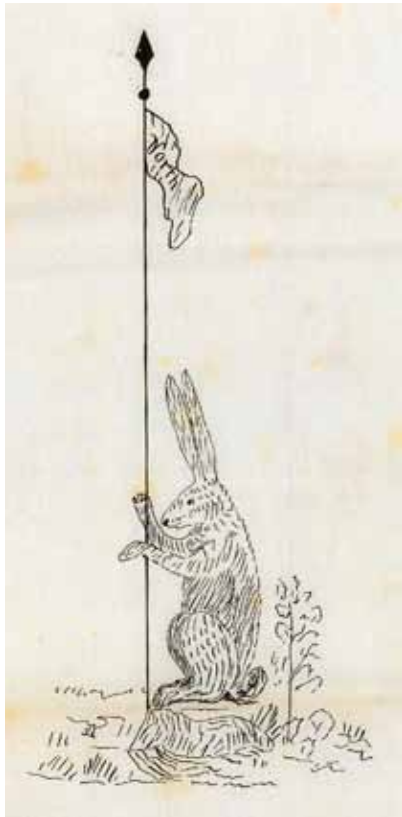


Fig. 1.3. Detail from a map of Rancho San Miguelito and the lower Ventura River, 1897. A jackrabbit serves as the compass, pointing north. (Barry 1897, courtesy of the Museum of Ventura County)

To acquire these sources, we visited local historical archives, public libraries, county offices, and regional archives. In total, we visited twenty-seven source institutions across California to collect data (table 1.1). We also reviewed material available online and conducted searches of over twenty electronic sites and databases. We acquired scans, copies, or photographs of a diverse array of primary and secondary sources pertaining to the historical landscape of Ventura County (fig. 1.3; also see “Historical data for Ventura County” spread, pages 6-7).

We acquired full or partial copies of approximately 500 maps, 250 documents, and 500 photographs. These represent a small fraction of the documents reviewed at the archives themselves. While we reviewed

Local Historical Societies and Public Libraries
Camarillo Historical Society
Fillmore Historical Society
Museum of Ventura County
Ojai Valley Historical Society
Santa Paula Historical Society
Seabee Museum
United Water Archives
Ventura County Public Library
County Agencies
Santa Barbara County Recorder’s Office
Santa Barbara County Surveyor’s Office
Ventura County Recorder’s Office
Ventura County Surveyor’s Office
Regional Archives
Air Photo Archives, UCLA Department of Geography
The Bancroft Library, UC Berkeley
Bureau of Land Management
California Coastal Conservancy Archives
California Historical Society
California State Library
California State Railroad Archives
CSU Northridge Library
The Huntington Library
Los Angeles County Seaver Center
Mark H. Capelli Southern California Steelhead Watershed Archives, Davidson Library, UCSB
NARA Pacific Region
Santa Barbara Mission Archive-Library
Santa Barbara Museum of Natural History
UC Davis Map Collection
UC Santa Barbara Map and Imagery Library
Water Resources Collections and Archives
Western Foundation of Vertebrate Zoology
Whittier College

Table 1.1. Archives, libraries, and historical societies visited to collect data for the Ventura Historical Ecology study.

HISTORICAL DATA FOR VENTURA COUNTY

This study involved the collection and compilation of a wide array of historical sources, spanning multiple centuries, languages, and formats. Historical documents form the backbone of our historical mapping and analysis, from Spanish-language explorer’s journals (1769) and correspondence from the San Buenaventura Mission (ca. 1800) to soils mapping and aerial photography of the mid-20th century.

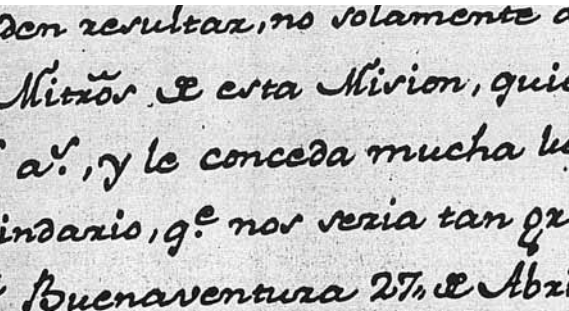
Since each source was produced by individuals in different social contexts and with variable goals, understanding the provenance of the sources we draw on is a fundamental starting point for understanding our findings. Shown below are examples and brief descriptions of some of the primary sources used in this study.



Mexican land grant sketches (1840s-1850s). As the Mission system disintegrated, influential Mexican citizens submitted claims to the government for land grants. A *diseño*, or rough sketch of the solicited property, was included with each claim. *Diseños* often show notable physical landmarks which would have served as boundaries or natural resources, such as creeks, wetlands, springs, and forests. While *diseños* are not as spatially accurate as subsequent surveys, they provide extremely early glimpses of former landscape features and patterns. (U.S. District Court ca. 1840d, courtesy of The Bancroft Library, UC Berkeley)



General Land Office Public Land Surveys (1853-1900). In areas not claimed through the land grant system, the U.S. Public Land Survey imposed a grid of straight lines on the landscape, dividing property into six-mile square townships. Each township was further subdivided into 36 one-mile sections, each section containing 640 acres. Surveyors methodically surveyed section lines along these transects, noting cultural and natural features they encountered along the way. Survey notes and plat maps from these surveys are useful for their ecological information. (Hoffman 1868d, courtesy of the Bureau of Land Management)



Textual accounts (1769-2011). Written accounts can provide a wealth of detailed information with nuance about landscape dynamics not available on maps. Spanish expeditions provide the earliest accounts; later sources such as land grant case testimonies, newspaper articles, ornithological records, county histories, and travelogues give rich perspectives from early visitors and residents. (text courtesy of the Santa Barbara Mission Archive-Library)



U.S. Coast and Geodetic Survey maps (1855-1934). The U.S. Coast and Geodetic Survey was established in 1807 by Thomas Jefferson to create navigation maps. Though the maps only cover the coastline and immediately adjacent areas, they are a highly valuable source because of their impressive detail and accuracy, scientific rigor, and relatively early survey dates. (Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration)



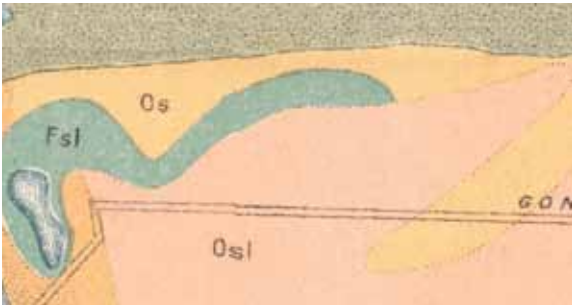
City and county surveys (1860-1930). Local surveyors produced abundant maps, including many surveys of individual parcels. These maps, often surveyed at a large scale, contain details not included in other regional mapping efforts such as sloughs and side channels, smaller ponds and wetlands, or clusters of trees. Though coverage is inconsistent, these maps are invaluable in constructing an understanding of local ecosystem dynamics. (Barry 1894, courtesy of the Ventura County Surveyor’s Office)



U.S. Geological Survey topographic maps (1903-1943). Shortly after 1900, the USGS (established in 1879) began producing topographic quadrangles at 1:62,500 for the Ventura County region. Though the maps are relatively coarse, they provide some of the earliest consistent, comprehensive coverage for the entire region. (USGS 1904, courtesy of the CSU Northridge Geography Map Library)



Historical aerial photography (1927-1959). A Depression-era program to ensure crop stability and soil conservation practices resulted in extensive aerial photographic coverage for much of the county. The bulk of historical aerial imagery used in this study is from 1927 and 1938. While the photographs were taken after substantial modification, the photos nevertheless reveal relict ecological features, traces of which are often still present in the landscape. (Fairchild Aerial Surveys 1927, courtesy of Whittier College)



U.S. Department of Agriculture soil surveys (1901-1917). Early soil surveys were developed to describe variability in the agricultural viability of regional soils. These maps, and their accompanying reports, are a key source in the inference of historical habitat extent and location. Descriptions of soil properties and agricultural use can provide insight into former habitats, in particular providing spatially accurate detail on the extent of wet meadows and alkaline habitats. (Holmes and Mesmer 1901b)



Landscape photography (1860s-1950s). Historical photographs represent a category of diverse historical data that can provide extremely localized, accurate information. Photographs can capture the conditions of a given place and time in a manner that provides substantial detail about specific species presence and landscape structure. (Isensee 1928b, courtesy of Museum of Ventura County)

thousands of documents for this study, historical research is never completely exhaustive, and the local historical record is extensive. Additional sources will undoubtedly surface showing ecological information that enrich the descriptions and information incorporated in this report. In particular, we were unable to focus substantial efforts on data collection for the major Santa Clara River tributaries (e.g., Santa Paula, Sespe, and Piru creeks) and the Los Angeles County portion of the Santa Clara River. As a result, it is likely that much more information exists detailing the historical landscape of these regions. Future research exploring other sources, such as early court cases and oral histories, may also reveal more detail about this area.

Data Compilation

Data compilation is the process of organizing the large volume of collected, heterogeneous data used in this study into more accessible formats for interpretation at the local and landscape scale. As part of this process, we read narrative sources and transcribed relevant quotes into one comprehensive document, georeferenced maps and spatially locatable quotes, and created large-scale maps, or “base maps,” displaying compiled data onto which we transferred non-georeferenced data. High-priority maps were chosen for georeferencing based on their spatial resolution, mapping accuracy, and relevance (e.g., types of features shown and date of mapping). They were georeferenced to contemporary orthorectified aerial imagery (USDA 2005), using ESRI’s ArcGIS 9.3.1 software. Approximately 150 maps were georeferenced.

One heavily used source was historical aerial photography, which required orthorectification and mosaicking of 238 aerial photographs into a comprehensive, continuous coverage of the entire study area (fig. 1.4). Aerials were acquired from a number of source institutions and spanned a number of different years. The earliest imagery (1927), used where available, makes up about one half of the entire photomosaic. Later imagery (from 1938, 1945, and 1959) was substituted where 1927 imagery was not available. The spatial consistency, accuracy, and high level of detail available made these an invaluable source for the project.

Relevant quotes were extracted from textual material and transcribed into a Microsoft Word document. Quotes were organized by broad geographic area (Santa Clara River valley, Ventura River valley, Oxnard Plain) and by subject (e.g., riparian vegetation, channel geometry, or wetland habitats). In addition, quotes pertaining to land use history, irrigation history, and climate were transcribed. Over 160 pages of quotes were transcribed. Of these quotes, about 240 were spatially specific enough to be locatable on our base maps. These were mapped and included in our project geographic information system (GIS) as an independent data layer.

In addition, we adapted methods developed by the Forest Landscape Ecology Lab at the University of Wisconsin-Madison that use GIS to store, display,



and analyze General Land Office (GLO) data obtained from the microfilm archives at the Bureau of Land Management Office in Sacramento, CA (Manies 1997, Radeloff et al. 1998, Sickley et al. 2000). For Ventura County, survey notes ranged from 1853-1900. Just under 1,700 data points collected from the General Land Office notes were included in this layer.

Fig. 1.4. Earliest date of aerial photo coverage. Two hundred and thirty-eight historical aerial photographs were orthorectified and mosaicked to provide continuous coverage of the study area. Aerials spanned from 1927-1959, with the bulk of photos from 1927 and 1938.

Data Interpretation

We examined historical data for evidence of landscape characteristics prior to significant Euro-American modification. Our goal was to map landscape features as they existed, on average, prior to and during the early decades of Euro-American settlement (1770s-1850s). Despite inter-annual and decadal variability, mean climatic characteristics during the period for which historical data were obtained (1769-1940s) were relatively stable (Lynch 1931, Dettinger et al. 1998; see also Haston and Michaelsen 1997). Many later sources (i.e., outside of the target time period) were found to record features that clearly corresponded to features documented by earlier sources, and thus provided more accurate mapping of these features. For example, a feature shown on an early source (e.g., a *diseño*) that confirms the general presence of the feature but not its location, could be confirmed and mapped from a later source (e.g., a historical aerial), despite surrounding land use changes.

The habitat map produced through this process depicts our understanding of landscape features as they existed before major Euro-American modifications (1770s-1850s; referred to as “early 1800s” for simplicity). Individual creek and habitat features were digitized from historical sources, and ultimately synthesized into the study area habitat map (included at the beginning of this report).

The primary purpose of the mapping process and resulting habitat map is to represent habitat diversity and heterogeneity at the watershed scale, leading to a better understanding of regional patterns and processes. While many individual habitat polygons have been mapped with precision (see table 1.2), others have higher error margins for their mapped size. Clearly, our dataset of disparate sources (each representing a different scale, time period, and level of accuracy) prevents mapping each area at the same level of detail. In addition, many former features were undoubtedly not documented by any historical source, and therefore were not mapped. However, these issues do not undermine the map’s usefulness as a tool to characterize and understand the region’s historical ecological patterns and the underlying processes that shaped them.

The following section outlines the methods used to integrate and synthesize data in GIS to depict broad classes of habitats on the map, both for the purpose of visual representation of historical habitats and channels and for analysis of the historical landscape. For more information on the accuracy of a particular habitat polygon, please refer to the GIS metadata.

RIVER CORRIDORS AND RIPARIAN HABITATS For the river systems (Santa Clara, Ventura) and major tributaries to the Santa Clara River (Santa Paula, Sespe, Hopper, and Piru), the entire river corridor (from outer bank to outer bank) was mapped as a polygon in the habitat layer (fig. 1.6). (Major tributaries to the Ventura River, such as Coyote, San Antonio, and Matilija creeks, were on the edge of the study area boundary and were not mapped as polygons.) This area includes the predominantly sandy active channel (mainstem; high disturbance) in addition to vegetated areas that show evidence of erosion/deposition (medium disturbance) and more densely vegetated areas that may be subject to flow during flood events, but without evidence of major erosion/deposition (low disturbance). Benches or bottomlands with evidence of flow during at least some flood events are also included. This definition of the river corridor was based on research conducted by Stillwater Sciences (2007b) for 1938-2005. More detailed definitions of riverine terms used in this report is can be found on page 61.

We used Stillwater Sciences’ mapping as a starting point for defining the river corridor for the Santa Clara River (Stillwater Sciences 2007b). For other major channels, including the Ventura River, mapping from the earliest available historical aerial served as a base layer. These base layers were then modified where earlier historical sources showed clear evidence of a change in outer bank position. For more details on mapping

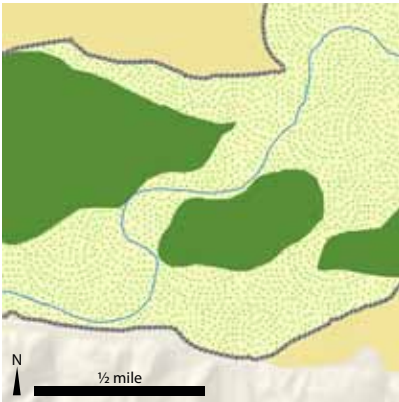


Fig. 1.6. Detail of mapping of outer river banks and river corridor extent. Outer banks were mapped as a broken black line, and river corridor extent with a green and yellow stippled pattern. (The dark green polygons are willow-cottonwood forested wetlands.)

methodology for the river corridors of major streams, see the Santa Clara River morphology section (page 63).

For these main river corridors, the mainstem channel lines were mapped from the historical aerial photomosaic. Since the location of the low-flow channel would have changed regularly, these lines are only used to represent the presence of mainstem channels in the broadest sense, and do not indicate a persistent feature. They were mainly used as a tool to map seasonality for the Santa Clara and Ventura rivers and main tributaries. Stream seasonality (presence of summer flow) was mapped based on historical USGS mapping, and amended where earlier additional evidence was available.

In general, we did not develop detailed maps of riparian habitats (in-channel and on the outer bank), given their inconsistent documentation and their dynamic nature on a yearly or decadal scale. Riparian vegetation features represented on historical maps within the active channel and on the floodplain were difficult to interpret and impossible to map meaningfully, given inter-annual variability in distribution and characteristics. As a result, riparian vegetation such as live oaks along canyons at the edge of the valley were mapped as the surrounding habitat. In addition, riparian habitat in the active channel was subsumed under “other in-channel riparian” habitat. Historical riparian habitat patterns are described qualitatively in the text.

While many areas of riparian forest inside the active channel were ephemeral, shifting with major flood events, there were a few reaches of the river with large wetland riparian features whose presence was consistently documented through major flood events. These areas are notable in their extent (over 200 acres), their persistence over time (as documented by multiple historical sources), and their relative importance to early residents (as indicated by their prevalence in the historical record). These features are included in our habitat mapping as willow-cottonwood forested wetland.

CHANNELS All other watercourses (including Calleguas Creek and tributaries to the rivers and creeks mapped as polygons, as described above) were mapped as line features in ArcGIS (fig. 1.7). The contemporary National Hydrography Dataset (USGS 2004) was used as a basis for mapping the historical channel network. The NHD GIS layer was modified where historical sources (such as historical aerial photos or maps) clearly showed evidence of a historical plan form differing from the contemporary alignment. This process produced a depiction of our best understanding of the historical channel network based on earliest available source.

Contemporary stream lines were altered only where historical sources clearly indicated a different channel position or shape than that mapped by NHD (greater than 50 feet difference). This approach accounts for differences in mapping scale between historical and modern mapping, differences in georeferencing, and the accuracy of historical sources.

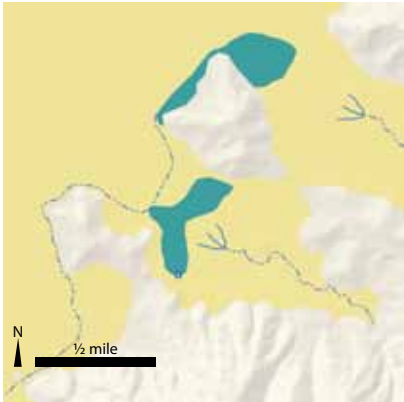


Fig. 1.7. Detail of channel mapping. Small creeks were mapped with a single line, dashed to indicate intermittent/ephemeral conditions. A forked symbol was used to indicate a distributary (that is, the point at which a creek spreads or sinks).

Although this method will not capture all changes in plan form, it allows us to more accurately analyze major changes in drainage density (stream length per unit area), connectivity, and total stream length while preventing us from over-mapping change. All editing was performed at a scale of 1:4,000.

To map the historical drainage network, we first compared NHD mapping and modern aerial imagery (USDA 2005) to early aerial imagery (1927-1959) to identify 20th century modifications. Engineered channel reaches, such as ditches and artificial flood control channels, were removed from the data set. To evaluate change predating the historical aerals, NHD mapping was compared with earlier maps depicting channel plan form. We also incorporated information from General Land Office (GLO) survey notes, other textual descriptions, topography, and early soils maps. (Contributing sources and certainty levels associated with each creek segment are recorded in the GIS attributes.)

Channels (over 500 feet long) depicted by a historical source but not present in NHD were included in the historical channel layer. To maintain a consistent depiction of channel density over time, we attempted to map channels roughly to the same level of detail as contemporary NHD mapping. As a result, our mapping excludes some small channels for which there is evidence in historical sources (such as small barrancas, creeks, or sloughs). In particular, a number of small channels visible in the historical aerial photomosaic, but of uncertain size or origin, were not included in our historical channel mapping. This approach allows for more accurate comparison between the historical stream layer and modern mapping.

Many channels historically lost definition on the alluvial plain rather than directly connecting to another channel. We represented the terminus, or distributary, of defined channels with a forked symbol on the habitat map. In cases where channels did connect to a large river (Santa Clara or Ventura river) or a major tributaries (Santa Paula, Sespe, Hopper Canyon, Piru, or Castaic creek), the channels were clipped to the historical outer channel banks layer, signifying probable connectivity to the mainstem.

WETLAND HABITATS We documented the extent and distribution of wetland types prior to significant Euro-American modification based on available historical evidence (fig. 1.8). Wetland types mapped include palustrine habitats (alkali meadow, alkali meadow/flat, wet meadow, valley freshwater marsh, perennial freshwater pond, willow thicket, and willow-cottonwood forested wetland) and also a number of coastal habitat types (see habitat crosswalk, table 1.3).

Salt-affected, seasonally-flooded alkali meadows covered large areas of the Oxnard Plain, and were by far the most extensive wetland habitat type in the region. Extent of alkali-associated habitats was mapped almost exclusively from historical soils maps (Holmes and Mesmer 1901b, Nelson et al. 1917). Alkali meadow was first mapped from the

later historical soils map (Nelson et al. 1917), which shows large bodies of land with alkali present (designated with an “A”) or alkali present “in spots” (designated with an “S,” and covering most of the alkali-affected area). This mapping provided the general extent of alkali influence on the Oxnard Plain. A map of alkali extent accompanying the earlier soils report (Holmes and Mesmer 1901b), which distinguishes between six grades of alkali influence from 0.2% to over 3%, coarsely matches the extent of alkali-affected land as shown on the 1917 map, but provides much more resolution on the extent of highly affected (greater than 1% alkali) land. Highly affected alkaline areas, or alkali flats, were drawn from this map (the alkali meadow/flat category includes areas with 1% or greater alkali concentration in the top six feet of soil).

To map coastal features, we digitized and interpreted features from the earliest available U.S. Coast and Geodetic Survey (USCS) topographic sheets (T-sheets), from 1855 and 1857 (Johnson 1855b,c; Johnson 1857). High-resolution, full-color digital imagery of original T-sheets were obtained from the National Archives and Records Administration in College Park, Maryland (thanks to Dr. John Cloud of NOAA) and georeferenced. This work was completed as part of the Historical Wetlands of the Southern California Coast project, which contains further detail on the digitization and interpretation process for the T-sheets (see Grossinger et al. 2011). This mapping was then compared to additional sources (e.g., later T-sheet resurveys, independent historical maps, GLO survey notes, and other textual descriptions) and modified where appropriate.

Other wetland habitats were mapped from reliable, spatially explicit historical sources documenting the presence and extent of wet meadows, depressional marshes, ponds, and willow groves on the alluvial plains. Where multiple sources showed the same feature, evidence was synthesized to produce the most likely representation of historical feature. Topography, historical soils maps, and early aerial imagery were used to refine the shape and extent of wetland features in the absence of other available documentation.

This process undoubtedly under-represents the historical extent and distribution of wetland features. Some known wetland features are documented in the textual record or on coarse maps, but are ultimately not recorded with enough accuracy to render them mappable. Other wetlands were undoubtedly present, but were left undocumented by the available historical record. Subsequent research may reveal more information about the presence or location of additional wetland features.

DRYLAND HABITATS We documented the extent and distribution of dryland habitat types prior to significant Euro-American modification based on available historical evidence (fig. 1.9). Here we define “dryland” habitats to be well drained terrestrial habitats without regular cycles of flooding. Mapped terrestrial habitat classes include grassland/coastal

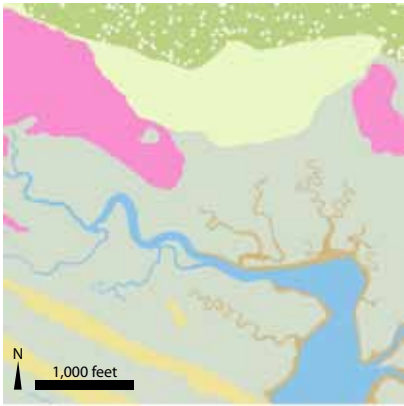


Fig. 1.8. Detail of wetland mapping, northwestern edge of Mugu Lagoon wetland complex. We mapped seasonal wetlands (such as alkali meadows, shown here in green with white stipple) in addition to perennial wetlands (such as the tidal marsh shown in grey-blue).

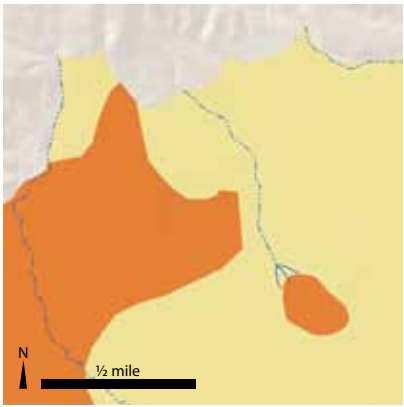


Fig. 1.9. Detail of dryland mapping. We mapped dryland habitats in a generalized fashion, including grassland/coastal scrub (in yellow) and oaks and sycamores (in orange).

sage scrub and oaks/sycamores (see habitat crosswalk, table 1.3). This layer provides the background into which we incorporated wetland and river corridor mapping.

Historical sources generally contained much less spatially explicit documentation of dryland habitat features (unlike for many wetland types, where multiple historical sources often document a single feature’s location and characteristics). As a result, the goal of dryland habitat mapping was to produce a meaningful representation of patterns of dryland vegetation cover at the landscape scale. Given the lack of spatially specific information in most early sources, we relied predominantly on the few sources that did address dryland habitats, including GLO surveys, historical soil surveys, and historical aerial photography. Where available, textual descriptions, cartographic sources, and landscape photography provided additional support.

In particular, the GLO survey data provided early, detailed information about habitat boundaries and characteristics along survey lines. Later sources (such as historical soil surveys and aerial photography), in addition to edaphic or topographic information, were used to shape polygons in areas where a GLO transect was the only other source of evidence. In some cases, habitat boundaries were defined by the descriptive text associated with the soil surveys. These surveys often describe the native vegetation of the soil type, such as “brush and grass” on Yolo fine sandy loam or “scattered oak and brush” on Vina fine sandy loam (Nelson et al. 1920). Aerial photography was used to confirm the presence of trees identified by earlier sources and to map the extent of that area based on the vegetation pattern.

The “grassland/coastal sage scrub” class covers the majority of the study area (53%). It encompasses a wide range of subtypes of different moisture regimes and vegetation types. Our data suggest that the grassland/coastal sage scrub areas ranged from rich, relatively moist coastal prairie, to barren land, to dense scrub and cactus with little or no grass. This habitat type may also include areas of sparse tree cover or regions with small groves (below the minimum mapping unit, not locatable, or not documented by historical sources). We use the term “coastal sage scrub” because California sagebrush (*Artemisia californica*) was likely the predominating species. However, other chaparral or cactus species also occurred in many areas. In this report, we use grassland to mean a predominantly upland herbaceous cover, encompassing both forbland and coastal prairie types.

We were unable to map grassland and scrub separately at a consistent scale across the region, given the indistinct boundaries between types and the absence of early historical evidence for many parts of the study area. In addition, due to early invasions and the effects of grazing, dramatic changes in extent of grassland and scrub may have occurred shortly after European contact in the late 1700s, which complicates interpretation of

mid-1800s sources (see box on page 18). Generalized accounts of the Ventura County lowland describe it as largely dominated by herbaceous cover, and documentation of non-riparian trees was confined to a few select areas (see specific chapters for more details). To address this data gap, we used the grassland/coastal sage scrub habitat class as a default type when no historical evidence existed. As a result, this habitat classification often carries greater interpretation uncertainty than other mapped classes. This is captured in the GIS historical habitat layers.

The “oaks and sycamores” habitat type includes woodland or savanna areas supporting coast live oak (*Quercus agrifolia*) and/or California sycamore (*Platanus racemosa*). It was mapped in areas where tree cover was documented by historical sources (e.g., a GLO survey recording “timbered tableland” or “scattering oaks”; Thompson 1868, Craven 1874g). Polygon boundaries were drawn from a synthesis of historical aerial photography, soils and other historical maps, and textual data. In many of these instances, sycamores were explicitly mentioned (e.g., a map depicting “scattering oak and sycamore” or a GLO surveyor noting “scattering live oak and sycamore with undergrowth sage brush”; Hare 1876, Orcutt 1900); this information is included in the GIS metadata. The “oaks and sycamores” class would have included understory cover ranging from predominantly grassland to predominantly scrub, though this distinction is not represented in our mapping.

As for wetland habitat types, it is likely that mapping of these wooded areas is a conservative representation of extent, since trees were mapped only where there was supporting historical evidence. Some areas of this type are undoubtedly assigned grassland/coastal sage scrub as a default due to lack of documentation.

Inevitably, historical documents reveal more details about the historical landscape than is represented in the habitat map. For example, not all features noted by the GLO surveyors were subsequently mapped in the habitat layer, as some information was more detailed than our mapping standards allowed (e.g., an area with a small patch of cactus noted within grassland was all mapped as part of the grassland/coastal sage scrub class). As is the case with most ecosystems, transitions between woodland, scrub and low herbaceous cover were often gradual and diffuse, extending over broad areas. The habitat mapping represents regional-scale transitions as opposed to local-level detail (such as small groves, patches of scrub, or narrow zones of riparian oaks along ravines). Many of these local characteristics, though not mapped, are explored further in this report. Though the broad habitat classifications we use obscure some of the detail present in the historical record, they provide meaningful classification units that are comparable across the study area, allowing us to map at a consistent scale even in areas with relatively sparse documentation.

GRASSLAND, FORBLAND, OR COASTAL SAGE SCRUB?

The original composition of pre-contact herbaceous cover on Ventura County valley floor—indeed, across all of California—is far from clear. The historical dominance of perennial bunchgrasses in California grasslands has been hypothesized by many ecologists, and was the dominant theory for most of the 20th century (e.g., Clements 1934, Burcham 1956; see Bartolome et al. 2007 and Martinez 2010 for more detail). More recently, however, a number of researchers have proposed the historical prevalence of annual grasses and forbs in Southern California (the Los Angeles coastal prairie; see Mattoni and Longcore 1997, Schiffman 2005) and California as a whole (see Schiffman 2007, Minnich 2008). In the absence of precise, explicit historical evidence, we broadly refer in this report to the low herbaceous cover that dominated much of the Ventura County lowlands as “grasslands.” These areas may have included perennial bunchgrasses and annual grasses, in addition to annual forbs and wildflowers and even some shrubs.

In our historical habitat mapping, we lumped these “grassland” habitats with the shrubbier coastal sage scrub. One reason for doing so is the ambiguity of the historical record. While habitat type is clearly indicated in a few areas by the historical record (for example, references to “cactus and sage brush” (Craven 1874f) or a “spacious plain, covered with grass” (Costansó and Browning 1992)), in most areas no such historical resolution exists.

A second reason for combining the herbaceous and shrub classes is the uncertainty surrounding impacts of Chumash land management practices, in particular the burning of grasslands. Widespread Chumash burning of grassland areas in the Santa Barbara Channel region has been exhaustively documented by Timbrook et al. (1982). Frequent (every 1-3 years) burning of valley grasslands, a technique used to increase yields of seeds and other foods during the late summer, would have maintained these areas at the expense of coastal sage scrub. Conversely, the suppression of burning practices in the late 1700s by Mission officials would have led to the encroachment of coastal sage scrub into former grassland areas.

The effects of Chumash burning practices on the extent and distribution of Ventura grasslands and shrublands further compounds the ambiguity surrounding each habitat’s historical distribution in the county, and even calls into question the relevance of 19th century ecological observations for these habitat types. Heavy grazing pressures from Mission cattle in the late 1700s and early 1800s may have also distorted these observations. Since distinctions between grasslands and shrublands could not be consistently made across the entire study area, we chose to display the two communities together rather than risk making uninformed decisions.

The cessation of Chumash fire management, grazing impacts, and the introduction and invasion of exotic species all contributed to a rapid change in the character of Ventura grasslands by the early 19th century. Descriptions of widespread non-native cover, particularly wild oats (*Avena fatua*) and wild mustard (*Hirschfeldia incana/Brassica nigra*), were abundant during this time on lowlands across the study area: GLO surveyor Hancock (1854) repeatedly noted “dense mustard” and “belts of grass and mustard” on the Oxnard Plain; a description corroborated by other observers who saw “thickets of wild-mustard” (Roberts 1886), “thousands of acres actually overrun with wild mustard” (Rothrock 1876), a “vast forest of bee-haunted mustard-blooms” (Eames 1889), “meadow grass and wild oat” (*Daily Alta California* 1865), and “wild oats, wild burr-clover [*Medicago polymorpha*], and alfilaria [filaree; *Erodium cicutarium*]” (Storke 1891).

Timbrook et al. (1982) provides a list of grasses that were likely abundant in the Santa Barbara Channel region during active Chumash management. They include California brome (*Bromus carinatus*), ryegrasses (*Leymus [Elymus] condensatus*, *L. glaucus*, and *L. triticoides*), meadow barley (*Hordeum brachyantherum*), coast range melic (*Melica imperfecta*), bluegrass (*Poa secunda*), needlegrass (*Nassella pulchra*, *N. lepida*, and *N. cernua*), chia (*Salvia columbariae*), and red maids (*Calandrinia* spp.), among other grass and herb species.

Habitat and Channel Classification

We developed twenty different habitat types based on historical evidence and modern classification systems (table 1.3). These classes balance a desire to preserve the detail often available in the historical record, while creating meaningful classes that are comparable to contemporary classification systems and applicable across the entire study area. In some cases, the character of historical data creates difficulty in direct translation to a single contemporary vegetation class. We divided the 20 habitats or vegetation types into wetland, dryland, riparian, and coastal habitat types reflective of the historical ecology of the region (see table 1.3 for complete list). (In this report, we use the term “riparian” to refer exclusively to streamside vegetation.)

The following definitions provide brief explanation of the habitat types outlined in table 1.3. They are in large part derived from contemporary descriptions and classification systems outlined elsewhere (e.g., Ferren et al. 1990, 1995; Mertes et al. 1996; Holstein 2000; Ornduff et al. 2003; Barbour et al. 2007; Ferren et al. 2007; Grossinger et al. 2007; Stillwater Sciences 2007a,c; Coffman 2008; Orr et al. 2011). For more detailed descriptions of each type, please refer these documents.

Palustrine and Terrestrial Habitats

PERENNIAL FRESHWATER POND Freshwater ponds are permanently inundated, non-vegetated depressional areas containing year-round standing water. They often occur within larger complexes of marshland, willows, and seasonal wetlands.

VALLEY FRESHWATER MARSH Valley freshwater marshes can be associated with low-lying depressions and ponds, in-channel sloughs and areas of high groundwater, or groundwater-fed springs. They are flooded for most or all of the year, and are permanently saturated. Dominant plant species include bulrushes (*Scirpus [Schoenoplectus] spp.*), cattails (*Typha* spp.), sedges (*Carex* spp.), spikerushes (*Eleocharis* spp.), and rushes (*Juncus* spp.).

WILLOW THICKET This category includes stands of willow (*Salix* spp.) not found along rivers or creeks. It includes dense thickets dominated by shrub-sized willows with occasional larger trees (e.g., historically documented box elder; *Acer negundo*), in addition to willow “groves,” which tended to include stands of more mature, established trees. Since willows are dependent on a relatively high groundwater table, these areas are often temporarily flooded.

WET MEADOW Wet meadows are temporarily or seasonally flooded grasslands characterized by poorly-drained, clay-rich soils. They can be flooded for days or weeks depending on precipitation and topography, and stay moist longer than adjacent, better-drained areas. The dominant plant species were probably rhizomatous ryegrasses (*Leymus* spp.), with a significant component of obligate and facultative wetland species such as wire rush

Table 1.3. Crosswalk between historical habitat type and modern classification systems.

Historical Habitat Type	California Terrestrial Natural Communities (CNDDB 2003)	Wetland Classification and Water Regime (Cowardin et al. 1979)/ USFWS Riparian Mapping System (2009)
Palustrine and Terrestrial Habitats		
Perennial Freshwater Pond	N/A	Palustrine permanently flooded wetland.
Valley Freshwater Marsh	Valley Freshwater Marsh (52.100.01)	Palustrine persistent emergent freshwater/saline wetland. Temporarily to permanently flooded, permanently saturated.
Willow Thicket	Scrub Willow (63.100.00), Willow Riparian Forests and Woodlands (61.200.00)	Palustrine forested wetland. Temporarily flooded, permanently saturated
Wet Meadow	Native Grassland (41.000.00); Meadows and Seeps not dominated by grasses (45.000.00)	Palustrine emergent wetland. Temporarily flooded, seasonally saturated.
Alkali Meadow	Alkali Meadow (45.500.00), Salt - Alkali Marsh (52.200.00), Saltgrass (41.200.00)	Palustrine emergent saline wetland. Temporarily to seasonally flooded, seasonally to permanently saturated.
Alkali Meadow/ Alkali Flat	Alkali Meadow (45.500.00), Alkali Playa Community (46.000.00), Saltgrass (41.200.00)	Temporarily to seasonally flooded, seasonally to permanently saturated.
Oaks and Sycamores	California Sycamore-Coast Live Oak (61.312.01), California Sycamore (61.310.00)	N/A
Grassland and Coastal Sage Scrub	Native Grassland (41.000.00); Venturan Coastal Scrub (32.190.00), Wildflower Field (41.290.00)	N/A
Characteristic Riparian Habitat Types		
Willow-Cottonwood Forested Wetland	Willow Riparian Forests and Woodlands (61.200.00), Black Cottonwood Riparian Forests and Woodlands (61.120.00), Southern Cottonwood-Willow Riparian (61.130.02), Marsh (52.100.00)	Riparian Forested Deciduous
Other In-Channel Riparian	Scrub Willow (63.100.00), California Buckwheat-Scalebroom (32.070.01), Mulefat Scrub (63.510.00), California Sycamore-Coast Live Oak (61.312.01), Willow Riparian Forests and Woodlands (61.200.00)	Riparian Scrub-Shrub Deciduous, Riparian Forested Deciduous/Evergreen
Coastal and Estuarine Habitats		
Beach/Dune	Coastal Dunes (21.000.00), Native Dunegrass (41.260.00)	N/A
Tidal Lagoon (mostly open?)	N/A	Estuarine subtidal, unconsolidated bottom
Tidal Lagoon (seasonally open)	N/A	Estuarine subtidal/Palustrine intermittently flooded. Unconsolidated bottom.
Non-tidal Lagoon	N/A	Estuarine subtidal/Palustrine intermittently flooded. Unconsolidated bottom.
Tidal Flat	N/A	Estuarine intertidal. Intermittently flooded, unconsolidated bottom.
Tidal Marsh	Coastal Brackish Marsh (51.100.02), Pickleweed Wetland (52.201.00)	Estuarine intertidal persistent emergent wetland. Temporarily to seasonally flooded, permanently saturated.
Seasonally Tidal Marsh	Coastal Brackish Marsh (51.100.02), Pickleweed Wetland (52.201.00)	Estuarine intertidal persistent emergent wetland. Seasonally flooded, permanently saturated.
Salt/Brackish Marsh	Coastal Brackish Marsh (51.100.02)	Estuarine intertidal persistent emergent wetland. Temporarily to seasonally flooded, permanently saturated.
Salt Flat/ Seasonal Pond	N/A	Estuarine intertidal. Intermittently flooded, unconsolidated bottom.
High Marsh Transition Zone	Saltgrass (41.200.00), Alkali Meadow (45.500.00)	Palustrine emergent or unconsolidated bed, possibly hypersaline at times

(*Juncus balticus*), irisleaf rush (*Juncus xiphiodes*), buttercup (*Ranunculus californicus*), and blue eyed grass (*Sisyrinchium bellum*).

ALKALI MEADOW Similar to wet meadows, alkali meadows are temporarily or seasonally flooded grasslands on poorly-drained, clay-rich soils. Unlike wet meadows, however, alkali meadows are characterized by salt-affected soils. The dominant vegetation is salt grass (*Distichlis spicata*), though other salt-tolerant species such as alkalki goldfields (*Lasthenia ferrisiae*), salt marsh birds beak (*Cordylanthus maritimus* ssp. *maritimus*), spreading alkali weed (*Cressa truxillensis*), shaggyfruit pepperweed (*Lepidium lasiocarpum*), and hairy gumweed (*Grindelia hirsutula*) may have also been present.

ALKALI MEADOW/FLAT Some alkali meadows were characterized by a particularly high degree of soil salinity (over 1% in the first 6 feet; Holmes and Mesmer 1901c). These areas are composed of a mosaic of alkali meadows and more sparsely vegetated alkali playas or flats (e.g., “scalds”). Saltgrass (*Distichlis spicata*) is still a significant component, but this category also includes large expanses of open, non-vegetated seasonally flooded areas (<10% plant cover) with local alkaline concentrations too high to support substantial vegetation.

OAKS AND SYCAMORES This classification includes areas not along active stream courses but with documented coast live oak (*Quercus agrifolia*) and/or California sycamore (*Platanus racemosa*). With few exceptions, the dominant tree is coast live oak. Shrubs and herbaceous cover were both documented below the canopy. Since it is unevenly specified by historical documents in this region, we were unable to specify tree density. These areas likely ranged from savanna to woodland densities. They occurred predominantly on well drained terraces and alluvial fans in the Ventura and Santa Clara river watersheds.

GRASSLAND/COASTAL SAGE SCRUB This is a general category encompassing herbaceous and shrub cover, mostly occupying well drained portions of the Ventura County alluvial valleys. Vegetation communities included in this category range from treeless herbaceous cover and coastal prairie (which may have included native perennial bunchgrasses and annual grasses, in addition to annual forbs, wildflowers and shrubs) to Venturan coastal sage scrub (including coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*)).

Riparian Habitats
WILLOW-COTTONWOOD FORESTED WETLAND This category includes large areas (over 200 acres) of wetland riparian habitat whose presence has transcended significant flood events of the late 19th and early 20th centuries. Each of these areas is well documented in the historical record as broad forested groves or marshes; many were even named (e.g., West Grove, East Grove, the Cienega). They are distinguished from other in-channel riparian areas by their size, their breadth (in some places over 3,300 ft

wide), their persistence, and their notoriety. They are also described in the report as “persistent wetland riparian areas.”

These areas included valley freshwater marsh and winter-deciduous riparian forest, with species extent and distribution varying by location. Some areas would have been predominantly forest stands on higher benches, while in other areas forest would have been interspersed with open wetland patches. Mixed willow forest (*Salix* spp., including arroyo willow, red willow, narrowleaf willow, sandbar willow, and shining willow), mulefat (*Baccharis salicifolia*), black and Fremont cottonwoods (*Populus balsamifera* ssp. *trichocarpa* and *P. fremontii*), and occasional sycamores (*Platanus racemosa*) would have been present in varying proportions in these areas, in addition to wild grape (*Vitis Californica*), wild rose (*Rosa californica*), and California blackberry (*Rubus ursinus*). Freshwater marsh-associated species such as tule (*Scirpus* [*Schoenoplectus*] spp.), cattails (*Typha* spp.), sedges (*Carex* spp.), spikerushes (*Eleocharis* spp.), and rushes (*Juncus* spp.) were also present.

OTHER IN-CHANNEL RIPARIAN Since the variability of historical data precluded detailed riparian mapping for this study, most riparian habitats are included in this category. The character and distribution of these habitats varied with water availability and flood disturbance regime. At one extreme, areas of frequently flooded sandy riverwash occupied the lowest portions of the active channel, and were either unvegetated or sparsely vegetated with willow, mulefat, or alluvial scrub. At the other, established, infrequently flooded bars and islands along portions of lower Santa Paula Creek and the Ventura River supported stands of California sycamore and Coast live oak. Intermediate riparian habitats included willow forest, sycamore-alder-California bay forest (on the Ventura River; Mertes et al. 1996), mixed riparian forest, thickets of willow scrub and mulefat, and alluvial scrub (including mulefat, California buckwheat (*Eriogonum fasciculatum*), and scalebroom (*Lepidospartum squamatum*)). These patterns, while lumped in the GIS, are discussed extensively in the report.

Coastal Habitats

BEACH/DUNE Beaches and dunes are coastal habitats located immediately along the shoreline. Beaches and foredunes are sandy and sparsely vegetated, while backdunes are located inland from foredunes and are generally more stable and more densely vegetated. While foredune vegetation is mostly composed of forbs, backdunes also support some shrubs in addition to herbaceous cover.

Beach and foredune vegetation would have likely included sand verbena (*Abronia maritima*) and pink sand verbena (*Abronia umbellata*), beach bur (*Ambrosia chamissonis*), beach saltbush (*Atriplex leucophylla*), beach primrose (*Camissonia cheiranthifolia*), beach morning glory (*Calystegia soldanella*), dune lupine (*Lupinus chamissonis*), mock heather (*Ericameria*

ericoides), dune buckwheat (*Eriogonum parvifolium*), and salt grass (*Distichlis spicata*). Backdunes would have likely supported coastal sagebrush (*Artemisia pycnocephala*), Heather goldbush (*Ericameria ericoides*), dune lupine (*Lupinus chamissonis*), and buckwheat (*Eriogonum* spp.), in addition to species also present in the foredune community. Scattered willows (probably *Salix lasiolepis*) were documented in dune swales south of McGrath lake.

TIDAL LAGOON (MOSTLY OPEN?) These are coastal bodies of water with a more frequent connection to the ocean, although precise historical closure dynamics are generally unknown. Subtidal communities of eelgrass (*Zostera marina*), Pacific eelgrass (*Zostera pacifica*), and surf-grass (*Phyllospadix torreyi*) occur in subtidal portions of estuarine lagoons.

TIDAL LAGOON (SEASONALLY OPEN) These are coastal bodies of water with a seasonal connection to the ocean. They are typically non-tidal during the summer, when the mouth is closed, and open during the winter, when greater freshwater flows breach the barrier.

NON-TIDAL LAGOON Mostly-closed tidal lagoons are coastal bodies of water with infrequent tidal connection. These lagoons may have salinity gradients ranging from fresh to brackish to saline, with freshwater inputs from springs and streams upslope and occasional tidal inputs. Through stratification, these lagoons may support distinct saline and fresh zones. Some lagoons may have occasionally dried out during the dry season.

TIDAL FLAT Tidal flats are unvegetated intertidal habitat, found on gradually sloping shorelines between estuarine open water and the lowest salt marshes. They are exposed between low and high tides.

TIDAL MARSH Tidal marshes occur along the perimeter of tidal lagoons, and are regularly inundated by the tides. Plant species distribution within the tidal marsh is determined largely by salinity and elevation (and thus inundation frequency); dominant plant species include Pacific cordgrass (*Spartina foliosa*), pickleweed (*Salicornia virginica*), and high marsh species such as saltgrass (*Distichlis spicata*), Parish’s pickleweed (*Arthrocnemum subterminale*), and shoregrass (*Monanthochloe littoralis*).

SEASONALLY TIDAL MARSH Found adjacent to seasonally open tidal lagoons, seasonally tidal marsh shares similar vegetative characteristics to tidal marsh but with the addition of brackish emergent vegetation such as prairie bulrush (*Scirpus* [*Bolboschoenus*] *maritimus*), tule (*Scirpus* [*Schoenoplectus*] *californicus*), and cattail (*Typha domingensis*). Seasonally tidal marshes have brackish to saline hydrology, depending on season, elevation, and precipitation.

SALT/BRACKISH MARSH Found adjacent to non-tidal (mostly closed) lagoons, non-tidal brackish marsh hydrology originates largely from runoff and

precipitation, with occasional dune overwash during large storm events contributing saline water. As a result, non-tidal brackish marshes can be fresher than the more marine-influenced tidal marshes, with corresponding shifts in vegetation distribution and frequency. The infrequent presence of an outlet can also make some non-tidal brackish marshes hypersaline. Dominant plant species probably overlap with high marsh plants (e.g., saltgrass), with additional presence of brackish-tolerant species such as bulrush (*Scirpus [Bolboschoenus] spp.*), tule (*Scirpus [Schoenoplectus] californicus*), and cattail (*Typha domingensis*). Little is known, however, about the pre-modification plant community of these marshes.

SALT FLAT/SEASONAL POND/MARSH PANNE Tidal marsh pannes or salt flats are unvegetated, open depressions within tidal marshes. They are irregularly or seasonally flooded. Their hydrology (alternately flooded and dry) and evaporate concentration precludes most plants from establishing. Some seasonal ponds may have occasionally retained open water year-round.

HIGH MARSH TRANSITION ZONE The high marsh transition zone is the ecotone between estuarine and terrestrial communities, with habitats intergrading between upland habitats and the tidally-influenced saline habitats of the coast. High tidal marsh species (e.g., saltgrass) overlap with alkali meadow species and freshwater (non-tidal) species. This area generally receives overflow by extreme high tides.

2 • HISTORICAL BACKGROUND AND CONTEXT



It was late in the afternoon of the next day ere we started for our seven miles ride to Saticoy. Our way led through the upper portion of one of the finest avenues in California...Clinging to the road on both sides are extensive orchards of apricot and walnut trees, while countless acres of beans stretch away to the mountains on one hand, and to the river on the other.

And to think! When I was a little girl this was all a vast forest of bee-haunted mustard-blooms, in which the traveler would get lost as easily as in an Indian jungle.

—NINETTA EAMES 1889,
TRAVELING FROM SANTA PAULA TO SATICOY;
AUTUMN DAYS IN VENTURA

Ventura County has a complex history of occupation, cultivation, and water use. Land and water use both reflect physical characteristics of the landscape (e.g., sugar beet cultivation indicates presence of alkaline soils) and affects landscape character (e.g., groundwater pumping decreases riverine flow). Because of this, understanding the cultural trends in the county is essential to interpretation of changes in landscape patterns and ecological function that have occurred over the past 250 years.

Since other reports have provided detailed histories of land and water use trends in the mid- to late 20th century (e.g., Schwartzberg and Moore 1995, AMEC 2004, Stillwater Sciences 2007b), we do not cover it again here (fig. 2.2). Instead, we focus on 19th- and early 20th-century trends in population, agriculture, irrigation, and resource use that provide context for the broad ecological and hydrologic changes occurring in the county concurrent with the changes detailed below.

Early Settlement History: Ventureño Chumash

The Chumash have been present in the Santa Barbara Channel region for about 9,000 years (Timbrook 2007). Ventureño Chumash occupied most of the study area, including the Ventura River valley, the Oxnard Plain, and the Santa Clara River valley to around Castaic (Van Valkenburgh 1935). The Uto-Aztecan Tataviam lived in the upper portion of the Santa Clara River watershed.

An estimated 15,000 Chumash lived in the Santa Barbara Channel area (including the Channel Islands) in 1769, at the time of Crespi’s expedition

Fig. 2.1. Planting lima beans on the Dixie Thompson Ranch, near Ventura. This photo (opposite page), taken around the turn of the 20th century, shows a team in the process of planting lima beans, and is part of a series of such photos. Other photos in the sequence state that the rows were 1.75 miles long, and that teams could plant 150 acres a day. (Unknown ca. 1900c, courtesy of the Society of California Pioneers)

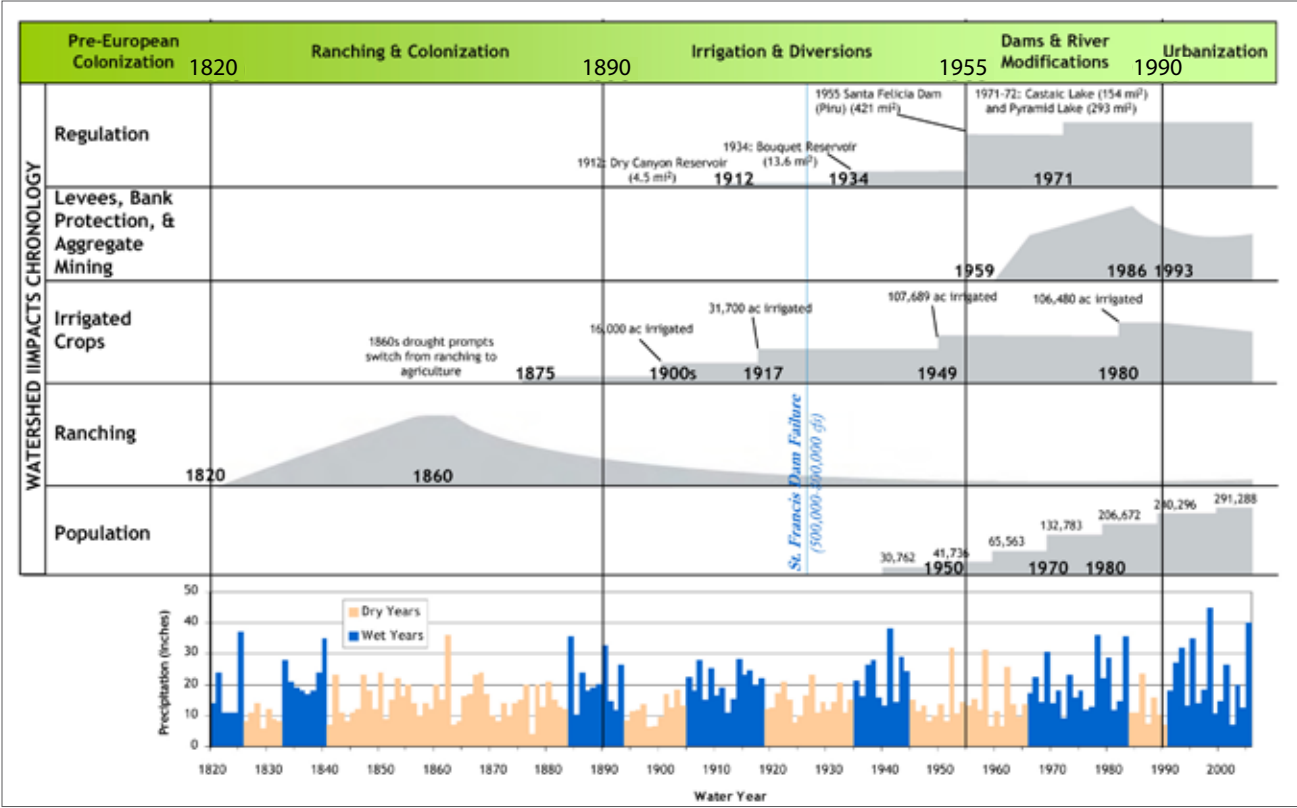


Fig. 2.2. Chronology of land and water use modifications, population, and precipitation on the lower Santa Clara River, 1820-2005. This graphic, produced by Stillwater Sciences (2007b), provides hydrologic and land use modification context useful in the interpretation of historical sources. (Precipitation data extended and adapted from Freeman (1968) by Stillwater Sciences (2007b); graphic courtesy of Stillwater Sciences)

(Timbrook et al. 1982). On a sea voyage in 1542, Juan Rodríguez Cabrillo noted a seaside town which he called Pueblo de las Canoas, a large village with many canoes (in Kelsey 1986). This site has been variably identified by researchers as near Mugu Lagoon (Wagner 1941, Kelsey 1986, King 2005) or near Ventura (Bancroft 1884, Davidson 1887, Bolton 1959; see Moriarty and Keistman 1963 and Kelsey 1986). When Crespí's party traveled through the Ventura region in 1769, they noted a number of large Chumash settlements: a village of about 200 near the confluence of Sespe Creek and the Santa Clara River (Costansó mentions that including this village, he saw 500 Chumash between Piru and Sespe); a village near the Santa Clara River at its confluence with Santa Paula Creek; a large village near Saticoy Springs; and a large village near Ventura (Costansó and Browning 1992, Crespí and Brown 2001).

A large number of other important settlement and use sites have been identified by archaeologists and ethnographers. In particular, ethnographer and linguist John Peabody Harrington worked closely with the Ventureño Chumash during the early 1910s, recording information about places and place names. Harrington's research documents a rich landscape of place names for springs, lagoons, and other natural features, as well as settlement sites. Sites of particular note recorded by Harrington and other researchers

were located all over the county, including near Ventura, Matilija, Saticoy Springs, Montalvo, El Rio, Somis, Springville, Hueneme, Mugu, Santa Paula and Sespe creeks, Camulos, and Castaic (Harrington 1913e, Van Valkenburgh 1935).

The Chumash made extensive use of a wide variety of plant species in the county, as documented in detail by Timbrook (2007). Mission friar José Seánán noted in a report that the Chumash at the Mission still ate the "wild seeds and fruits which they love dearly and cannot forget" (Seánán 1822). In addition to supplying food sources, plants were also used for producing material items. Riparian plants along the Santa Clara River, such as carrizo grass (*Phragmites communis*), giant reed (*Arundo donax*), tule, and cattail were used by the Chumash to create housing, boats, and other objects (Schwartzberg and Moore 1995, Timbrook 2007). Tule from the mouths of the Santa Clara and Ventura rivers was used to thatch houses (Harrington 1986b), and canoes were stored in the tule marsh at the mouth of the Ventura River (Harrington 1986b, Timbrook 2007). (One of Harrington's informants recalled that canoe builders "bent tule that was growing there on both sides over the canoe" to shade the boat.)

Deliberate, systematic burning of coastal grassland was also used as a method to create food sources, as documented in the Santa Barbara Channel region by a number of historical accounts (cf. Timbrook et al. 1982). Santa Barbara Mission records from 1793 indicate that Chumash to the north of Ventura County frequently burned the region's grassland, complaining that the Chumash "set [fire] to the grazing lands every year" (Arrillaga 1793, in Stewart et al. 2002). The extent of these practices in the Ventura valley areas, and their effects on vegetation cover, are unknown. It is possible that cessation of native burning may have increased shrub cover in areas where burning may have favored bunchgrass species (e.g., on the alluvial portions of the Oxnard Plain). However, this is impossible to determine from our data set, and is complicated by the impacts of grazing in many areas during the first half of the 19th century, which likely served to inhibit shrub/scrub growth.

San Buenaventura Mission and the Ranching Era (1782-1877)

The San Buenaventura Mission was founded in 1782, introducing stock-raising and small-scale agriculture to what was to become Ventura County (fig. 2.3). Fruit trees and small gardens of vegetables such as melons, corn, and potatoes (Vancouver [1798]1984, Seánán 1822) were planted near the Mission, along the lower Ventura River, and in the Santa Paula area (Bowman 1947). By the 1820s, the Mission also tended cultivated fields on the eastern portion of the Oxnard Plain, likely the Las Posas/Calleguas region (Uría 1828). ("Las Posas" means a "pool" or "water hole," features often associated with springs; Gudde and Bright 1998.)

Stock (notably cattle and sheep) ranged over large portions of the Mission property, including the Ventura and Santa Clara River valleys and large

*Along the margin of the river
Buenaventura are many small gardens
belonging to the Indians, where they
raise fruits and vegetables...*

—ROBINSON 1846

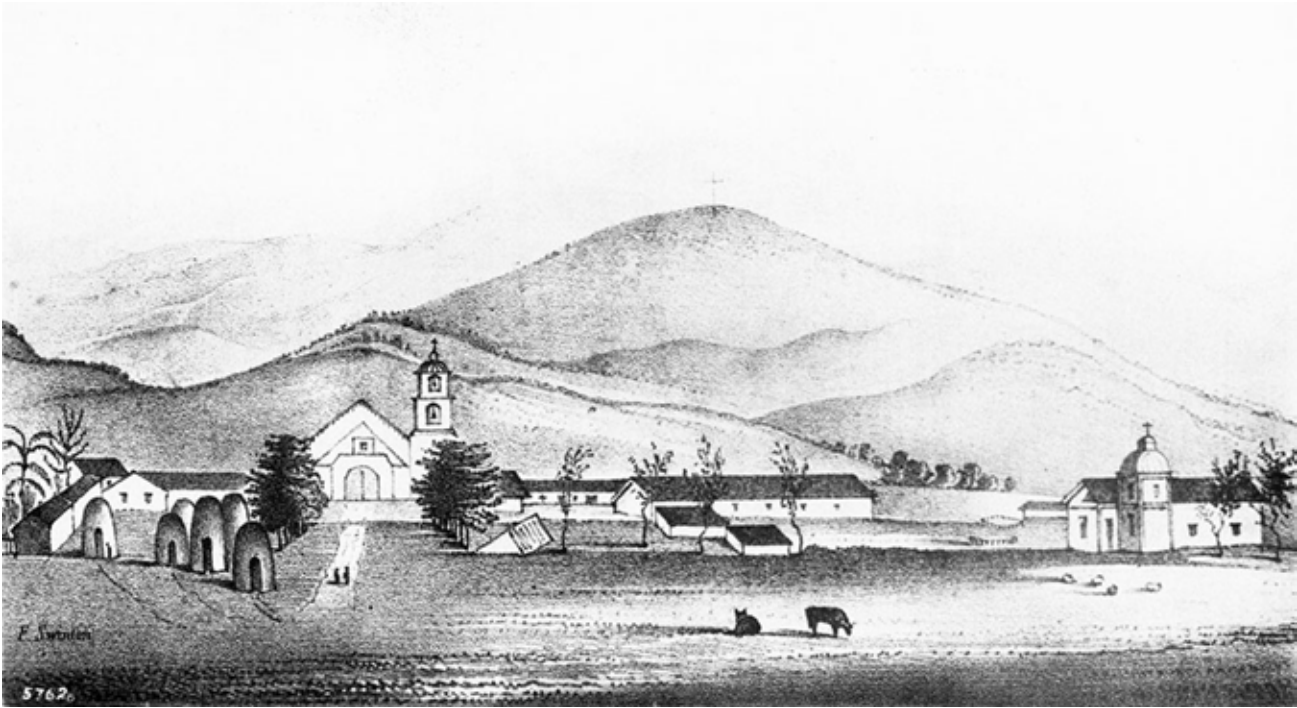


Fig. 2.3. Mission San Buenaventura, ca. 1829. This remarkably early sketch, from Alfred Robinson’s book *Life in California*, shows the mission complex as it existed before secularization. Cows graze in the foreground, with what appear to be sheep further back. Two people are on the path to the church complex. In the book Robinson describes his visit to the mission: “At dinner the fare was sumptuous, and I was much amused at the eccentricity of the old Padre...After concluding our meal, we walked with him to the garden, where we found a fine fountain of excellent water, and an abundance of fruits and vegetables.” (Text: Robinson [1846]1947; Image: Robinson ca. 1829, courtesy of the USC Digital Archive and the California Historical Society)

portions of the Oxnard Plain (Bowman 1947). The Mission’s main site for grazing and breeding cattle was in the Sespe-Pole Creek region (modern day Fillmore; Seán 1822, Van Valkenburgh 1935), though significant numbers of cattle also grazed near Piru (which Seán called “the consolation of this Mission” for its benefit to cattle). Sheep were kept in four flocks in the Ventura River valley north of the Mission (Seán 1822) and also near the current location of the Olivas adobe near the Santa Clara River (Harrington 1913e). Fray José Seán described the extensive ranging of the Mission’s cattle:

The considerable numbers of animals belonging to this Mission do their grazing, in large part, just above the beach. When the pasture there is exhausted or dried up, the cattle go in search of more plentiful or better grazing elsewhere, following the beach inland and spreading out toward Mugú [Santa Paula]. The animals farthest from the beach make their way to a place called Saticoy, and when the grazing there is exhausted (that locality not being very productive and most of the growth being sword grass), they roam farther up to the meadows along the river and through a rather wide canyon into Sécepy, some bands of mares penetrating as far as Camulus. (Seán and Santa María 1804)

At the Mission’s peak inventory in 1816, holdings included over 41,000 head of stock, including about 23,000 cattle and 12,000 sheep (Bowman

1947, California Missions Resource Center 2010). Around this time (1815), from 45 to 120 cows were slaughtered per week (Seán 1815). This provided an overabundance of meat, and since cows were kept predominantly for their tallow and hides this extra meat was simply discarded: “the large parts of the meat are taken in carts to the fields and burnt, since there is no one to collect them and there is plenty of fresh meat in the houses” (Seán 1815).

A drought around 1828-9 diminished the Mission’s cattle and sheep herds (Lynch 1931, Smith 1972). After the secularization of the California Missions in 1834 holdings were further reduced, until by 1842 a traveler noted “at most, one thousand head of cattle, large and small”(de Mofras [1844]1937). (Interestingly, de Mofras also noted that at this time Mission fields were irrigated with water from the Santa Clara River.) The Mission was illegally sold in 1846 to José Arnaz.

By this time, though, former Mission territory had been largely divided into large ranchos amongst Spanish and Mexican families. By the time the Mission was sold in 1846, what was to become Ventura County had been divided into 19 ranchos (Triem 1985), many of which were heavily stocked with cattle. One resident recalled that in 1850 “the whole country was overrun with cattle...The cattle were so thick and plentiful in those days that vaqueros would have to go ahead of parties traveling through the country to clear the way for them” (Sheridan 1912). By 1860, there were more than 90,000 cattle and 65,000 sheep in Santa Barbara County (including Ventura County, which was not formed until 1873; Gregor 1953; fig. 2.4). (While the numbers cited above seem large, they account for modern-day Ventura and Santa Barbara counties, quite an extensive area.)

The drought of 1863-4 killed massive numbers of cattle all over California. Lack of pasture and water caused thousands of cattle to die of starvation, or be slaughtered in anticipation of the lack of food and water. In Santa Barbara County, a newspaper article noted that 18,000 cattle “have been slaughtered for their hides and tallow, and from one-third to one-half of the remainder have died by starvation” (*Daily Alta California* 1864). (Others report a much larger figure, stating that 2/3 of the County’s cattle died; cf. Thompson and West [1883]1961.) This effectively marked the end of extensive cattle raising in the area. By the 1870 U.S. Census, only 10,000 cattle remained in Santa Barbara County (Gregor 1953).

As a result of this sharp decline in cattle numbers, after 1864 sheep ranching became the dominant land use in the region, in part because of their greater tolerance to drought. In 1870, about 190,000 sheep grazed in Santa Barbara County, nearly three times the number in the county a decade earlier. This was consistent with a wider statewide trend: while the 1850 census recorded under 20,000 sheep, by 1876 (the peak of the industry) there were over 6,400,000 sheep in the state being raised for meat and wool (Johnston and McCalla 2004).

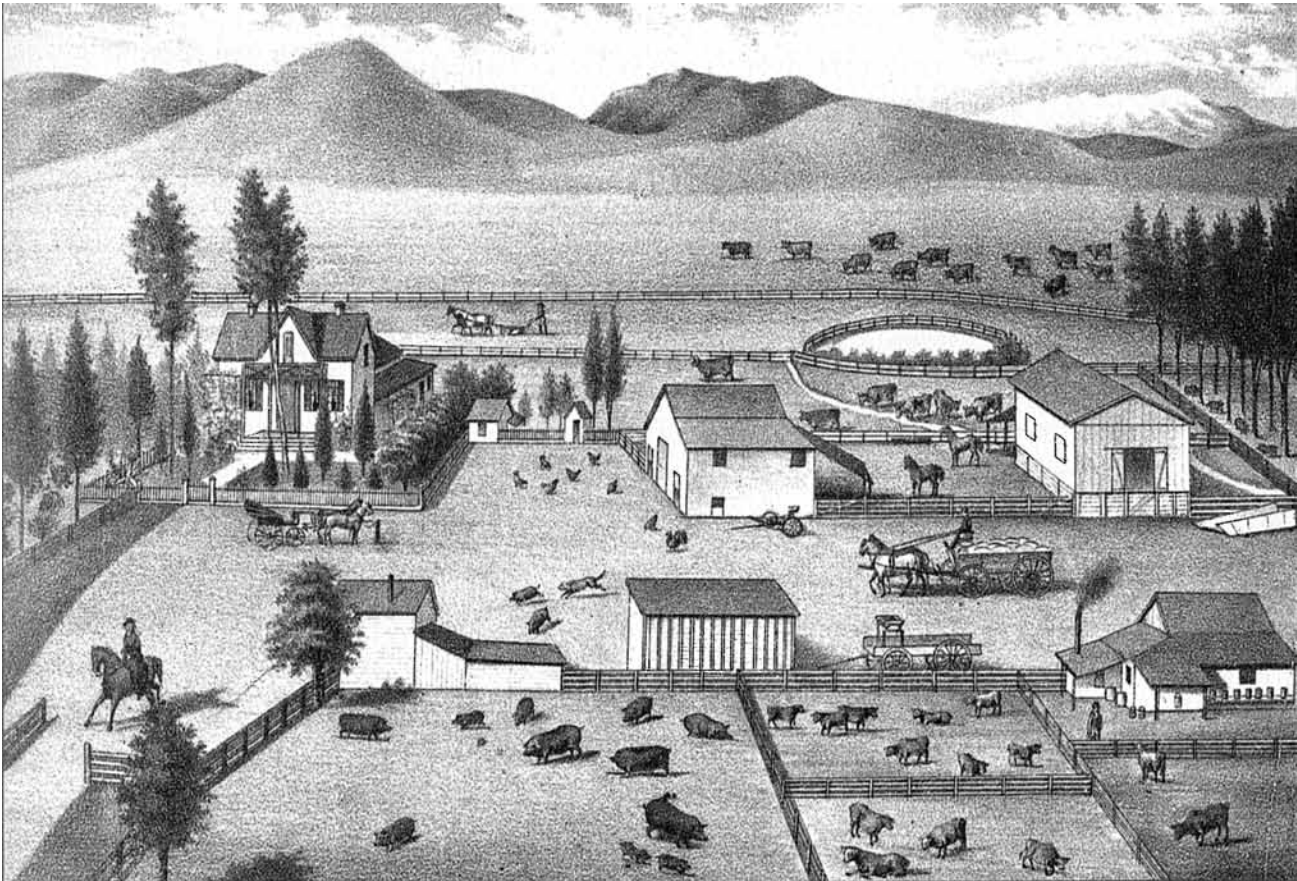


Fig. 2.4. Cattle, horses, pigs, and chickens on the George G. Sewell ranch near Santa Paula, 1881. Unfenced cattle graze in the background, and a dog chases a pig in the enclosure. The farm had 400 acres under cultivation and an additional 500 acres for grazing, including 1,000 hogs and 20 cattle. While the heyday of large cattle ranches had ended, this farm still had a number of stock. (Thompson and West [1883]1961)

The drought of 1877 marked the end of the large-scale stock raising in the county, and decimated the massive sheep flocks of the previous decade:

The year 1877 was very dry. In Santa Barbara county, hay was forty dollars a ton. I have heard men say, with a sigh, “It was the dry year of ‘77 that broke me up. My sheep all died.” Many a man grew gray that year, as he saw his living withering away. (Rindge 1898)

After this, Ventura County ranchers transitioned to grain farming. Large-scale sheep and cattle ranches, while still present in the county in reduced numbers, were largely pushed onto less desirable lands, either upland areas or uncultivable or remote lands. An exception was in the upper (Los Angeles County) portion of the Santa Clara River valley, where cattle and sheep grazed near the river into the 20th century (Tait 1912) and still do today. In some areas, sheep and cattle pastured Ventura uplands most of the year, and in valley floor fields during the winter (Nelson et al. 1920, Gregor 1951).

The impact of early cattle and sheep grazing on historical lowland habitats in Ventura County is unknown. At the peak of Mission stock holdings in 1816, stock ranging densities in the county reached an estimated one head for every four to five acres of grazing land (Bowman 1947). This

may be considered a relatively low to moderate stocking density: in the late 19th century appropriate stocking densities for cattle in Southern California were considered to be five acres per head for “valley land,” and approximately one acre per head for sheep (Bancroft et al. [1890]1970). Furthermore, these standards were based on American cattle, which were only introduced to Southern California by the 1860s (Adams 1946) and were much larger and required more forage than their Mexican counterparts (Cleland [1941]1990, Burcham 1956). The Mexican cattle ubiquitously raised by the Mission and early ranchos would have required less land than the above densities. Impacts of Mission-era cattle grazing were likely limited by the relatively small size and moderate grazing intensity of Mission-era cattle.

However, by the 1850s and 1860s it is possible that cattle and sheep grazing may have had significant effects on ecological and morphological processes in the county. Potential effects of early livestock grazing include alteration of the distribution and type of valley floor habitats (e.g., relative proportion of herbaceous cover and scrub and increased spread of invasive plant species), changes in rainfall runoff and erosion (and a resultant increased sediment supply to Ventura County waterways), and an increase in the depth and density of barrancas (Stillwater Sciences 2007b). These effects are treated only peripherally here (see pages 18 and 172).

A few sources do describe the effects of livestock on portions of the county’s pasturelands. Hassard (1887) described some of the effects of the upland shepherding in Ventura County common subsequent to the drought of 1877: “herders... drive thousands of sheep over the government wild lands, and, when they have stripped a region, put the torch to the brush, to improve the pasturage for the next season.” Rothrock (1876) described the immense changes wrought by sheep on the Conejo Ranch during the 1876 dry period, noting that

Hitherto sheep-raising has been the principal interest of the ranch, and of this we had the most indubitable evidence in the appearance of the land, everywhere pastured off the very surface. How long it will take California to regain the rank pasturage the State once had is a question.

Up Sespe Canyon, Rothrock described “a country where in the most accessible spots the soil had been stripped of the meager supply of herbage it perhaps once possessed.” While this was an exceptionally dry year, this type of heavy grazing would have likely altered the hydrodynamics of Ventura County streams.

Early Commercial Agricultural Development (1878-1920)

After the collapse of the large sheep ranchos of the 1860s and 1870s, farmers quickly began to switch to other livelihoods. Barley, which thrived in the foggy coastal areas better than other grains, had been cultivated on the Oxnard Plain since the 1860s (Storke 1891, Gregor 1953) and was a major crop of the Ventura lowland areas. Descriptions of the lower Santa

*And ’77, that ghastly year, child
as I was, is still with me, when the
relentless sun looked down from
cloudless blue skies and set red in
the west day after day, when the hills
were dry and brown from year’s end
to year’s end, and the lowing of cattle
being driven out to the country and
the bleating of the dying sheep filled
my heart with sorrow...*

—FRANCIS 1912

*If the stranger ever wondered where
Boston got its beans, he found out
now, as the land fell away to the
Pacific with the soil becoming richer
and finer as it expanded into the
broad plains of Santa Paula and
Hueneme, green for miles with grain
and springing corn and beans...*

—VAN DYKE 1890

Clara Valley and Oxnard Plain from the mid- to late 1870s describe an agricultural landscape dominated by barley (and, to a lesser extent, corn on the moister portions of the plain):

[traveling west from Conejo], we crossed the western end of the Santa Clara Valley, and found the farmers engaged in harvesting their barley... Large fields of good corn were seen. It was just in tassel, and gave abundant promise of a heavy crop. It is hardly overreaching to say that on that day we saw thousands of acres actually overrun with wild mustard, which attained a height often of 8 or 10 feet...In some places, indeed, it might well be doubted as to whether it was a mustard or barley field we were passing, both of which were luxuriant enough. (Rothrock 1876)

[describing “the section east of the Santa Clara River”] As we drove through that region, it seemed as though we were gazing upon a vast sea of grain, and here and there a dark spot looming up like a distant island, and contrasting strongly with the billowy waves of green barley on every hand. The dark spots marked the tracts of corn ground... (Sheridan 1878)

Lima beans were first planted on the Oxnard Plain around 1875 (Storke 1891; fig. 2.5). Like barley, the beans grew well in the fog on non-alkaline lowland soils (Holmes and Mesmer 1901c, Gregor 1953). By the late 1880s, beans had become a major commercial crop for the region; one account describes “one vast field of green and gold—ripening wheat and barley and growing corn and beans” (Oge 1888). A few years later, beans had surpassed even barley in prominence; Ventura County was described in 1891 as “preeminently a bean county” (Storke 1891) and one observer noted “seemingly limitless stretches of beans” (Eames 1890). Oxnard sand and Oxnard sandy loam, the two major soil types mapped on the Oxnard Plain in 1901, were “when free from alkali...the very best for the growing of lima beans. Almost every foot of such land was planted to this crop year after year, with only an occasional crop of barley planted for rotation” (Holmes and Mesmer 1901c). Beans continued to be a major product on the Oxnard Plain well into the 20th century; in 1951 Ventura County produced over 25% of the large lima beans in the United States (Gregor 1953).

However, in 1898 the establishment of the Pacific Beet Sugar Company’s sugar factory shifted the agricultural dynamics of the county (fig. 2.6). Sugar beets thrived on the plain’s alkali soils, allowing cultivation of land which had previously been only slightly productive or not farmed at all:

A few years ago only indifferent crops of barley were grown on the greater part of this soil which was considered practically worthless, as quite often the barley hay contained such a great amount of salt that stock would not eat it. Now a great deal of the alkaline portion of this soil is planted to sugar beets with surprising results. (Holmes and Mesmer 1901c)

Only three years after the creation of the factory and the city of Oxnard, sugar beets were considered second in importance in the county only to the bean (Holmes and Mesmer 1901c); in 1913 beets and beans were called “the staples of the county” (Chase 1913). Beets were grown on the low, alkali



Fig. 2.5. “Dixie Thompson’s bean threshing,” ca. 1899. Workers threshing beans on the Oxnard Plain. (Unknown ca. 1899, courtesy of the California State Library)



Fig. 2.6. Hauling wagon loads of beets on the Oxnard Plain, ca. 1900. (Unknown ca. 1900b, courtesy of Jeff Maulhardt)

land that would not support other crops, while beans were often grown on slightly higher alluvial deposits (Tait 1912). A crop rotation of beans and beets (or beets and barley on land too alkaline for beans) was often practiced in lowland areas, since the beans fixed nitrogen for the beets and the beets removed some alkali from the soil (Gregor 1953). Beans, beets, and barley remained the primary crops for the region until around 1920. By 1917, barley was only grown “on soils less desirable [sic] for other crops and in remote situations” (Nelson et al. 1920), and sugar beet planting peaked in 1919 (Schwartzberg and Moore 1995).

The extensive acreage of the Oxnard Plain meant that the agricultural statistics for Ventura County essentially reflected the trends of the Oxnard Plain. Through the 1870s, 1880s, and 1890s, beans, beets, and barley were the dominant crops in the county. Barley and beans were also grown at this time in inland valley areas, in addition to wheat in areas not influenced by the coastal fog (such as the Ventura River valley; Hampton 2002).

*The grain was knee-high, the groves
were in bloom, the wildflowers
carpeted all the fields.*

—EDWARDS ROBERTS, 1886,
SANTA PAULA

The lack of fruit culture in the region in the 1870s, and in particular on the Oxnard Plain, was notable to travelers used to seeing orchards in other parts of Southern California. In 1876, botanist J. T. Rothrock (1876) wrote that after traveling along the Oxnard Plain, “What more than anything else surprised me in the day’s march was that no attention was paid to fruit-culture. I find recorded in my notes that not a single fruit-tree was seen that day. There was no apparent reason for this.” The reason, of course, was the alkaline lowland nature of most of the plain.

While (as Rothrock observed) alkali concentrations and seasonal flooding precluded fruit culture on the plain in the 19th century, by the 1890s orchards began to proliferate in a few areas in the Santa Clara River valley. Early experiments in 1870s, notably around Santa Paula, had proven that walnuts and fruits (such as oranges, nectarines, peaches, and apricots) could succeed in the county (*Ventura Free Press* 1878a, Gregor 1953, Heil 1975, Hampton 2002). One newspaper mused that “some day the whole of the Santa Clara Valley will be a great fruit garden instead of, as now, a barley field” (*Ventura Signal* 1874a); another projected that by about 1880 the county would have fruit available to export (*Ventura Free Press* 1878a). However, fruit culture during this period was largely limited to the Santa Paula (and to some extent, Sespe) region; Rothrock (1876) noted that “With the exception of the Cumules [sic] Ranch...but little cultivation is attempted in the valley above Santa Paula.”

By the mid-1880s, orchards had become more prevalent in the lower Santa Clara River valley (fig. 2.7). One traveler journeying upriver from Ventura described “level fields, some planted with grain and flax, others covered with fruit-groves” (Roberts 1886). Another noted “extensive orchards of apricot and walnut trees...[and] countless acres of beans” between Saticoy and Santa Paula (Eames 1889). (“And to think!” Eames further writes, “When I was a little girl this was all a vast forest of bee-haunted mustard-blooms, in which the traveler would get lost as easily as in an Indian jungle.”) Residents of the county who had been present in the 1870s were amazed by the agricultural changes that had taken place in only a decade:

The individual who viewed the broad, treeless, uncultivated extent of the Santa Clara valley of Ventura county, less than twelve years ago, would now marvel at the transformation that has been wrought during this comparatively short period in that flourishing section. (*Ventura Free Press* 1883a)

Riding from Santa Paula to San Buenaventura a short time ago, I could not but mark the difference in the style of farming now, in the Santa Clara valley as compared with ten years ago. Then it was nearly all barley, and scarcely a clean field of that, so abundant was the mustard, sometimes taking possession of hundreds of acres. Now it is very different. Cultivated crops are raised to a great extent, and the land is considered too valuable to give over to weeds and everywhere is carefully farmed. Beans, corn, and flax are raised largely, and hundreds of acres have been put to fruit trees. (*Pacific Rural Press* 1886)

The expansion of the Southern Pacific Railroad to Ventura (1887) helped provide a wider market for the burgeoning commercial agriculture of the county and spurred development of both beans and orchards in the Santa Clara River valley (Warner 1891, Gregor 1953). Many towns sprung up along the railroad in the Santa Clara River valley, such as Montalvo, Fillmore, and Piru. While Ventura county was still considered “bean country,” it was clear that fruit growing would be the next wave of agriculture in many parts of the valley (Storke 1891). In 1891, a *Ventura Free Press* article opined that “the days of raising barley, corn and potatoes for market, as in days gone by in the Fillmore, Sespe, and Bardsdale sections of Ventura county are numbered. It is essentially a fruit section and the past few years and particularly the past year has seen the conversion [sic] of fields, heretofore given up to the commoner cereals, planted to fruit trees” (*Ventura Free Press* 1891c).

Limoneira Company began growing citrus on a large scale around Santa Paula in 1890; by 1920, citrus had become a dominant crop of the region (Gregor 1953, Schwartzberg and Moore 1995). As artificial drainage (beginning in 1918) and irrigation began to lower the water table and decrease the alkalinity of parts of the Oxnard Plain in the 1930s and 1940s, farms in this area began to convert former beet and bean acreage to citrus and walnuts (Gregor 1953). For detailed information on agricultural trends after 1920, see Gregor (1951, 1952, 1953) and Schwartzberg and Moore (1995).

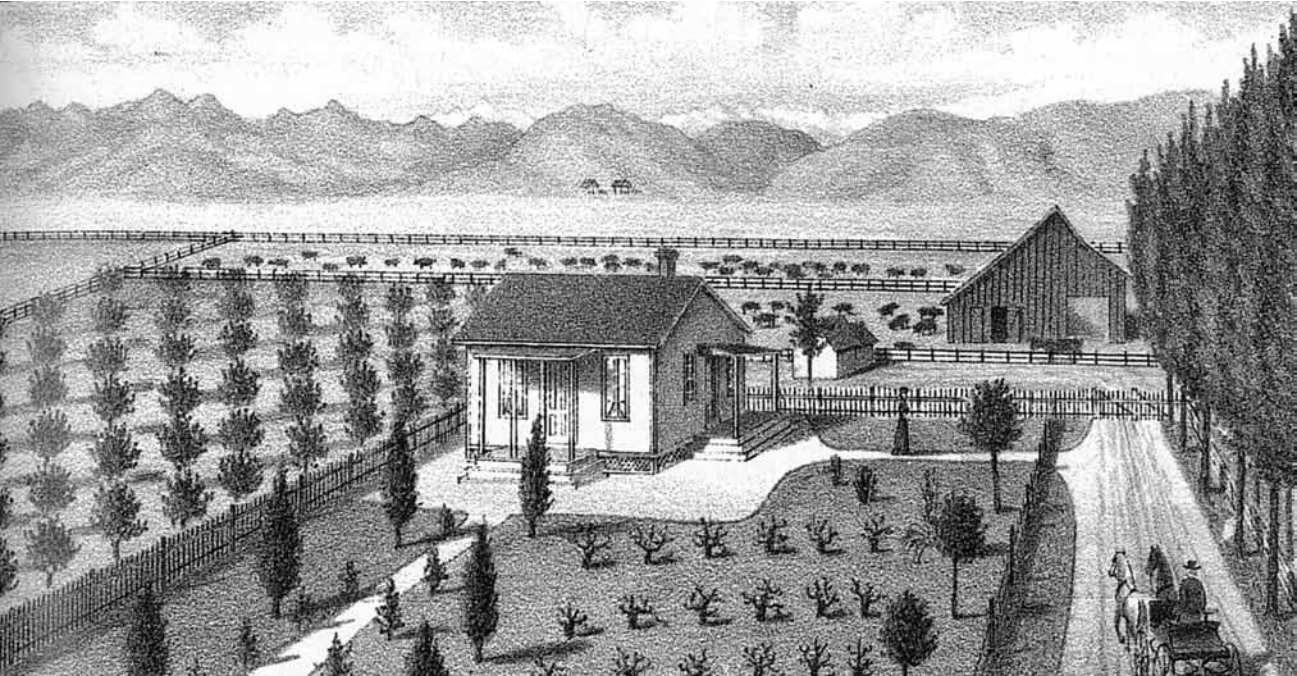


Fig. 2.7. Young orchard on J.H. McCutcheon’s farm near Santa Paula, 1883. Young orchard trees—less than a decade old—are shown surrounding the McCutcheon home. Many of these orchards were planted on the site of the barley farms of the previous decade. (Thompson and West [1883]1961)

Hydromodifications: Surface Diversions and Groundwater Extraction

The history of irrigation in Ventura County has been extensively covered by others (Gregor 1953, Freeman 1968, Schwartzberg and Moore 1995). For detailed information on water use in the county, please refer to these texts. What we provide here is a brief overview of surface water use and groundwater extraction as context for the historical data discussed throughout the report.

To address the water needs of Mission residents and their fields, in the early 19th century (ca. 1805-1815) an aqueduct was built bringing water from the Ventura River near the confluence of San Antonio Creek to the Mission and its fields (CERES 2004). The aqueduct, which was destroyed during the floods of 1861-2 and 1866-7 (Greenwood and Browne 1963), was the predominant component of the larger Mission water system. In addition, the Mission used three reservoirs for water storage, two about three miles north of the Mission and one near Santa Paula (Uriá 1828). The Mission also diverted water from Santa Paula Creek to irrigate fields in that area (Freeman 1968). Surveyor W. M. Johnson, in a U.S. Coast Survey report, notes that the Ventura River valley is “thoroughly irrigated by water from the river of the same name, which is carried to every part of it by means of ditches” (Johnson 1855a). Saticoy Springs also provided a year-round source of water (*Ventura Signal* 1871b, Freeman 1963).

The mission aqueduct supplied water to the city of Ventura through 1862; after its destruction during that year’s floods, water was hauled in barrels from the river (Triem 1985). This was common practice after the secularization of the mission and before the extensive construction of ditches, when many early residents relied on surface water hauled from perennial reaches of Ventura County waterways for domestic use. Anticipating the completion of the Farmers Ditch, one newspaper article celebrated that residents of the area north of the Santa Clara River (around Ventura) “shall not have to buy barrels and haul water from the river or Saticoy twice a week or thrice—the year round” (*Ventura Signal* 1871b). (After its construction, if the Farmers Ditch failed to produce water—such as during the drought of 1876-7—residents would still resort to hauling water; *Ventura Signal* 1876b). Sheridan (1926) recounts that Egbert’s Spring (north of downtown Ventura and east of the Ventura River; Barry 1894) used to provide water for domestic use for Ventura city during the early American period: “In the early days of the American occupation, the water of the spring was hauled on a wagon, in barrels, to the back doors of the residences of the settlers, at a cost of 25 cents per barrel. That was the drinking water of San Buenaventura.” When artesian water was found on the Ventura side of the Santa Clara River in 1898, a newspaper article noted that “they have been hauling water in that vicinity for thirty years” (*Pacific Rural Press* 1898). Farmers on the Oxnard Plain also hauled water in barrels from the Santa Clara River (Gregor 1952).

From the mid-1860s on, more substantial development of surface water diversions occurred on Ventura County waterways. Flow from perennial reaches of rivers and creeks was transported to fields and for domestic use. An 1864 map of the Camulos area shows a ditch leading to fields and vineyards from the perennial reach of the Santa Clara River about a mile upstream (Sprague 1865). This was likely one of the first diversions from the river (Freeman 1968). By the end of the 1870s, however, an abundance of canals brought water to fields. While many of these ditches had their sources or heads on tributaries (notably Santa Paula, Sespe, and Piru for the Santa Clara River, and San Antonio Creek along the Ventura River), others tapped into the Santa Clara River and Ventura mainstems (Crawford 1896).

These ditches brought water often long distances from perennial reaches near Santa Paula and Sespe creeks down to fields and population centers in need of water (fig. 2.8). The Farmers Ditch (1871) was 16 miles long, and brought water along the north side of the Santa Clara River from a branch of the river above Santa Paula Creek down to Prince Barranca (Hall Canyon), just east of Ventura (*Ventura Signal* 1871b, Freeman 1968). (One old-timer recounted to Vern Freeman (1968) that any extra water from the ditch was “disposed of” in the barranca.) The Santa Clara Irrigating Company’s ditch (1871) traveled 12 miles, bringing water to farmers



Fig. 2.8. Diversion ditch from Santa Paula Creek, ca. 1900. Surface diversions, such as this ditch taking water from Santa Paula Creek downvalley, brought water from areas with abundant surface flow to drier portions of the valley. (Unknown ca. 1900a, courtesy of the Santa Paula Historical Society)

At Satacoy [sic] we stopped for supper. From the excitement around the station and the water running down the street I thought an irrigating dam had sprung a leak; but a flowing artesian well had been struck instead, and its bursting forth had caused the commotion. These wells are the life of the country. There is much jealousy among rival settlements, and when one develops a copious flowing well it means beans, and walnuts; grain, vegetables and fruits, and the people shout with an exceeding joy thereat. They bite their thumbs at their envious neighbors and boast vaingloriously. This feeling is not known in the East, where the rain falls on all alike, and the land is all taken up. Here water rights go with the land, and when water in flowing quantities is found it means wealth to that section and the selling of land at good prices.

—KENDERDINE 1898

south of the river from near the west end of South Mountain (southeast of Saticoy) to near Hueneme (Freeman 1968). The Cienega Ditch (ca. 1874) diverted water from the river near the marsh (or *ciénega*) east of Fillmore. On the Ventura River, the Santa Ana Water Company built a ditch about seven miles long from the perennial reach around the Ventura River/San Antonio Creek confluence along the route of the old Mission aqueduct to supply water to the city of Ventura (Triem 1985).

The development of an artesian water supply on the Oxnard Plain beginning in the early 1870s changed the hydrologic landscape of Ventura’s lowland areas. While several springs, wetlands, and ponds were present along the eastern boundary of the Plain (i.e., in the Calleguas Creek drainage), there was very little potable water available in the main section of the plain (Thompson and West [1883]1961; see Chapter 5), and artesian wells transformed the non-alkaline portions of the lowland into a desirable farming region. The first artesian well in the county that we found evidence for was drilled near Saticoy in 1868, and was only 18 feet deep (*Daily Alta California* Sept 16, 1868). On the Oxnard Plain, artesian wells were first drilled the same year the town of Hueneme was founded (1870). By 1871, artesian wells were proliferating on the Plain within the artesian zone, which included much of the plain (very roughly) below Highway 101 (Schuyler 1900, Lippincott ca. 1930; see fig. 5.3). Artesian wells were also drilled in the bed of Calleguas Creek (*Ventura Free Press* 1878c). By 1899, there were at least 200 artesian wells in the artesian belt south of the Santa Clara River (Schuyler 1899). While wells were also drilled in the Santa Clara River valley, these were largely reliant on pumping.

The effects of surface water diversions and artesian development on riverine flow and groundwater levels were noted by the early 1880s. Around 1894, all the dry season flow of Piru Creek was being diverted for irrigation (Lippincott ca. 1894). By 1912, it was asserted that all the summer surface flow of the Santa Clara River was diverted for irrigation (Tait 1912).

In addition, groundwater extraction likely contributed to changes in surface water levels, possibly shifting previously perennial stream reaches to intermittent flow (Hanson et al. 2009). An 1883 article from the *Ventura Free Press* described some of the perceived impacts of groundwater extraction on the Oxnard Plain. While it is unclear what role artesian wells on the plain actually played in causing these effects on groundwater levels, the effects are interesting in and of themselves:

The people living on both sides of the Santa Clara, between where the water of the river at a point below Camulos Ranch down a short distance above the Sespe Creek, have been wondering why, their surface wells are failing year by year since about 1877—the time when the artesian well boring was begin [sic] on a large scale on the Colonia. Since the six large wells lately bored in the Las Posas, for the Hartman ditch, the water has sunk nearly 2 feet in these surface wells, and the Scienega, which was formerly a marsh, that would shake a rod from a man walking over it, is now dry enough to plow. The same volume of water is seen, below the Camulos Ranch, as in former years, and it is thought that the artesian

well-boring on Colonia is these [sic] cause of the decrease of these surface wells in and about the Scienega. (Ventura Free Press 1883b)

Similar effects were felt on the Oxnard Plain. By the turn of the century, coincident with the construction of the Pacific Beet Sugar Company’s sugar factory in 1898, many artesian wells on the plain had begun to stop flowing (Freeman 1968). The construction of the factory caused a significant spike in water demand on the Plain, as wells were built to supply water needs for the factory and new town of Oxnard. That year, the *Ventura Free Press* noted the impending problem of declines in groundwater levels:

The artesian water supply of this valley is soon to become an absorbing problem. Every year scores of new wells are being bored, often close together in the same artesian belt. The result is that wells which a few years ago gave a good flow have now ceased flowing and have to be pumped. The number of these must increase as the as the [sic] new wells increase. (*Ventura Free Press* 1898)

In 1900, the newspaper recorded that “quite a number of the Colonia artesian wells are falling of late on account of the factory wells running steady” (*Ventura Free Press* 1900). It was reported that factory water extractions caused a drop of five to ten feet in wells near Oxnard (Freeman 1968). As artesian water failed, water began to be pumped instead.

Through the 1910s and 1920s, groundwater levels in the Oxnard Plain and greater Santa Clara Valley continued to decrease (Freeman 1968). By the mid-20th century, summer surface flow in the Santa Clara River had sharply decreased; Gregor (1952) noted that the river was “dry most of the year.” At this time, almost all (90%) of the Santa Clara Valley and Oxnard Plain’s water demand was supplied by deep turbine pumps drawing groundwater (Freeman 1968). Urban development on the Oxnard Plain (and in other areas of the county) further strained groundwater resources.

Water Use and Irrigation

Ventura County was noted for its comparative lack of substantial irrigation development relative to other Southern California regions. On the Oxnard Plain, high groundwater tables and fog reduced the need for substantial irrigation of many crops (Rothrock 1876). In addition, the presence of alkali, coupled with a high groundwater table, impermeable clay subsurface soils, and extremely flat topography actually precluded irrigation over large swaths of the Oxnard Plain, since irrigation water only further saturated surface soils (Gregor 1953). Early farmers on the Plain understood this, and it was observed that they “do not irrigate more than they can avoid, for the reason...it brings the alkali to the surface” (Rothrock 1876).

For this reason, substantial crop irrigation lagged behind the development of large-scale agriculture in the county. The main crops of the 1880s—barley and beans, along with corn—were largely dry-farmed in the foggy, high groundwater table areas near the coast (Thompson and West [1883]1961, Gregor 1952, Swanson 1994).

The Colonia...Its abundant supply of water through its artesian wells give it an immense advantage over any part of the country.

—VENTURA SIGNAL 1876A

In 1889, only about 1% of the county’s farms were irrigated (Gregor 1952). This was a point of pride for some residents: “In Ventura County... as our farmers do not desire to get rich in a day, corn is planted after the winter rains are over, and but one crop a year is raised and that without irrigation” (Storke 1891). In 1893, citrus orchards near Fillmore were described as one of the “few irrigation enterprises in the county,” while in other parts of the county even citrus was grown without irrigation (Brook 1893). By 1900 irrigation was still not widespread, though it was recognized that irrigation would increase the productivity of county cultivation: “the ease with which crops have generally been grown in this district without irrigation, has made the people indifferent to the advantages of skillful irrigation and chary of undertaking it...the prosperity and value of the greater portion of Southern California have been the result of irrigation” (Schuyler 1900).

The general sentiment expressed in historical texts that “irrigation is not used at all in Ventura County” (Storke 1891) was undoubtedly an overstatement, as some farmers irrigated crops during extremely dry years, or during the dry season to increase yields. Other crops were more predictably irrigated, such as alfalfa and (later) citrus. By the turn of the century, staple crops beans, beets, and barley were all irrigated in some sections of the county (Holmes and Mesmer 1901c).

By the 1910s, much of the Santa Clara River valley from Saticoy to Piru that was planted to orchards was under irrigation (Tait 1912). It was widely held that “all orchards are better for irrigation” (Unknown ca. 1909). Citrus was almost universally irrigated, and it was recognized that other fruits, walnuts, and beans would be more productive with irrigation. During this time, all of the citrus in the county, and about half of the walnuts and apricots, were irrigated, while only a quarter of the sugar beets and less than 1/5 of the beans were irrigated (Unknown 1914). For orchards, irrigation was focused mostly in the dry season (around May to September).

However, even at this time irrigation was not practiced by the majority of Ventura County farmers, particularly on the Oxnard Plain. “The idea has prevailed in Ventura County,” wrote Tait (1912), “especially on the coastal plain...that irrigation is not necessary and the success of the lima bean industry without irrigation has done much to divert attention from the development of the water resources of the county. Within the last few years more interest has been taken in irrigation.” Irrigation was considered optional for most crops (excluding citrus) through the 1910s, though its role in increasing productivity was recognized (Nelson et al. 1920).

In 1918, extensive artificial drainage projects aimed at flushing out alkali salts began on the Oxnard Plain. Over the next years, these drainage projects leached salts out of alkaline areas on the plain (Gregor 1953). Coupled with the falling water table from groundwater extraction, many of these areas began to be non-alkaline and well drained enough to support tree crops, such as lemons and walnuts. These crops required irrigation, and

the tile drains provided a drainage pathway for irrigation waters for these higher value crops.

The transition to irrigation occurred gradually over the 1920s and 1930s as orchards expanded over large sections of the county’s cultivatable land. In the decade between 1919 and 1928, irrigated acreage in Ventura nearly tripled, from 31,700 to 86,700 acres. This was largely due to land use shifts on the Oxnard Plain as orchards became more common: by 1947, over 93% of the plain’s irrigable area was irrigated (Gregor 1952, fig. 2.9).

The explosion in water demand for irrigation, along with increasing pressure for water rights from outside the watershed, drove many of the major water management developments of the mid-20th century (see fig. 2.2). The most notable examples include the formation of the Santa Clara Water Conservation District (1927) and its successor, United Water Conservation District (1950); the construction of spreading grounds beginning in 1928 to replenish groundwater supplies and water levels in Oxnard Plain wells; and the construction of dams including the short-lived St. Francis dam (1926, failed in 1928) and Bouquet Reservoir (1934) in the upper watershed, and Santa Felicia Dam (1955) on Piru Creek. The Freeman Diversion Dam, also used for groundwater recharge, was completed in 1991.

Irrigation is not extensively practiced in the area and is confined principally to the Santa Clara River Valley, a small part of the plains north of Oxnard, the lower part of the valley along the Ventura River... and part of the lands along Santa Paula, Sespe, and Piru Creeks.

—NELSON ET AL. 1920

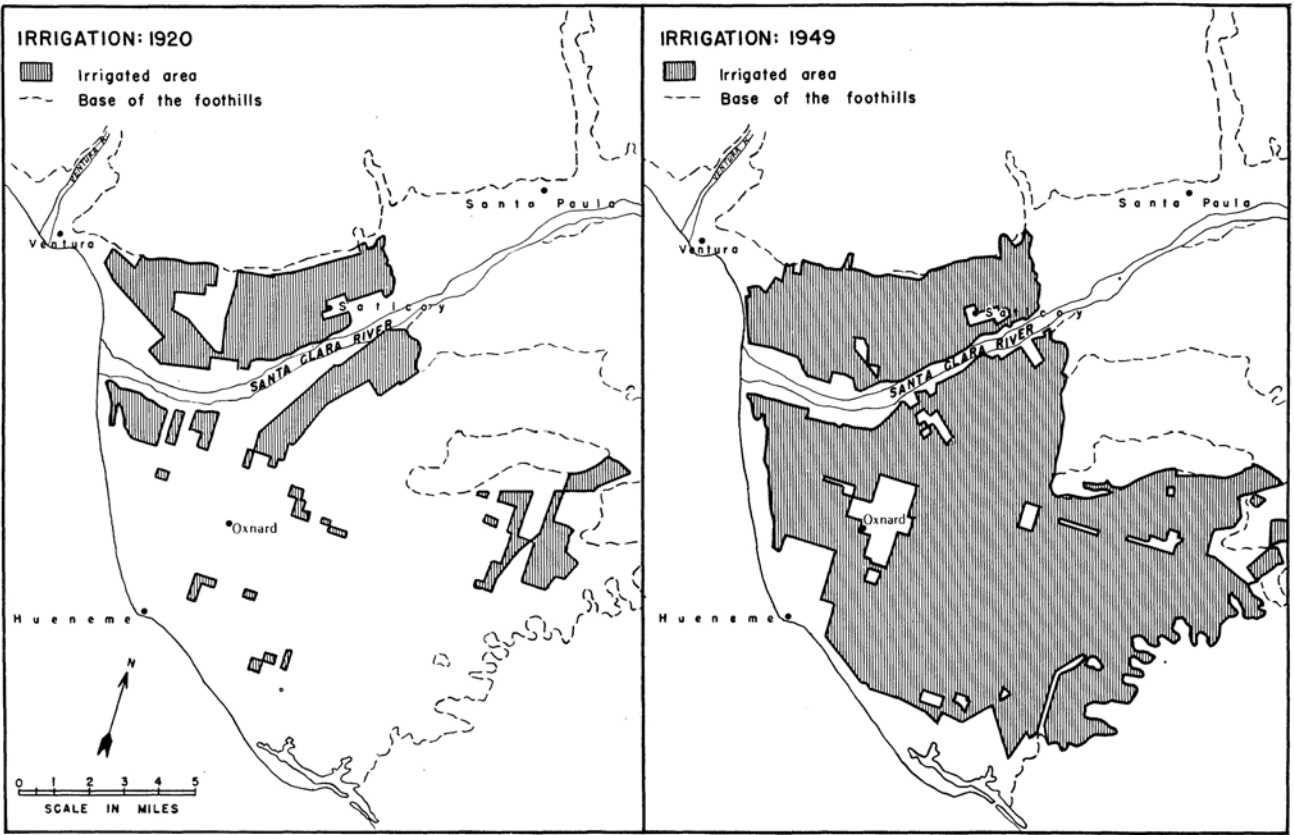
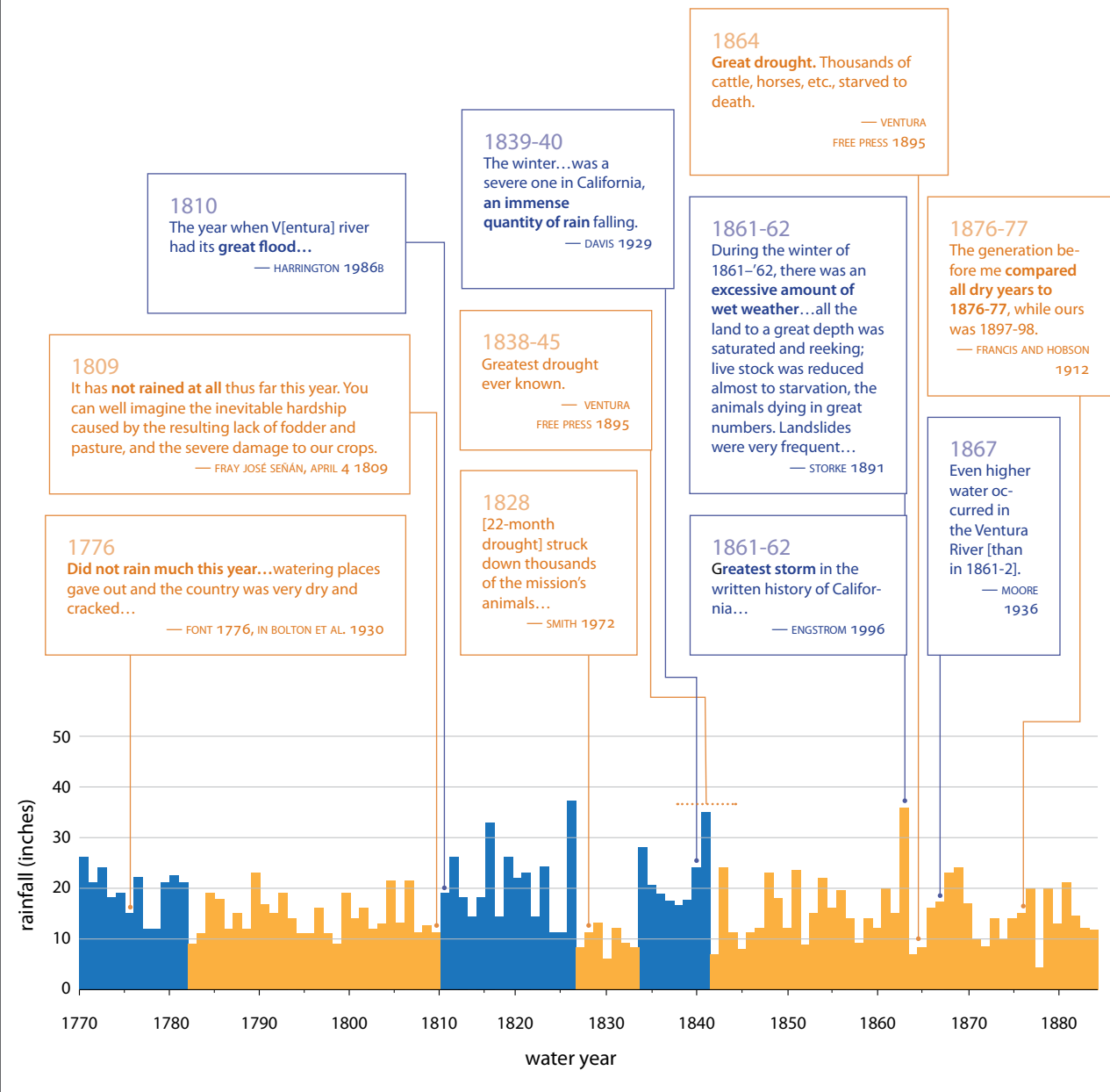


Fig 2.9. Extent of irrigated farms on the Oxnard Plain, 1920 and 1949. Irrigated acreage on the Oxnard Plain expanded rapidly from the 1920s through the 1940s. By 1947, over 93% of the Oxnard Plain’s irrigable area was irrigated. (Gregor 1952)

FLOODING AND CLIMATE

An understanding of the timing of major floods and droughts is an important aspect of historical data interpretation, particularly in a semi-arid environment such as Ventura County where channel form and riparian vegetation distribution are controlled by large flood events. In addition, short-term variations in climate can influence native habitat patterns indirectly by affecting land use: droughts can instigate greater reliance on groundwater, new irrigation practices, or the failure or abandonment of a crop, while extreme winter floods can catalyze stream channelization efforts and levee construction. For these reasons, it is essential to consider climatic patterns when interpreting former ecology and land use history.

We used precipitation records compiled by Freeman (1968) and Stillwater Sciences (2007b) to understand patterns of wet and dry years, in addition to qualitative narrative accounts of notable floods and droughts that occurred prior to standardized precipitation and flow monitoring (fig. 2.10). There are also a number of excellent general



treatments of historical climate in Southern California which were consulted (cf. Lynch 1931, Engstrom 1996, Haston and Michaelsen 1997).

Overall, Lynch (1931) concludes that the average Southern California climate has remained stable since 1769. The following coarse information on notable floods and droughts recorded in the historical record is provided so that the reader can better understand the context in which the historical data presented in this report were interpreted.

Of additional particular note is the flood caused by the St. Francis Dam break on March 12, 1928. The dam, located on San Francisquito Creek, was completed in 1926 at part of the Los Angeles water supply and storage system. After the dam failure, the resulting flood swept down the Santa Clara River valley, causing extensive damage and killing more than 450 people before reaching the ocean.

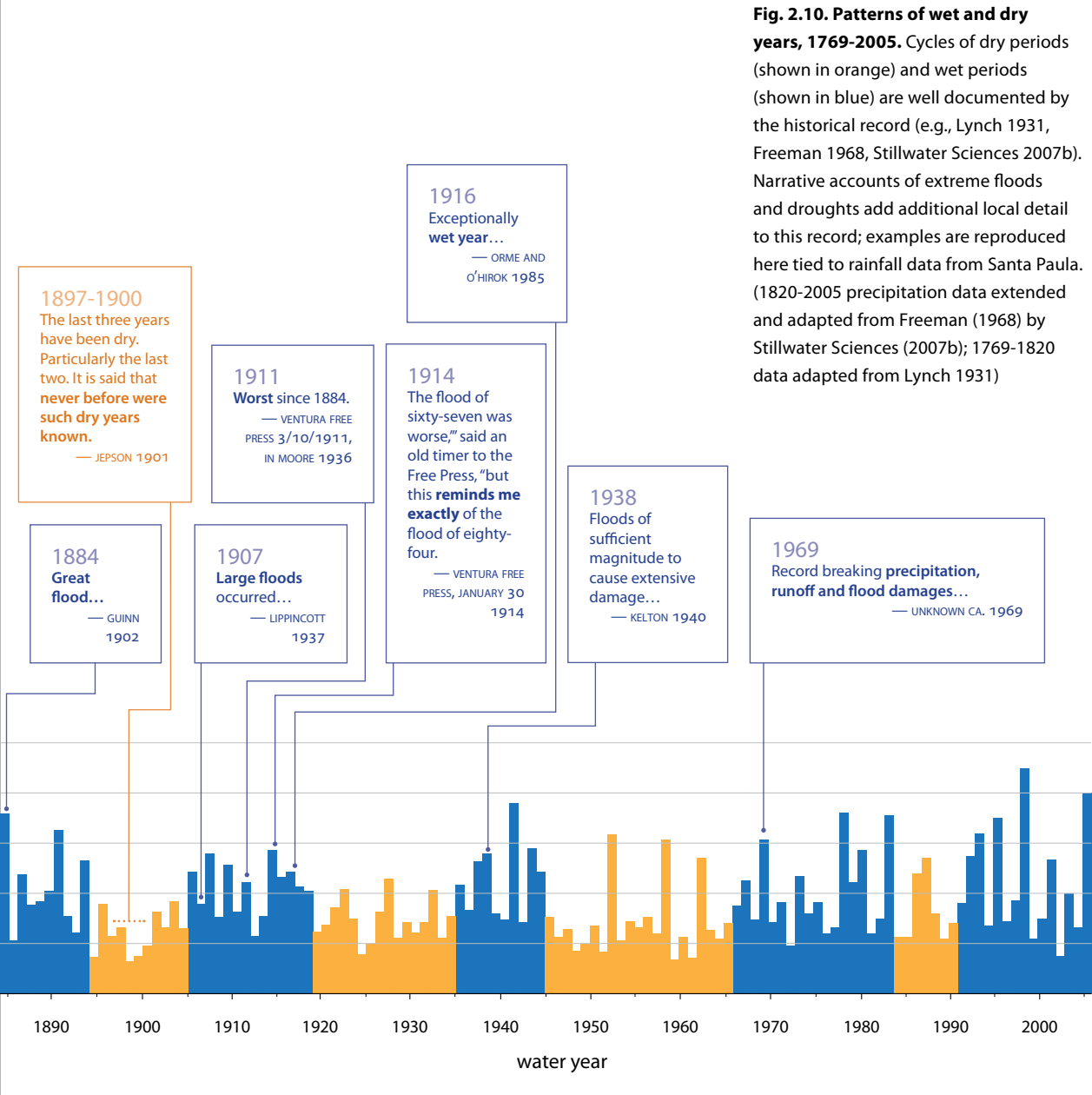


Fig. 2.10. Patterns of wet and dry years, 1769-2005. Cycles of dry periods (shown in orange) and wet periods (shown in blue) are well documented by the historical record (e.g., Lynch 1931, Freeman 1968, Stillwater Sciences 2007b). Narrative accounts of extreme floods and droughts add additional local detail to this record; examples are reproduced here tied to rainfall data from Santa Paula. (1820-2005 precipitation data extended and adapted from Freeman (1968) by Stillwater Sciences (2007b); 1769-1820 data adapted from Lynch 1931)

3 • SANTA CLARA RIVER AND VALLEY



*Though Santa Clara on her buoyant breast
Bear neither steamer swift nor bellied sail--
No Palinurus, steering from the West,
Seeks shelter here from Neptune's threat'ning gale,--
Yet grandly on she flows through brake and dell,
Irriguous wide in many a sinuous line,
And Ceres sees with joy her banks oërswell,
While Bacchus thanks her for his certain vine.
And there Vertumnus and Pomona, too,
Like timid lovers shrinking to the wood,
With bosky groves they shade the open view,
And gather freshness from the swelling flood.*

—GOLD AND SUNSHINE: REMINISCENCES OF EARLY CALIFORNIA, AYERS 1922

Introduction

The Santa Clara River watershed is one of the largest coastal watersheds in Southern California, draining approximately 1,620 square miles and running 116 miles from its origin to the coast. Its headwaters are in the San Gabriel Mountains in northern Los Angeles County, and the lower portion of the river runs southwest through Ventura County before reaching the Oxnard Plain and draining to the Pacific Ocean.

The watershed is located within the Transverse Ranges geologic province, in a geologically active area west of the San Andreas Fault. The geology of the watershed includes younger, mostly marine-origin sedimentary rocks in the lower watershed, and older igneous and metamorphic rocks in the steep upper watershed. The sedimentary rocks of the lower watershed are generally poorly consolidated and highly deformed and fractured, making them highly erodible. Even the (generally relatively erosion-resistant) granites and other older rocks of the upper watershed are vulnerable to high erosion rates due to extensive fracturing, folding, and faulting (Orme 2005, Stillwater Sciences 2007b, Stillwater Sciences 2011). As a result, the watershed is subject to high rates of sediment production and transport. This is particularly true for the river's lower reaches (i.e., below Sespe Creek), where average sediment yield is roughly double the regional average (Warrick 2002).

This aspect of the river is intensified by the highly episodic, “flashy” nature of flood events on the river. Like other rivers in southern California, Santa Clara River flows are controlled by a Mediterranean climate, with peak flows in the rainy season and inter-annual variation of floods and droughts. Not only is precipitation mostly confined to the winter months, the majority of water and sediment in the system are transported during just a few high-

Fig. 3.1. Lower Santa Clara river, 1934 (opposite page). The remnants of West Grove may be seen on the south side of the river (right side of image), in addition to braided channels and riverwash. (Fairchild Aerial Surveys 1934, courtesy of the Benjamin and Gladys Thomas Air Photo Archives, Spence and Fairchild Collections, UCLA Department of Geography)

intensity, short-duration events: on average, more than half the flow from the Santa Clara and Ventura rivers takes place over only three to six days of every year (Warrick 2002).

The Santa Clara River is regionally significant because it has largely retained this natural variability, and consequently substantial aspects of its natural form and processes are still remarkably intact. In contrast to other Southern California rivers of its size, the Santa Clara River maintains a regularly scoured sandy bed, braided channel form, and highly variable flows still controlled largely by patterns of precipitation and groundwater availability. Despite substantial changes such as decreases in sediment load due to impoundment by dams and the loss of floodplain area, the overall morphology, hydrology, and sediment transport on the river mirror its historical attributes. (About 37% of the Santa Clara River basin area is behind dams, though the corresponding decrease in sediment delivery to the mainstem has been somewhat smaller – 27%; Orme 2005.) The mainstem has no large storage dam, though it is regulated by the Vern Freeman Diversion which diverts a majority of the river’s low flows.

As a result of this episodic hydrologic regime (and again, in contrast to other southern California rivers), the Santa Clara River has retained much of the longitudinal habitat heterogeneity that has been mostly lost on other systems due to land use pressures, flow regulation, and channelization. While many of the region’s rivers have had peak flows capped by regulated dam releases for flood control, the active vegetation scouring and habitat variability present on the Santa Clara River provide some of the habitat complexity needed by native plant and animal communities. The river also provides a migration corridor for several endangered species, such as the southern steelhead trout (anadromous *Onchorynchus mykiss*).

Fig. 3.2. Historical habitats of the Santa Clara River and valley, early 1800s. The Santa Clara River valley was dominated by broad, mostly treeless expanses of grassland and scrub. Trees, such as live oaks and sycamores, occurred on several alluvial fans north of the river and along many of the valley’s tributaries, most of which sank into valley soils before reaching the Santa Clara River. A large wetland complex at Saticoy included willow groves, freshwater marsh, springs, and alkali meadow, and was the only significant wetland complex documented on the plain in the valley. Within the outer river banks, however, large areas of willow-cottonwood forest and freshwater wetlands marked areas of perennial flow and rising groundwater east of Camulos, at Fillmore (near the present-day fish hatchery), Santa Paula, and below the Highway 101 bridge.



The extent of urbanization in the Santa Clara River watershed is still relatively low, and as a result it supports a variety of plant communities ranging from evergreen and deciduous woodlands to fire-susceptible chaparral and grasslands. Much of the mountainous northern portion of the watershed is part of the Angeles National Forest and Los Padres National Forest. However, the lower watershed is dominated by orchards and row crop agriculture and developed urban areas.

This chapter explores the historical characteristics of the Santa Clara River and valley prior to major urban and agricultural modifications (fig. 3.2). In particular, we focus on the pre-modification hydrology, morphology, and ecology of the Santa Clara River, describing each historical attribute at a reach scale.

Santa Clara River reach designations

For purposes of comparison, we identified six reaches of the lower Santa Clara River (fig. 3.3). These reaches were broadly defined based on physical characteristics of the system such as topography, flow dynamics, tributary inputs, and geology (Bisson et al. 2006). They are designed to provide meaningful units of analysis for reach-level investigations of channel dynamics and morphology.

The six reaches were based on (and thus compatible with) Stillwater Sciences’ (2007b) reach designations for the lower river. Stillwater Sciences identified 11 reaches from the river mouth to the Los Angeles County line (slightly west of our study area boundary). In most cases we preserved their reach boundaries, aggregating multiple (two to three) Stillwater reaches into one reach (see fig. 3.3, table 3.1). While these more general reach designations capture fewer detailed changes in channel characteristics (such as average slope), they do



Legend for historical habitats of the Santa Clara River and valley, early 1800s

Coastal and Estuarine Habitats

- Ocean
- Beach
- Dune
- Tidal Lagoon (seasonally open)
- Seasonally Tidal Marsh
- Salt Flat/Seasonal Pond/Marsh Panne
- High Marsh Transition Zone

Palustrine and Terrestrial Habitat

- Perennial Freshwater Pond
- Valley Freshwater Marsh
- Willow Thicket
- Wet Meadow
- Alkali Meadow
- Oaks and Sycamores
- Grassland/Coastal Sage Scrub

Characteristic Riparian Habitat

- Willow-Cottonwood Forested Wetland
- Other In-Channel Riparian

Hydrology

- Intermittent or Ephemeral
- Perennial
- Distributary
- Outer River Bank
- Spring

Table 3.1. Upstream boundaries of Santa Clara River reaches (after Stillwater Sciences 2007b).

	Estuarine reach	Oxnard reach	Santa Paula reach	Sespe reach	Piru reach	Del Valle reach
Upstream end of reach	Harbor Blvd bridge	Freeman dam (roughly coincident with upper limit of summer dry reach)	Left bank impinges on South Mountain	Eastern edge of Cienega (upper limit of perennial reach)	2.5 miles east of Piru Creek (upper limit of summer dry reach)	Study area boundary

broadly distinguish between portions of the river with significant differences in hydrology, topography, and channel constriction and width.

While most of Stillwater Sciences’ reach boundaries were preserved, one boundary (between our Sespe and Piru reaches) was modified from their original mapping. The reach boundary was moved approximately two miles east in order to reflect differences in the Sespe and Piru reaches and include the high-groundwater area near the old Sespe Cienega (Fillmore Fish Hatchery) in the Sespe reach. We also expanded Stillwater Sciences’ last reach (upstream end at the Los Angeles County line) to include the area between the county line and Interstate 5.

Fig. 3.3. Reaches of the Santa Clara River. We designated six reaches of the lower Santa Clara River as units of analysis for the following chapter. These reaches are aggregations of Stillwater Sciences’ (2007b) more detailed reach designations for the river, with a few modifications to reflect historical conditions.

From the coast upstream to Interstate 5, the six reaches of the river are designated as the Estuarine reach, the Oxnard reach, the Santa Paula reach, the Sespe reach, the Piru reach, and the Del Valle reach. Through this report, we will refer to these reaches, and use them as a practical scale at which to examine and analyze historical riverine processes and dynamics.



Valley Floor Habitats

Along much of the Santa Clara River, extensive alluvial fans from tributaries to the north have restricted the location of the river (pushing it southward, often directly up against the southern hills). Along with tectonic processes that have tilted the valley, this creates a sloping topography to the north of the river in places that has precluded the presence of depressional wetlands in many places on the valley floor. While there were a few exceptions (notably, the fault-controlled Saticoy Springs), the valley floor was generally composed of dryland features.

Many of these south-facing alluvial fans supported oaks, sycamores, and scrub, particularly between Santa Paula and Sespe creeks. Limited willow scrub habitat was also documented. The majority of the valley floor, however, supported extensive swaths of grassland and scrub. Trees occurred on south-facing alluvial fans, as well as within Santa Paula and Sespe creeks’ banks, on the outer bank of the Santa Clara River, along many small creeks, and occasionally as individuals on the plain.

The following section outlines evidence for the composition and distribution of habitats on the Santa Clara River valley floor.

Dryland Habitats

For many 19th century observers, the Santa Clara River valley floor was notable for its sparse tree cover. With few exceptions (such as along watercourses, on some higher alluvial fans north of the river, and scattered sparsely across the plain), most of the valley was characterized by large expanses of grass and (in some areas) scrub. GLO surveys noted areas of “no timber” fifteen times across large portions of the valley from Santa

July 20 we entered Santa Clara Valley, and as we did so passed by a large flourishing mill which was evidently doing a good business. Well-tilled farms became more common, and there seemed to be still more room and water sufficient for a much larger population. The ground reaching down from the hills was a sage-brush covered slope, while on the flats bordering the river we found a greensward, much of which was made up of sour grass, that a mule will eat rather than starve. Earlier in the season it appears there is forage of a better character to be had in the valley. The water is alkaline, but less markedly so in the river.

—ROTHROCK 1876,
TRAVELING IN JULY 1875
FROM SESPE CREEK DOWNSTREAM

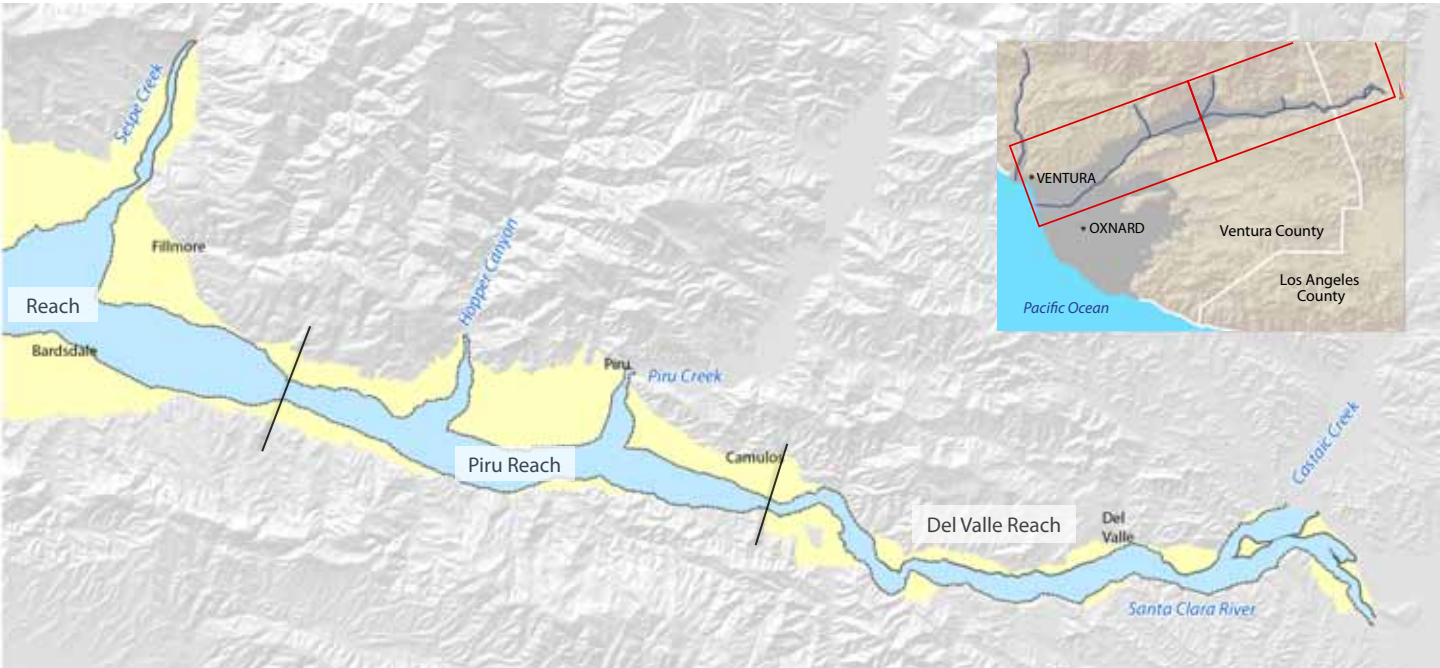




Fig. 3.4. The Fremont sycamore, still standing at the intersection of Highway 126 and Sycamore Road west of Sespe Creek, is a California Historical Landmark. According to the Office of Historic Preservation, the tree “has served as a resting place, a polling place, a temporary post office, and an outdoor chapel” (OHP 2011).

Paula to Piru (Craven 1874b,d,e,f,g); others described the valley as “treeless” (*Ventura Free Press* 1883a). An 1879 newspaper article described it as a “broad and prairie like valley” (*Ventura Signal* 1879, in Hampton 2002).

The general absence of trees meant one was able to see long distances over the plain in many places without interruption. The Fremont sycamore, a lone tree north of Highway 126 at Sycamore Road/Hall Road (fig. 3.4), was a landmark tree on the plain; one GLO survey sighted 1.5 miles across the plain to the tree, a remarkable distance away for such a survey (Craven 1874c). (The tree, named after General John C. Frémont, still stands today and is a California Historical Landmark. Modern Sycamore Road follows this line of sight to the tree, and forms the northwestern boundary of the Sespe Ranch.)

This aspect of the valley was documented in a number of ways, across much of its extent. Above Sespe Creek east to Newhall, Holton (1880) broadly described “much fine meadow” in the valley along the river. Between Sespe and Santa Paula creeks in 1769, Crespí noted that the valley was “very grass-grown with very tall broad grass,” comparing it to similar grassy areas they had just traveled through east of Sespe Creek (Crespí and Brown 2001). In the same area over 100 years later, an observer noted flats covered with “a greensward, much of which was made up of sour grass, that a mule will eat rather than starve,” though this may have been in the floodplain (see page 87; Rothrock 1876). The grassy nature of the lower valley was documented by early San Buenaventura Mission records, in a letter describing the grazing patterns of Mission animals in 1804 (for full quote, see page 30):

The animals [cattle] farthest from the beach make their way to a place called Saticoy, and when the grazing there is exhausted (that locality not being very productive and most of the growth being sword grass), they roam farther up to the meadows along the river and through a rather wide canyon into Sécpey [Sespe], some bands of mares penetrating as far as Camulus. (Señán and Santa María 1804)

The region near Saticoy (other than near the springs themselves) was known for its lack of timber. In this area, Crespí recorded that “no trees are to be seen nearby” (he could see all the way to the easternmost edge of West Grove, more than 2.5 miles away; Crespí and Brown 2001). Engineer N. King observed “a great scarcity of both wood and water” in the region, “farmers having to haul both for miles” (King 1883). Cooper (1887) noted the area was “naturally prairie land, producing no trees,” and an early newspaper article described impediments to early settlers from the “lack of timber and water” (*Daily Alta California* 1868).

These grasslands also included an abundance of wildflowers in many places, as noted by one traveler riding upvalley from Santa Paula to Camulos:

Four of us drove, and one mounted on her pony rode beside us, and kept us well supplied with wild-flowers, of which there were acres along the roadside. Beyond the Sespe River they became more and more abundant. They covered the hillsides, and lay in great patches by the side

of the road... Near where we stopped to eat our luncheon, in the shadow of a huge live-oak tree, the fields were carpeted with flowers of every imaginable color, – clover and buttercups, sunflowers and wild sweet-sage, thistle and cacti, – all girded by green grasses. (Roberts 1886)

In a few areas, sagebrush and scrub were also documented. In particular, the valley floor around the intermittently-flowing Piru reach of the Santa Clara River was notably drier than other parts of the valley, so much so that one traveler called it a “desert” (Eames 1889; see margin). GLO surveyor Craven (1874f) recorded “cactus and sage brush” in this area, just north of the Santa Clara River southwest of Piru. Patches of sagebrush and cactus were also documented on alluvial fans north of the river and west of Sespe Creek and in lower Santa Paula canyon (Hoffman 1868b,c; Craven 1874g). Undoubtedly many more patches of scrub were found in dry portions of the valley and on coarse alluvial fans.

However, a few scattered trees—mostly sycamores and live oaks—also dotted the grasslands. Crespí noted trees “here and there on the level” between Fillmore and Santa Paula; in the same area ornithologist Barton Evermann (1886) described live oaks “scattered irregularly over the valley.” Reflecting their rarity, some of these individual trees and groves were used as landmarks or for gatherings; some even had names (see Jarrett 1983), like the Fremont sycamore mentioned earlier. These trees were not included in our mapping, but would have been notable landmarks on the otherwise mostly treeless plain.

Ethnographer J.P. Harrington’s Chumash informants recollected a couple of places in the plain between Saticoy and Santa Paula, “with some aliso [sycamore] trees”; his informants gave him the name for a sycamore grove (Kats’antuk) and sycamore tree (Sap’konil; Harrington 1913e). Other sycamores on the grassy plain are documented by GLO surveys (Norris 1853, Craven 1874c,g). (Though *aliso* literally means “alder,” in Spanish California the term was universally used to refer to sycamores.)



Fig. 3.5. Fourth of July picnic under oaks on Bill Boosey’s ranch, ca. 1910. Fourth of July picnics and celebrations were often held in the Santa Paula area’s sycamore and oak groves. These live oak trees are still standing (Henderson pers. comm.). (Unknown ca. 1910a, Courtesy of Santa Paula Historical Society)

We left the Camulos at an early hour the next morning. As we crossed the Piru, De Forest gazed curiously about him, at last remarking in his usual spiritless manner,

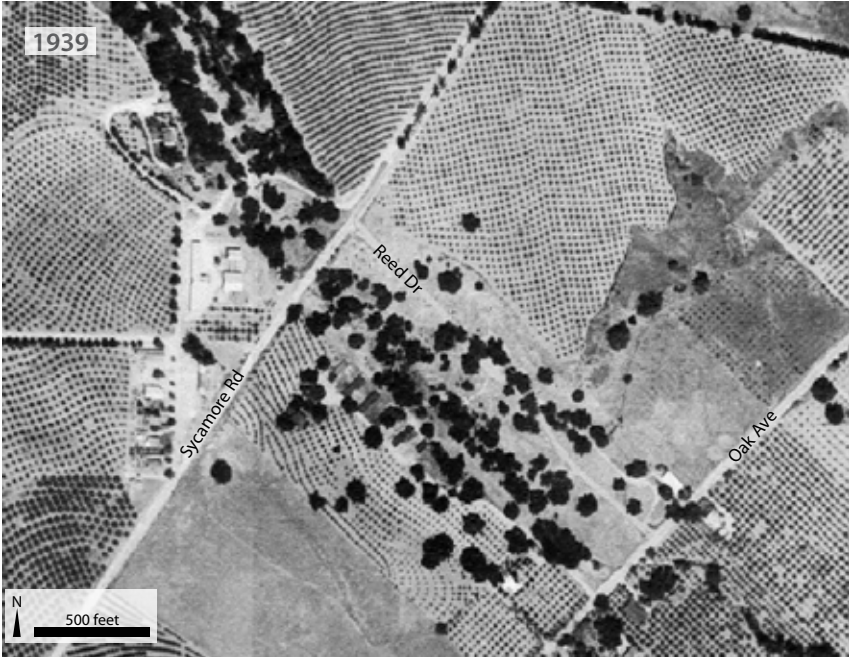
“It is always an enigma to me why Mr. Cook should have chosen this desert for his home, when he is right in sight of a place like Bardsdale.”

“Why, just because it is a desert, comparatively speaking,” the Judge emphatically rejoined. “What Nature has not done for Bardsdale and Saticoy, man has already accomplished, and Mr. Cook’s energy demands tremendous obstacles to overcome...”

—NINETTA EAMES, FALL 1889



Fig. 3.6. Kenney Grove, 1939-2008. Kenny Grove is situated at the former distributary of a small creek, west of Sespe Creek and above Oak Avenue. Fourth of July picnics were common under these trees in the late 19th century. The trees, still present in 1938 (top), are currently an RV campground shaded by the oaks (bottom). (USDA 1938, courtesy of Ventura County)



Among the people in the east end of this county there has latterly been some quiet renewal of the agitation in favor of the purchase of Kenny Grove in the Sespe Canyon and its maintenance by the county for public park purposes...The grove is a very beautiful strip of woodland, situated in the center of a populous and growing section, and a public park is much needed there—and will be more needed with every passing year.

—VENTURA FREE PRESS 1909A

On the valley floor around Santa Paula and Sespe creeks, a number of live oak and sycamore groves provided shady locations for picnics and Fourth of July celebrations (fig. 3.5). Sprague’s grove, a “beautiful sycamore grove” near Sprague’s house and Sespe Creek, was one such gathering spot in the 1870s (*Ventura Signal* 1874b, Warring 1959, Jarrett 1983). Kenney Grove, a grove of live oaks between Sycamore Road and Oak Avenue west of Sespe Creek, was another in the 1880s and 1890s; today it is an RV campground owned by Ventura County (Ventura Free Press summary, 1888-1889, from Fillmore HS newspaper index; fig. 3.6). Other live oak and sycamore groves were also documented, including a live oak grove near Santa Paula Creek (*Ventura Free Press* 1879), a grove east of Fillmore called Sespe Grove (*Ventura Free Press* 1887b), and a sycamore grove northwest of the Sespe Creek-Santa Clara River confluence (Barry ca. 1890). Most of these groves

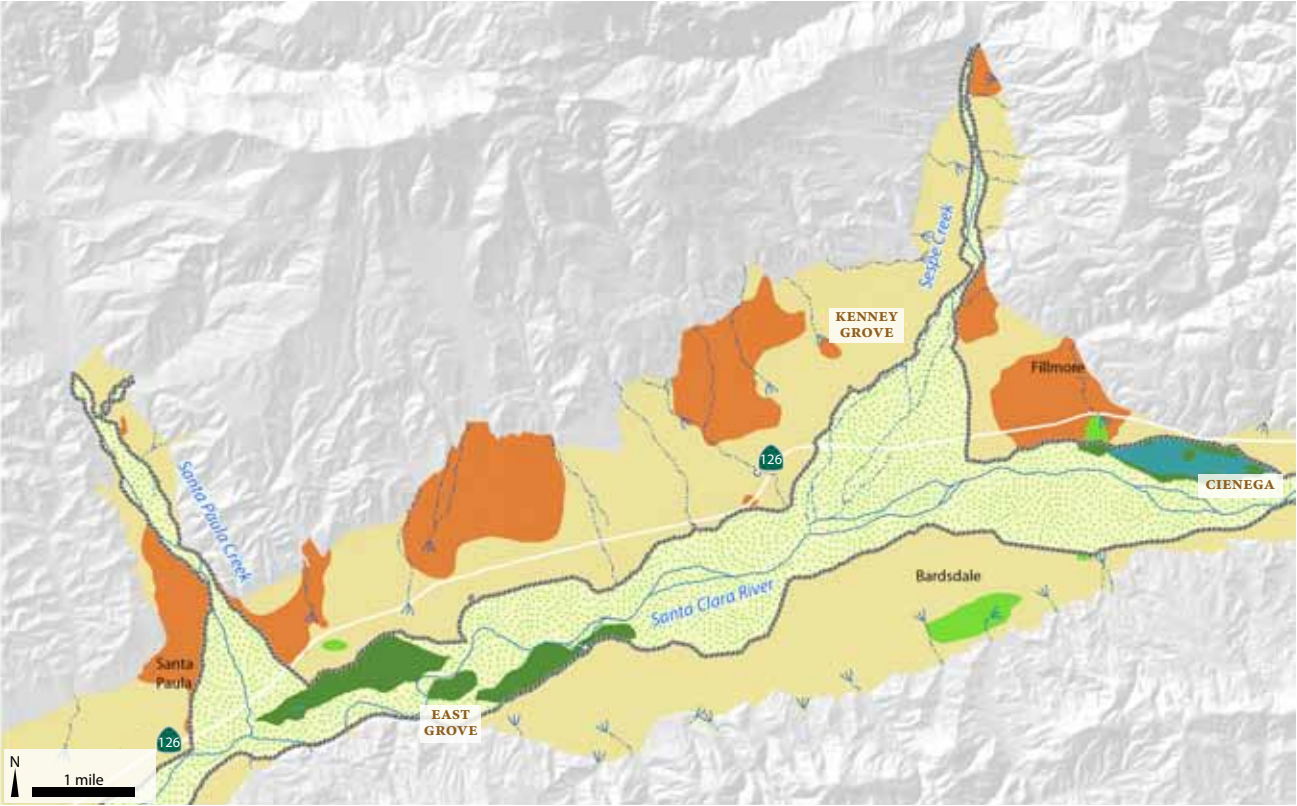


Fig. 3.7. Sycamores and oaks between Santa Paula and Sespe creeks. Scattered oaks and sycamores, documented by GLO, historical soils surveys, and early aerial photography, occupied coarse alluvial fans north of the Santa Clara River.

were lacking spatially specific information and were thus not included in our habitat map.

In addition to these isolated trees and groves, there were a few areas of denser tree cover on the valley floor. These timbered areas were documented exclusively on alluvial fans north of the Santa Clara River between Santa Paula and Sespe canyons (fig. 3.7). Using both GLO survey notes and historical aerial photography, we found that the gravelly fine sandy loam with stones (Yg) soil type from the historical soil survey (Nelson et al. 1917), prevalent on these alluvial fans, was well correlated with the documentation of historical oaks and sycamores. We subsequently used this soil type to delineate probable timbered areas (see page 15). GLO field notes for these areas describe “oak timber,” “scattering oak timber,” and “scattering live oak and sycamore with undergrowth sage brush” (Hoffman 1868c, Orcutt 1900).

The cities of Santa Paula and Fillmore, both established at least partly on this soil type, were both the sites of notable areas of live oaks and sycamores. A few notable sycamores in Fillmore have survived to the present day, many marking the former route of Pole Creek (Jarrett 1983; fig. 3.8). In Santa Paula, oaks and sycamores are still widespread, particularly in the northern part of the city (fig. 3.9). In addition to these trees, many other



Palustrine and Terrestrial Habitat

- Valley Freshwater Marsh
- Willow Thicket
- Wet Meadow
- Oaks and Sycamores
- Grassland/Coastal Sage Scrub

Characteristic Riparian Habitat

- Willow-Cottonwood Forested Wetland
- Other In-Channel Riparian

Hydrology

- Intermittent or Ephemeral
- Perennial
- Distributary
- Outer River Bank
- Spring

Fig. 3.8 (top right). Sycamore on Kensington Street being trimmed, July 2008. This giant sycamore was part of a group of three sycamores on this block (Jarrett 1983).



Fig. 3.9 (above and bottom right). Oaks and sycamores are still common in this residential part of northern Santa Paula. (November 2008)



live oaks, sycamores, and other riparian trees were established within the banks of Santa Paula and Sespe creeks.

While many of these heritage trees have persisted—notably within the Santa Paula and Fillmore city limits—many were chopped down for firewood or to make way for orchards. One editorial in the *Ventura Free Press* lamented that “our native trees are rapidly disappearing under the sturdy blows of the wood chopper,” advising residents to plant new trees to compensate for those lost (*Ventura Free Press* 1881). Even in the late 19th century, some valley residents recognized the value of these trees, and lamented their loss:

Some one should protest against the cutting down of the trees in the Sespe grove. A street is being surveyed through it and some of the finest trees must be sacrificed. This grove ought to be purchased by the town and kept for a park. It seems a shame that the few accessible groves in the county should be ruthlessly cut down. (*Ventura Free Press* 1887a)

Notably, no valley oaks (*Quercus lobata*) were historically documented in the lower Santa Clara River valley, either as a riparian tree along the river or on the valley floor. We found no description of valley oaks by any of the region’s travelers, botanists, or residents, despite abundant references to the presence of live oaks by these observers. This absence also holds true for the Ventura River and valley (excluding Ojai, which is not in our project area).

The absence of valley oaks is affirmed by the GLO survey notes for the region: in approximately 1,700 survey points collected over a span of 50 years by twelve separate surveyors, there is no mention of valley oaks. This stands in contrast to historical ecology studies performed elsewhere, where GLO surveyors consistently record the presence of valley oaks and differentiate between valley and live oaks (e.g., in northern California’s Santa Clara Valley; cf. Grossinger et al. 2007, Beller et al. 2010, Whipple et al. 2010). This absence has also been observed on the Ventura County portion of the Santa Clara River today (Orr et al. 2011).

An exception may be the Los Angeles County portion of the Santa Clara River, at the uppermost edge of the project area. Spanish explorers Miguel Costansó and Juan Crespí, traveling together on the Portolá expedition in 1769, both made note of valley oaks near Castaic Junction: for example, Costansó noted “on the plain we saw many groves of poplars [Fremont cottonwood] and white [valley] oaks, which were very tall and large” (Costansó and Browning 1992, Crespí and Brown 2001). Valley oaks were (and still are) also found in the neighboring areas of Ojai Valley and Thousand Oaks (both just outside the project area), and in fact were emblematic of both areas. This historical distribution is coarsely consistent with the modern range map, which shows an extremely limited range for valley oaks in Ventura County (Pavlik et al. 1991, Ventura County Planning Division 2007). It is also consistent with the low salt tolerance of the species, which limits their presence in valleys opening directly to the ocean (Jepson 1923, Ogden 1979).

Wetland Habitats

Though substantial wetland riparian areas were present on the extensive bottomlands of the Santa Clara River channel (see page 94), outside of the channel there were few wetlands on the valley floor. Scattered willow groves and areas of drier willow scrub were clearly present in the vicinity of the Sespe Creek confluence, though the exact location of these groves is not well documented. These areas were described as “willow thickets” (Peyton 1915), “willow brush” (Hoffman 1868a,c), and “thick grove of willows”

*...beneath its native oaks soft glows
the velvet sod of Santa Paula.*

—ALEXANDER 1918

(Jarrett 1983). Many features mapped as willow thickets would have included a variety of trees requiring relatively wet conditions, including alders, box elders, and cottonwoods in addition to willows.

On the south side of the Santa Clara River near Bardsdale, east of Chambersburg Road and north of Guiberson Road, an extensive willow grove served as a notable landmark for area residents. It was the site of a school, called Willow Grove, established after the 1884 flood stranded Cienega schoolhouse kids on the south side of the river (Jarrett 1983). Jarrett describes the significance of the grove:

Another thick grove of willows grew on the south side of the Santa Clara just over the bank from Guiberson Road, so outstanding that people gave directions by saying, “go east—or west—from the willow grove.”

Resident Carl Etkins (1965, in Freeman 1968) recalled that the irrigation pumping plant for the South Side Improvement Company was “fired with willow wood hauled from what was known at that time as the Grove,” likely referring to this willow grove (or possibly a grove near the Cienega area north of the river). Flooding resulting from the 1928 St. Francis dam break wiped out the remains of this grove (Jarrett 1983).

A few other wetland complexes were mentioned in historical accounts, though without enough spatial accuracy to map. One of ethnographer John P. Harrington’s informants described an extensive wetland in the Piru valley, a “great *cienega* that extends far up and down the creek” (Harrington 1913e). Eames (1889) described “verdant *ciénegas*” near Camulos, and Lopez (1854) notes “a *cienaga* [sic] or swamp” near Castaic. Though it is possible that these wetlands are in-channel features, they allude to the probable presence of many more wetland features — particularly in the Piru and Del Valle reaches — than were documented through our research.

SATICOY SPRINGS In contrast to the Oxnard Plain on the southern side of the Santa Clara River, the lowlands just to the north, on the opposite side of the river, contained few wetlands. This area was naturally steeper and more well drained than the south side of the river, as a result of alluvial fans emanating from the mouths of the series of canyons to the north. However, one distinctive wetland complex was found on the plain on the north side of lower Santa Clara River: Saticoy Springs. Groundwater emerged in an array of springs here, associated with a fault trace of the Country Club fault (Mann 1958), creating a series of springs, wetlands, willow thickets, and alkali meadows that were a noted source of water and wood through much of Ventura history (fig. 3.10).

This unusually large and reliable surface water source gave rise to a major Chumash village that remained at the site until the 1860s, and also served as a significant regional gathering place (Gudde and Bright 1998). One of Harrington’s informants recalled that “the Saticoy Indians used to come to Saticoy springs because of the water. The last meeting of Indians was at Saticoy in 1869. Hundreds were there...” (Harrington 1986b). Crespi also

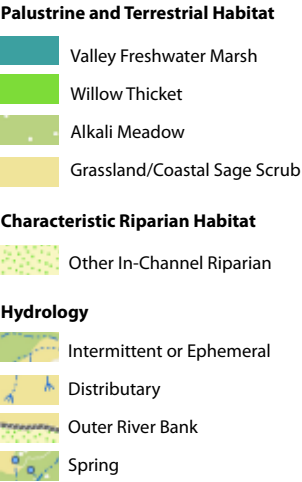


Fig. 3.10 Detail of Saticoy Springs, early 1800s. This 330 acre wetland complex was composed of springs, seasonal alkali meadows, and extensive willow groves and freshwater marsh.

recorded the water resources and extensive village located at the Saticoy site in 1769. He described “a good-sized village of very friendly heathens having, by our count, close to twenty very well built large round houses with grass roofs, with a spring close by it, flowing a bit, and the Santa Clara River a little over a musket shot away” (Crespi and Brown 2001).

The springs were recognized widely as a major landmark and water source for later settlers in the area (fig. 3.11). Their importance was so great that the Santa Clara River was sometimes called the “Saticoy River” even into the 20th century (Hittell 1874; Bancroft 1883; *Ventura Daily Democrat* 1902, in Browne 1974; Harrington 1913e). The Saticoy Springs area served as additional pasture for Mission animals when areas closer to the Mission were no longer available: “When the pasture there is exhausted or dried up, the cattle go in search of more plentiful or better grazing elsewhere... The animals furthest from the beach make their way to a place called Saticoy” (Señan and Santa María 1804). Modern American settlement in the area began when Jefferson Crane began to farm in the area in 1861 (Triem 1985, Gudde and Bright 1998). The springs were noted as a valuable aspect of the Saticoy area, described as “magnificent springs of pure water... said to be the finest in Ventura county” (*Ventura Signal* 1872).

Prior to major water infrastructure developments (such as widespread artesian development and canals bringing water from further upstream on the Santa Clara River), Saticoy Springs and the perennial portion of lower Santa Clara River were two of the primary sources of summer water for local settlers on the northern side of the river and across the western half of the Oxnard Plain (Cooper 1887, Holmes and Mesmer 1901c, Freeman 1963, fig. 3.12). Settlers north of the Santa Clara River depended on the Saticoy area as a primary water source, and would “buy barrels and haul water from the river or Saticoy twice a week or thrice—the year round...” (*Ventura Signal* 1871b; see also Freeman 1968).

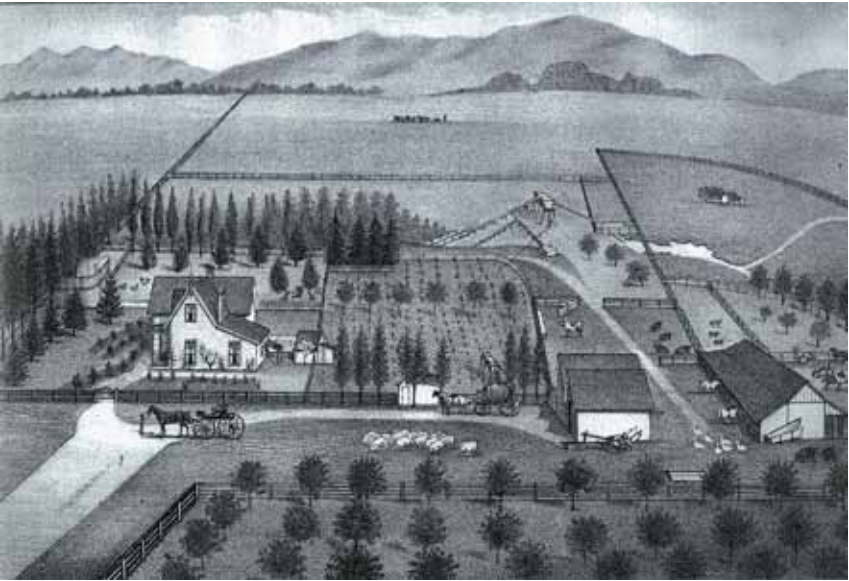


Fig. 3.11. Detail of an early map showing Saticoy Springs at the crossroads of two thoroughfares. (Norway 1867, courtesy of the Ventura County Surveyor’s Office)

Fig. 3.12. “Residence & ranch of S.T. Wells, Saticoy,” ca. 1883. This sketch shows a portion of S.T. Wells’ property at Saticoy. His property included some of the springs, as can be seen at right in this image. (Thompson & West [1883]1961)

In contrast to the treeless, relatively dry grass and scrub land surrounding them, the Saticoy Springs were perennially wet, surrounded by a wetland mosaic which included 140 acres of alkali meadow as well as extensive freshwater marshes and willow groves and thickets. Cooper (1887) described the mosaic of freshwater marsh and willow thickets that he observed in 1872-73:

At Saticoy, however, about 30 feet above the river-bed, springs issue from the edge of the ‘mesa’ or terrace for half a mile, constant in summer, and forming a considerable marsh, about half of which was then [1872-3] covered by willow groves, thirty or forty feet high, and uniting, the waters form a brook large enough to run a mill at all seasons, discharging within a mile, into the bed of the river.

Kimball (in Freeman 1968) described the patchwork of plant life in the Saticoy Springs area: “This extensive spring area was covered by a dense growth of willows, tules, berry vines and horse nettles. It was the finest kind of a park or playground for boys interested in birds’ eggs, blackberries and licorice root.” The marsh and willow groves at Saticoy also supported a variety of birds, including Bell’s vireo (*Vireo bellii*, possibly least Bell’s vireo), Hutton’s vireo (*Vireo huttoni*), marsh wren (*Cistothorus palustris*), and yellow warbler (*Dendroica aestiva*) (Cooper 1887).

Channel Morphology

The lower Santa Clara River is a complex, dynamic, braided system. Large flood events are the major driver for morphologic change in the system and can transport substantial quantities of water and sediment over extremely short periods of time: from 1928 to 2000, the four days with the largest sediment discharge account for one quarter of the system’s total discharge (Warrick 2002, Warrick et al. 2004).

In addition to natural flood events, the St. Francis Dam break (on San Francisquito Creek) created an immense flood wave that swept rapidly through the lower Santa Clara River on March 12, 1928. Peak discharges for the flood have been estimated at about 600,000 cubic feet per second (cfs) around the Ventura-Los Angeles County Line (Begnudelli and Sanders 2007), well over a 1,000 year recurrence interval flood under contemporary hydrology (Downs et al., submitted). The dam break, along with other large floods of the 19th and early 20th century (e.g., 1862, 1884, 1914), were often noted for the extensive damage caused to the infrastructure of the lower Santa Clara River valley. After each major flood, local newspapers were filled with accounts of washed out bridges, uprooted riparian trees, and eroded farmland.

These accounts pose questions about the spatial extent of erosion and deposition along the river during these storms. In particular, understanding the effects of natural floods (e.g., 1862 or 1884) and the dam break (1928) on the physical characteristics of the river is an essential component of our understanding of the historical morphology of the Santa Clara River, and how and where morphological change occurs in the system.

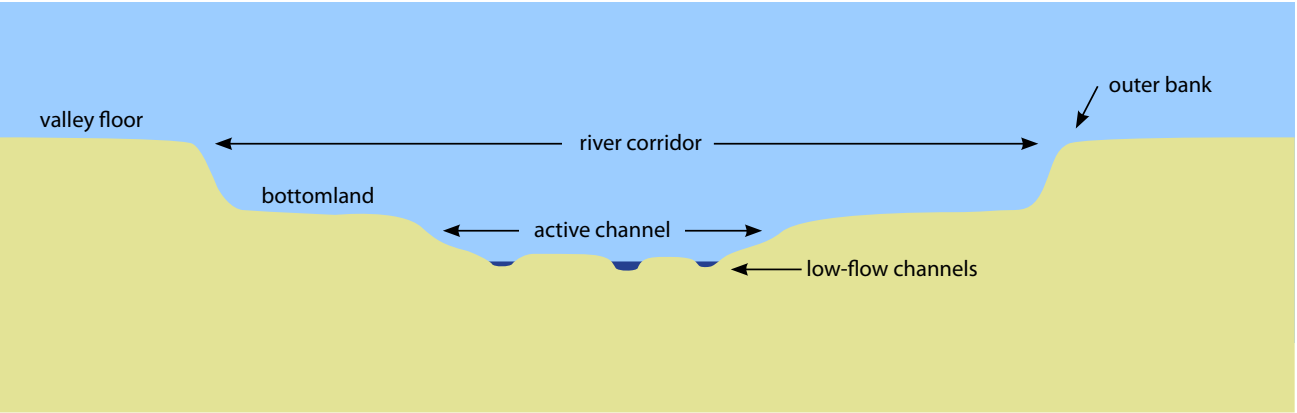
Our research suggests that while substantial change in channel morphology occurred within the outer banks of the river (on bottomlands and within the active channel), comparatively few major shifts in outer bank position occurred in the late 19th and early 20th centuries, even during major flood events. These findings, along with our methods, reach-specific examples of persistence and change, and a discussion of our results, are discussed in detail below. While we focus on plan form changes to the Santa Clara River (notably channel width), a general discussion of hydraulic geometry and channel form are also included in this section.

Hydrology and Geomorphology Terminology

A wide variety of geomorphic features are found within the outer banks of the Santa Clara River, each characterized by different hydrology (flooding frequency, depth to groundwater) and ecology (vegetation and habitat types). Concepts of bankfull discharge as defined for streams in more humid climates (i.e., formed by floods with a 1.5 to 2 year recurrence interval; Wolman and Leopold 1957) are not appropriate for this system, which is characterized by considerable extremes of flow and sediment discharge (Stillwater Sciences 2007b). To address this discrepancy, here we use terminology better suited to Santa Clara River geomorphology. For clarity and consistency, we define the terms below that will be used throughout the report. (For a visual representation of riverine terminology, see fig. 3.13.)

The *active channel* consists of the network of all low-flow channels and the sparsely vegetated or non-vegetated, often sandy bed of the river (Richard et al. 2005). This portion of the river is dynamic, and experiences significant water and sediment transport in most floods; Graf (2000) termed it the “high flow channel.” It includes high disturbance areas that are scoured during high flows and have little to no vegetation, in addition to medium disturbance areas that support sparse, poorly established vegetation such as sand bars and islands (Stillwater Sciences 2007b). This is consistent with Stillwater Sciences’ classification of active channel width. Nineteenth-century surveyors referred to the active channel area as the “sandy bottom” (Terrell 1861b, Thompson 1867), “sandy bed” (Hoffman 1868b, Norway 1878b, Barry 1892a), or “wash of river” (Norway 1878b).

Fig. 3.13. Generalized cross-section, showing riverine terminology used in this report. The active channel consists of the low-flow channels and sparsely vegetated riverwash. In many reaches the active channel is flanked by bottomland (floodplain) surfaces supporting riparian grassland, scrub, and trees. The entire river, from outer bank to outer bank, is referred to as the “river corridor.”



Other early observers described the active channel as a “sandy and gravelly bed” (Cooper 1887) and a “sandy, shallow bed” (*Daily Alta California* 1868). Carrillo (1829, in Outland 1991) referred to the active channel as “worthless” *arenal*, or sandy area.

Above the active channel, within the outer banks of the river, *bottomland* surfaces supported scrubby to dense stands of vegetation. Though still subject to flows, these areas would have experienced minimal scour or deposition during most flood events. These areas correspond with Stillwater Sciences’ low disturbance surfaces. “Bottomland” is not a common contemporary ecological term on the West Coast, though it is still widely used in the eastern United States to refer to a periodically flooded forested area (NRCS 2008). Some biogeomorphic literature also uses the term to refer to riverine surfaces above the active channel, though in a broader sense than is meant here (e.g., Scott et al. 1996, Hupp and Osterkamp 1996, Friedman and Lee 2002, Hupp and Bornette 2003, Osterkamp and Hupp 2010). In addition, the Department of Fish and Game’s list of terrestrial natural communities in California recognizes “Riparian and Bottomland Habitat” as one of the primary categories of terrestrial vegetation (CDFG 2003). Early surveyors and residents commonly referred to these surfaces as “bottom” (e.g., Norris 1853, Thompson 1867, Craven 1874e), “river bottom” (*Ventura Free Press* 1876, Van Dyke 1890), or “bottom land” (Norway 1877, Hampton 2002, King 1883). (The active channel was also sometimes referred to as a bottom—though never bottomland—but was distinguished as the “sandy bottom”; e.g., Terrell 1861b, Thompson 1867, Thompson 1874.)

While portions of the bottomland certainly served as what today we would term the river’s floodplain—that is, the area “overflowed during moderate flood events” (Leopold 1994)—not enough is known about flood frequency to delineate the boundaries of the floodplain. Broadly, the bottomland would have included both floodplain areas (flooded on average once every 1.5 years; Dunne and Leopold 1978) and flood-prone areas (subject to flooding). Some flood-prone portions of the bottomland would have been flooded only during relatively extreme events, such as the 1928 St. Francis Dam break or 1969 flood.

The entire river system, including the active channel and bottomlands (riparian corridor, floodplain, and flood-prone areas), is here defined as the *river corridor*. The river corridor refers to the entire width of the river between outer banks, and includes all high, medium, and low disturbance areas.

River Corridor Position and Stability

Some previous work has addressed questions of overall river corridor stability over the past two centuries. Based on historical and modern aeri- als, Stillwater Sciences (2007b) mapped the width of the active channel after major floods from 1938 to 2005. Their data analysis shows a substantially narrowed active channel by 2005 in many reaches, most notably in the lowest reaches of the river (due to encroachment on the channel by

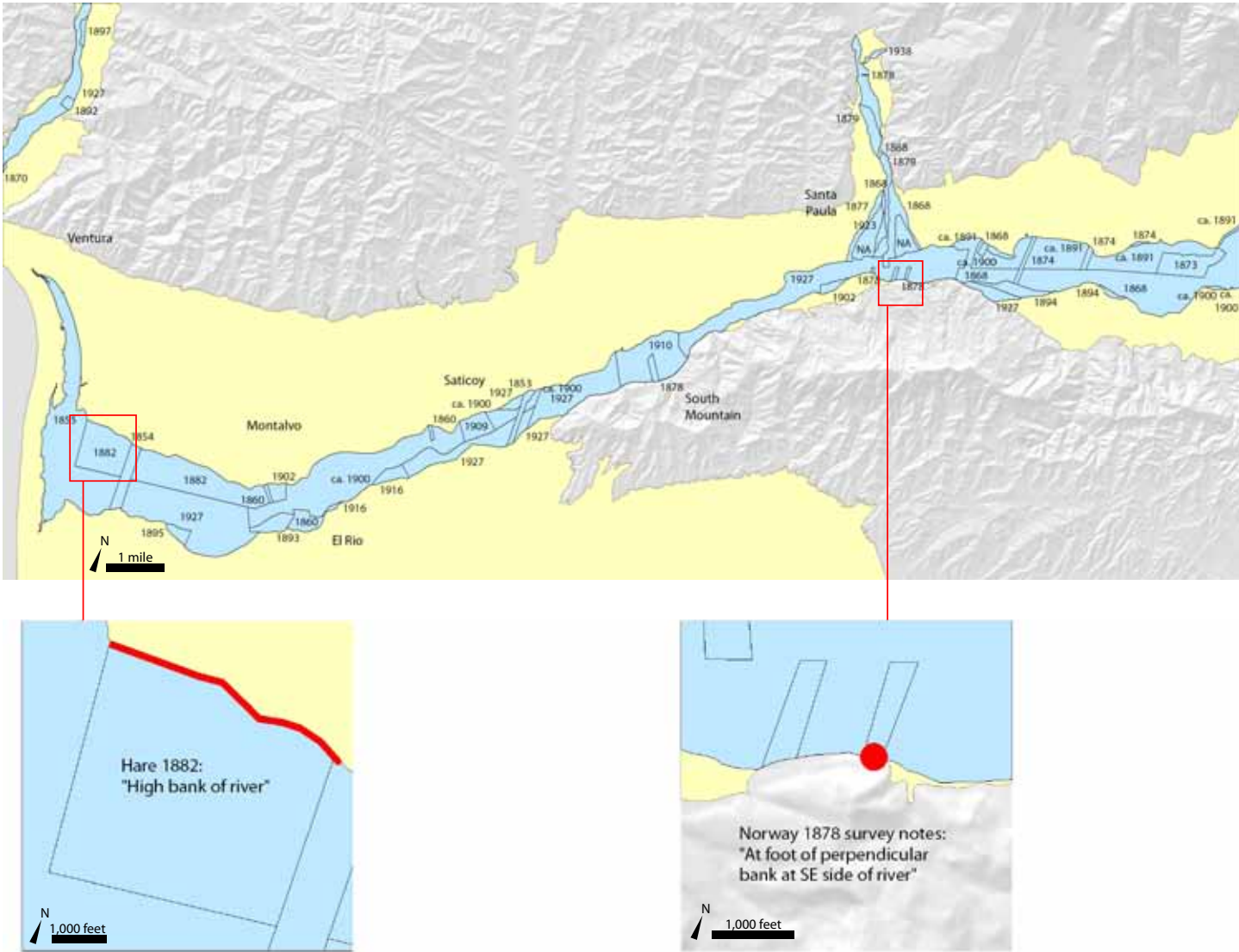
human modifications such as levee construction and agriculture). Overall, Stillwater Sciences found that the river corridor narrowed nearly 50% between 1938 and 2005.

Previous studies (Stillwater Sciences 2007b, 2011) have noted that the effects of the 1928 dam break are not obvious in a comparison of 1927 and 1929 aerial imagery. However, the morphology of the river before 1938 has not been established to date. To address questions of effects of pre-1938 floods, including the St. Francis Dam break, on active channel position and stability, we extended Stillwater Sciences’ 1938 active channel mapping back to the earliest possible date for each length of stream. Through this process, we produced a map of outer bank position based on the earliest available source. This section describes our methods for mapping approximate 19th century outer bank position, as well as an assessment of two centuries of change.

BANK MAPPING METHODS For the Santa Clara River and main tributaries (Santa Paula, Sespe, Hopper, Piru, and Castaic), we mapped the entire river corridor (from outer bank to outer bank) in a GIS polygon layer. This area includes the sandy, active channel bed (mainstem; high disturbance) in addition to moderately vegetated areas (10-80% cover; Stillwater Sciences 2007b) that show evidence of erosion/deposition (medium disturbance) and more densely vegetated areas (>80%) that may be subject to flow during flood events, but without evidence of major erosion/deposition (low disturbance). Benches or bottomlands with evidence of flow during floods are also included. This definition of the river is consistent with research conducted by Stillwater Sciences for the period 1938-2005.

The river corridor polygon included in our historical mapping represents the earliest reliable source available for each length of stream (fig. 3.14). For the lower Santa Clara River, previous mapping of high, medium, and low disturbance areas from 1938 aerial imagery (Stillwater Sciences 2007b) was used as a starting point. This layer was then compared to earlier historical sources where available. Where earlier sources confirmed 1938 mapping, bank position was left unchanged. Where they showed a substantial change (greater than 150 feet) in bank position, the 1938 layer was modified to reflect the earlier source. In places where Stillwater Sciences was missing 1938 aerial coverage (and in Los Angeles County), we extended their mapping of the active channel. We also mapped the outer banks of the Ventura River and major tributaries of the Santa Clara River from historical aeri- als and other spatially accurate historical sources.

The primary sources used to complete this mapping were the historical aerial photomosaic (which includes 1927, 1938, 1945, and 1959 aeri- als; see fig. 1.4), historical survey maps, and General Land Office survey data. The bulk of early sources were from 1870-1900; however, relatively few early (pre-1900) sources were available for the river above the Piru Creek confluence. Over 40 historical sources were used to create the outer bank position for the Santa Clara River. Multiple additional sources were also



used to delineate the historical outer bank positions of the Ventura River and major tributaries of the Santa Clara River. While 2005 LiDAR data were used to confirm the position of some portions of the bank, they were not used to map bank position where they were the only source available. This was done to avoid mapping terraces or bluffs that represent the geologic extent of the river (i.e., terraces no longer affected by floods by the 1800s) rather than the historical extent. However, this may have resulted in an underestimation of historical channel extent in some areas, as a number of scarps shown on the LiDAR were not included in our river corridor extent.

Interpretation of outer bank position from historical sources was often challenging. The outer bank was referred to as a “high bluff bank” or “bluff bank” (Thompson 1869, Norway 1878b), or simply the “high bank” (Craven 1874c,f). On some maps, both the edge of the sandy channel bed and the edge of the active channel were shown, facilitating interpretation of outer bank position. In addition, an outer bluff bank was often shown with hatch marks. However, the term “bank” was used differently by different

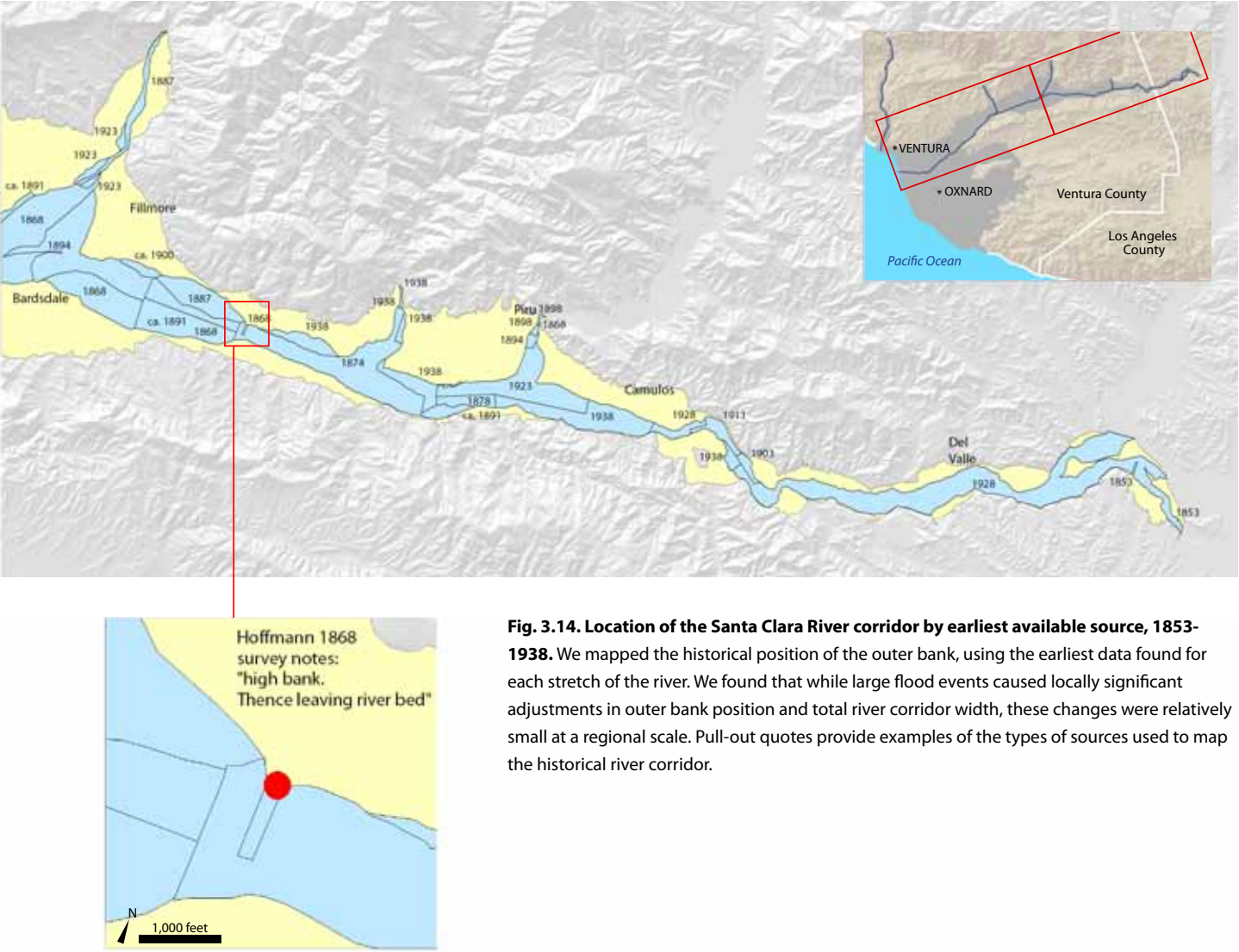


Fig. 3.14. Location of the Santa Clara River corridor by earliest available source, 1853-1938. We mapped the historical position of the outer bank, using the earliest data found for each stretch of the river. We found that while large flood events caused locally significant adjustments in outer bank position and total river corridor width, these changes were relatively small at a regional scale. Pull-out quotes provide examples of the types of sources used to map the historical river corridor.

surveyors, and could refer to either the outer bank or the boundary between the sandy channel bed and surrounding bottomlands. While auxiliary data (e.g., aerial photographs) were often used to determine the surveyor’s intent, some of these data were ultimately not specific enough to be used. Through this process, we were able to develop a substantial, albeit partial, spatial dataset describing channel morphology between 1850 and 1927, including reliable mapping of the active channel area at a number of sites and times. This dataset allowed us to effectively sample the extent of change in active channel area for available locations and time sequences. While this process did not yield a comprehensive dataset of pre-1928 active channel location, it did provide confirmation in a number of places of channel position bracketing major flood events from 1862-1928.

A few areas are of known lower confidence. For example, the area east of Sespe Creek provides a conservative estimate of channel width; two GLO points at the same spot (Norris 1853, Craven 1874f) intimate that the channel extended an additional 1,400 feet to the north, but we chose not to

extrapolate the entire section. For example, in cases where a map showed extensive bottomland for a portion of the river but no additional source showed the continuation of the feature upstream or downstream, we did not map the continuation of the bank. While it is likely that the outer bank continued, we had no historical data to confirm this. This resulted in a few jagged edges in our mapping where one source ends and no other shows the continuation of the feature. In addition, most of the Santa Clara River east of Piru Creek suffers from a lack of early data, and as a result is almost entirely mapped from the historical aerial. In general, this conservatism means that we may have undermapped river corridor extent in some places due to a lack of data. On the other hand, it should also be noted that in a few places (notably major tributaries to the Santa Clara River), outer bank mapping may represent multiple courses occupied by the creek but not historically occupied simultaneously, and thus may overrepresent the extent of river corridor at any given time.

It must be emphasized that this mapping is only an approximation of outer bank position for each system. A lack of data, or ambiguous data, often hindered interpretation. Further external review and ground truthing of the mapping and comparison to modern conditions were outside the purview of this study, and will be essential before site-specific application.

RIVER CORRIDOR EXTENT While historical data support substantial changes in channel morphology within the active channel (e.g., in low-flow channel position and extent of young, in-channel riparian vegetation) on a frequent (year-to-year) basis, the position of the broader river corridor remained comparatively stable through the floods of the late 19th and early 20th centuries. Comparison with 1938 mapping shows significant changes in outer bank position in a few reaches. However, our analyses suggest that no extreme overall shifts in channel position or width occurred between the late 19th century (1870-1900) and 1938. Since many historical sources



confirm outer bank position before and after the 1884 flood (and a few before 1862), these data offer significant insight into flood effects on Santa Clara River morphology. In particular, our analyses imply that the geomorphic work of most large floods stays largely within the outer banks of the river, and that the position of these banks has until recently (1938) been broadly persistent over time.

Even the St. Francis Dam break appears to have had minimal long-term impact on the river's overall plan form configuration (fig. 3.15), despite noteworthy scour and extensive deposition at various locations along the river valley and the possibility that the gradient of the channel between the county line and Sespe Creek has been recovering ever since (Stillwater Sciences 2007b). Many riparian features persisted, as did the general width and appearance of the channel.

This conclusion is supported by recent research simulating flooding extent and discharge in the Santa Clara River valley after the dam break (Begnudelli and Sanders 2007). Modeling predicts a maximum discharge of about 1.5 million cfs at the dam and over 600,000 cfs around the county line. In the lower reaches of the river, however, modeled flow was only approximately 250,000 cfs (near Santa Paula) and about 140,000 cfs (at the river mouth). These figures imply that though the flood wave was equivalent to recurrence intervals of well over 1,000 years in the upper portion of the lower Santa Clara River, discharges attenuated rapidly downstream: by the river mouth the flood wave was calculated to be an event with only about a 20-year return period (Downs et al., submitted). These calculations validate the relative lack of documented large-scale plan form change.

Net loss in area between our earliest source mapping and 1938 conditions is 2,000 acres (fig. 3.16) or 13% of the 19th century area. (While it is possible that sediment deposition accounts for some of the



Fig. 3.15. Santa Clara River after the St. Francis dam break, 1928. This photograph was taken near Piru only five days after the failure of the St. Francis dam. (Isensee 1928a, courtesy of the Museum of Ventura County)

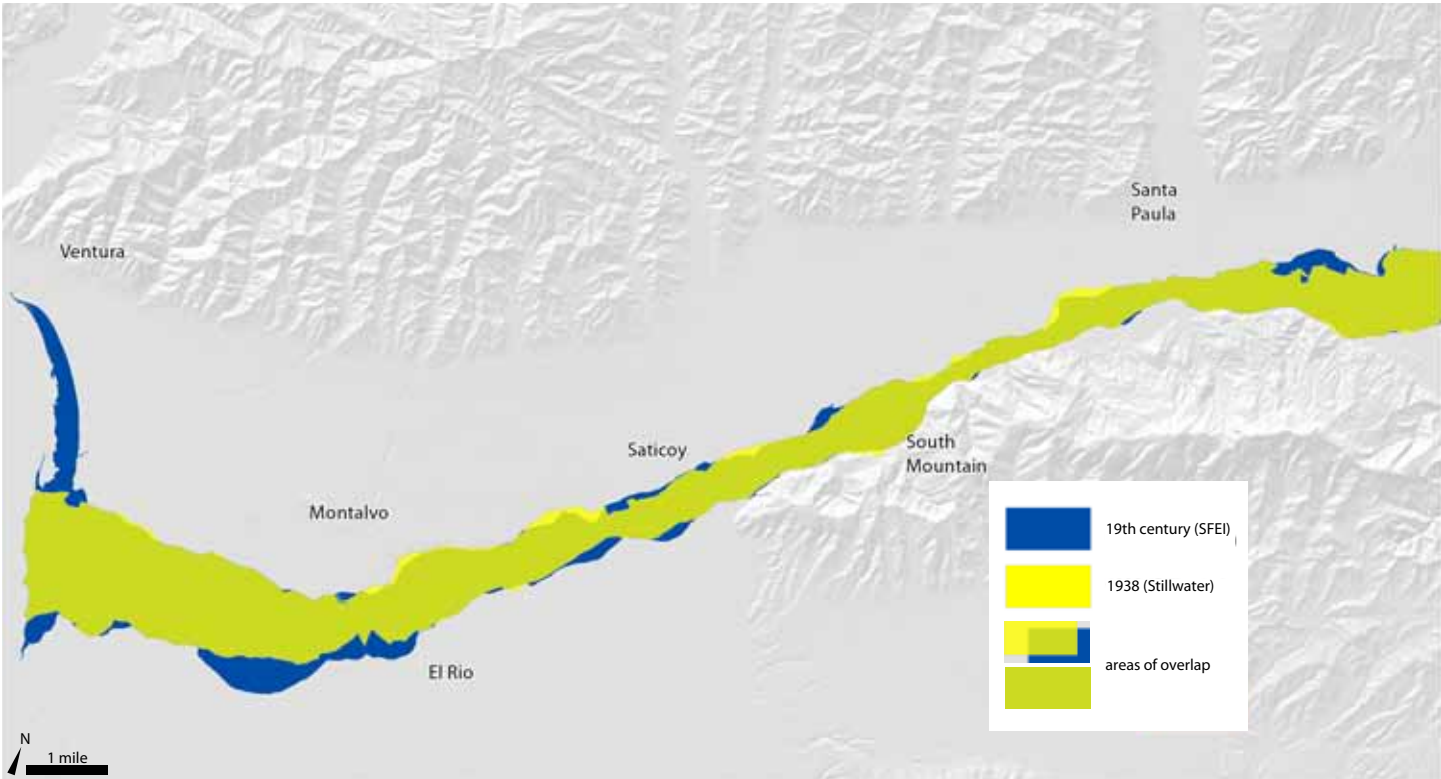


Fig. 3.16. River corridor extent and outer bank position, 19th century and 1938. By 1938, 13% (2,000 acres) of the river’s former extent had been removed from the river’s influence. Much of this lost river corridor was bottomland habitat near the river mouth and Sespe Creek. (1938 mapping from Stillwater Sciences 2007b)

channel narrowing by 1938, the bulk of this channel loss is from human encroachment on the river through cultivation, levee construction, etc.) While the data resolution is not sufficient to make reach-scale generalizations about stability, in many locations pre-1900s channel form coincides almost exactly with 1938 form (fig. 3.17).

In other reaches, however, comparisons between 19th century and 1938 mapping show substantial areas of channel change, on a scale of over 1,000 feet (fig. 3.18). The vegetated area south of the river in the Oxnard reach represents more than 2,300 feet of channel loss at its widest extent. The Sespe reach has been greatly constricted, especially the north bank just downstream of the Sespe confluence and in the Cienega (Fillmore Fish Hatchery) area. By 1938, bottomland areas in many portions of the Sespe reach extended 300-2,300 feet less far than they had in the 19th century.

It is important to note that while lateral migration of the Santa Clara River was relatively limited from the late 1800s to 1938, the character of many of the low-disturbance lands within the river corridor has changed dramatically over time. Many of these bottomlands were valued for agriculture (see Chapter 2 and pages 96-97), and by 1938 many were farmed. Our research suggests that much of the flooding damage occurred in these floodplain areas. While these areas may still have been hydrologically active in 1938 (i.e., subject to flow during flooding), many had lost substantial ecological value as riparian areas were replaced by farms and other uses.



The impressive stability of the SCR channel location over time, despite high intensity events such as 1862, 1884, and the St. Francis Dam break of 1928, suggests a channel with significant capacity to accommodate extreme events without significant lateral migration or changes in width. Though the channel has been significantly artificially narrowed at many spots, the largest plan form changes captured by our data set due to bank erosion were less than 1,700 feet. These types of changes, while immensely significant to local property owners, would have mostly represented very small proportions of the overall river.

By 2005, 7,600 acres of bottomland had been lost from the river corridor, nearly half of the 19th century area of about 15,500 acres (fig. 3.19). These areas had been converted to agricultural or urban uses, and were no longer regularly flooded or considered part of the river (fig. 3.20). Development

Fig. 3.17. Examples of historical persistence in bank location. In many locations along the river, the position of the outer bank remained quite stable over decades, despite intervening major floods (including the St. Francis Dam break of 1928). This is illustrated here in three reaches: south of the Sespe Creek confluence (left), at South Mountain (middle), and at the Olivas Adobe near the river mouth (right). In each case, early (1854-1882) evidence also confirms the early 20th century (1927-1938) bank position. In each instance, by 2005 bank position has shifted somewhat. (USDA 2009)

Fig. 3.18. Examples of historical change in bank location (top). In some places, bank position as documented by 19th century surveyors differed substantially from 1938 conditions, as shown here on the river west of the Sespe Creek confluence (left) and east of the Santa Paula Creek confluence (right). In each case, the river corridor had narrowed even further due to reclamation by 2009. (USDA 2009)

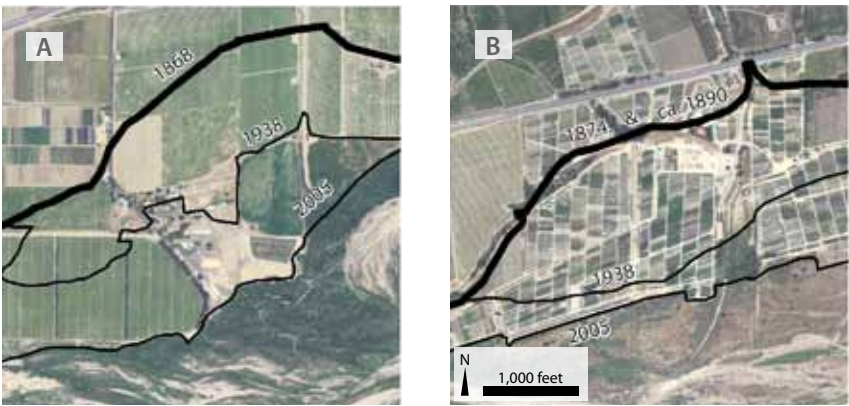


Fig. 3.19. (middle) From the 19th century to 1938, total river corridor area dropped only a little under 2,000 acres (13% loss), largely as a result of levee construction and agricultural encroachment on the channel. By 2005, over 7,600 acres had been lost, 49% of the original river corridor area. (1938 and 2005 data from Stillwater Sciences 2007b.)

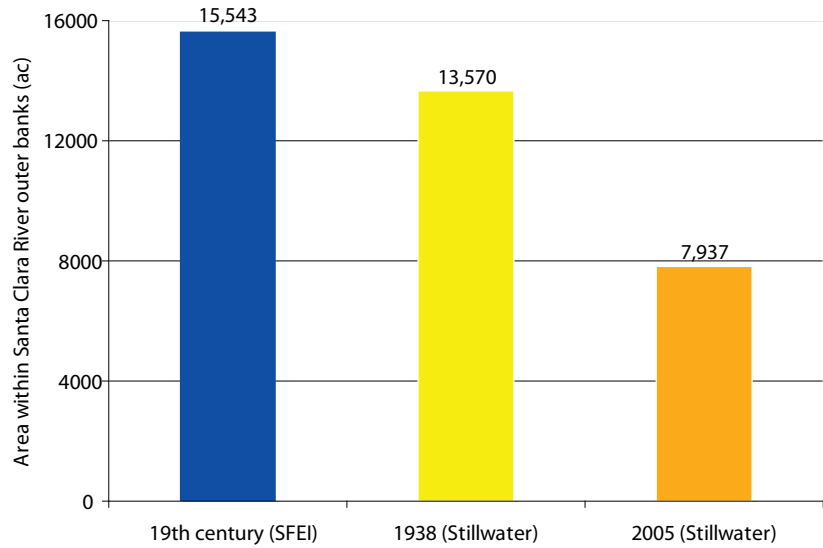


Fig. 3.20. (bottom) River corridor extent and outer bank position, 19th century and 2005. By 2005, over 7,600 acres had been lost, 49 % of the original river corridor area. Much of the lost area was bottomland habitats, leveed and reclaimed for farming and other land uses. Documented change is concentrated particularly in the Oxnard and Estuarine reaches (below Saticoy) and between Santa Paula and Sespe creeks. (2005 mapping from Stillwater Sciences 2007b)



trends over the past two centuries have resulted in a loss of floodplain bottomland, while the more regularly flooded sandy channel bed has been largely preserved. Today’s river has been shaped by multiple flood events over the past centuries, in addition to more recent anthropogenic activities.

LARGE-SCALE CHANNEL CHANGE A notable exception to the overall trend of channel stability is the migration of the Santa Clara River mouth from Point Hueneme to its present location, a shift of over six miles upcoast. Geologic maps and early aerial photography of the Oxnard Plain clearly show a former course of the Santa Clara River flowing through El Rio and Oxnard before entering the ocean just south of Hueneme, about six miles south of the current mouth of the river (fig 3.21; Fairchild Aerial Surveys 1927, Clahan 2003). This inactive, meandering channel was mapped by Parsons (2004); he termed it the Saviers paleochannel and identified it as the former course of the Santa Clara River.

A few references to the old channel of the Santa Clara River are present in the historical record. An article in the *Ventura Free Press* (1878b) notes that “many years ago the waters of the Santa Clara emptied into the sea only about half a mile below the wharf,” though it is unclear whether this was common knowledge at the time. At this time the expression of the old channel on the plain was likely still clearly visible in many places (Fairchild Aerial Surveys 1927), so this may have been widely accepted. A few 20th century researchers have also recognized the presence of the old route of the river (Carty 1973, Brown 1981, King 2005).





Fig. 3.21. Large-scale changes in the lower Santa Clara River course on the Oxnard Plain. Geologic, archaeological, historical, and edaphic data all support the migration of the Santa Clara River over the Oxnard Plain over geologic time. Extreme floods coupled with sediment deposition triggered channel migration on the Santa Clara River delta (Oxnard Plain) and subsequent large-scale changes in river corridor location. The dashed black lines represent paleochannels; the most recently occupied former course of the river (Saviers paleochannel, labeled **a**) may have been active as recently as 1812. It can also be seen here how ecological patterns of the Oxnard Plain are dictated by the channel migration history, with grassland/sage scrub on higher surfaces marking natural levees along more recently occupied routes of the river. (Nelson et al. 1917, Fairchild Aerial Surveys 1927, Clahan 2003, Parsons 2004)

It is unknown when the paleochannel was last actively occupied. Based on analysis of offshore sediments near Hueneme, geologists have estimated that abandonment of the Saviers paleochannel occurred no more than 2,000 to 3,000 years ago (Romans et al. 2009). Ethnographic accounts suggest that the shift may have happened much more recently, within at least the oral historical record of the Ventureño Chumash. One archaeological report cited Fernando Librado (a star informant for anthropologist John P. Harrington) as saying that the 1812 earthquake was the cause of the shift in channel course (Parsons 2004). While we were unable to find this (or any) document mentioning a specific year for the shift, this interpretation is not contradicted by additional ethnographic evidence. Multiple places in Harrington’s (ca. 1913) field notes reference a time when the Santa Clara River mouth was near Point Mugu (Harrington 1986a,b). (Point Mugu referred to the broader Ormond Beach-Mugu section of shoreline; Parsons 2004.)

Mugu estero used to be the mouth of the Santa Clara River. (Harrington 1986a)

Ponom [Chumash name for a pond and marsh north of Oxnard]... Means (1) “que hay que cuidar,” he must guard (2) for they had fear that sometime the river of Santa Clara could change its course back to Point Mugu... (Harrington 1986a)

The V. river first had its mouth many years ago at the foot of hills west of V. river valley. This was long ago. Then it changed to mitsqanaqan—then in 1810 (so the old men said) in a flood to its present location. Santa Clara River ran into Migu [sic] Laguna, but more recently changed. (Harrington 1986b)

This last quote seems to imply that the Santa Clara River changed course after 1810, though this is not substantiated by other documents. Regardless, these recollections point strongly to a channel shift in the recent past (e.g., roughly 200-500 years ago). It seems probable that if the channel had changed position 2-3,000 years ago, as posited by Romans et al. (2009), the event would no longer be in the cultural memory of early 20th century Ventureño Chumash descendents as a relatively “recent” change. This interpretation is supported by the historical (19th century) presence of occasional sycamore trees on the higher alluvial sediments of the paleochannel, indicating relatively recent occupation of the channel course.

Hydraulic Geometry and Channel Form

In comparison with channel width and stability, channel geometry is relatively poorly documented. Few early sources provide site-specific accounts of bank height or thalweg depth, and all but the broadest information on channel plan form is undocumented. A brief overview of these topics is provided here.

CHANGES WITHIN THE RIVER CORRIDOR While lateral changes in river corridor location were relatively limited on a year-to-year scale, within its outer banks the Santa Clara River was quite dynamic. High flows would regularly cause shifts in mainstem position, causing the river to reoccupy former

channels or cut new ones within its corridor. The width and location of the active channel, the distribution and density of in-channel vegetation, and the position and extent of bottomland would have also shifted with each major flood (fig. 3.22). Shifts in relative riparian cover and the nature of the active channel were identified by early settlers describing the Santa Clara River:

...the land which this season might be of some value for pasture or agriculture, might next summer be a bed of naked sand, for we know how capricious these streams are when flowing through a light sandy soil. I was informed by a gentleman residing in the Buenaventura, who had resided several years upon the Rancho of Sespe that he had seen the whole bed of the river covered with sand. (Hopkins 1871)

Other accounts also describe changes to the bottomland as a result of flooding (e.g., *Ventura Free Press* 1876, *Ventura Free Press* 1891b). Much of the low-lying riparian vegetation—willows and cottonwoods in or close to the active channel—would be uprooted from the river during major flood events. A few long-time residents of communities along the Santa Clara River noted that during significant floods of the late 19th and early 20th centuries, substantial portions of the riparian vegetation in the river would grow between major flood events, then be scoured out by flood waters:

The reason that the 1884 flood seemed to be a very large flood is that the river was very heavily loaded with cottonwoods. Some of these cottonwoods were 50 or 60 feet high and had an undergrowth about eight feet high. (War Department 1938)

[during 1884 floods] The banks of the Santa Clara River, the Sespe and Santa Paula Creek that had been lined with great oak, sycamores, and cottonwood trees, that had stood for centuries on their banks, had been swept bare... The Santa Clara River took out hundreds of acres of good land and left stones in its place. (Hardison, in Freeman 1968)

I think a great part of the damage done by the floods is caused by the growth which has occurred in the streams over a period of many years. In 1914 this growth was all washed up and we have had 24 years [between 1914 and the 1938 flood] in which to grow alders, willows and cottonwoods. When a big freshet comes, it takes this debris down in great quantities. (War Department 1938)

This [flooding] is all caused by the Santa Clara river, which gets very high and changes its course to first one side and then another.

—VENTURA FREE PRESS 1891B

Much later accounts describe that between floods “much of the bed is overgrown with weeds and willows” (C.E. Grunsky Company 1925) and that “during the dry period these willows encroach on that stream, so that during a major flow there is not enough open channel available” (War Department 1938). These dynamics are discussed further in the riparian vegetation section (pages 96-97).

It should be noted that some sources indicate that land use changes within the valley and tributaries altered effects of floods, making the active channel and bottomlands more susceptible to large-scale changes than previously. This effect was identified by the early 1880s: in 1886, a resident of Ventura noted that “within the last four or five years the Santa Clara River and those of its tributaries whose sources have been stripped of timber and brush, now

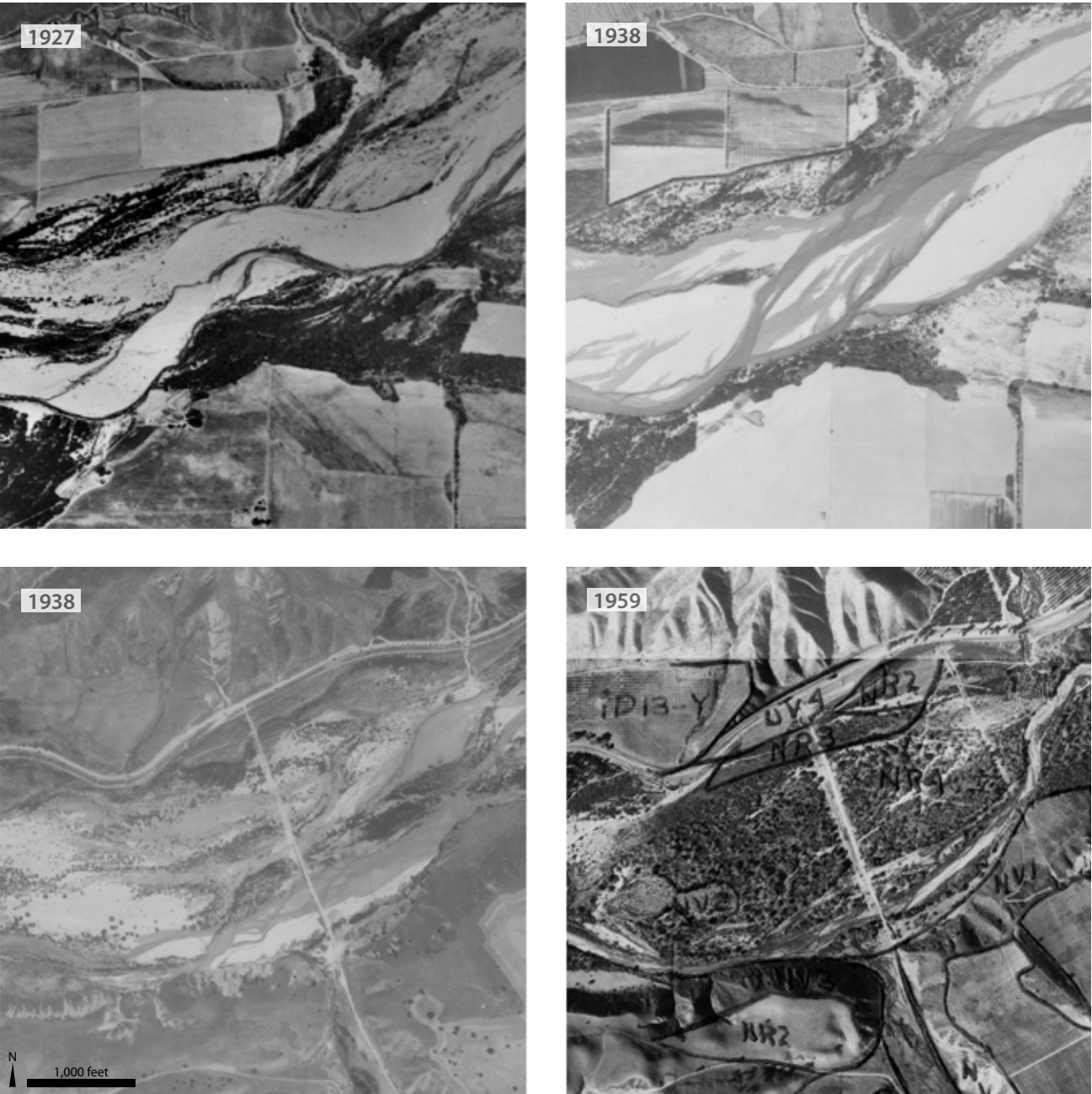


Fig. 3.22. Decadal-scale shifts in in-channel riparian vegetation and channel form. Major floods reworked the active channel and floodplain, creating new channel and vegetation patterns. Top images: Santa Clara River east of Santa Paula, 1927 and 1938. Bottom images: The river east of the Los Angeles County line, 1938 and 1959. (Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 1938, courtesy of Ventura County; USDA 1959, California State University Northridge, Map Library)



run more violently and destructively than formerly. As a consequence, the Santa Clara Valley is being much injured by floods” (California State Board of Forestry 1886). It is possible that floods of the late 19th and early 20th century—in particular 1884, 1914, and 1938, in addition to the St. Francis Dam break—may have impacted in-channel riparian distribution and bank position stability more significantly than previous floods of record. However, these accounts are hard to interpret given the relatively short memory of these observers in comparison to longer (e.g., decadal scale) variations in climate and precipitation, and the observed effects may not be a direct result of changes in land use.

INCISION/CHANGES IN BED LEVEL Stillwater Sciences documented changes in bed elevation from 1949 to 2005 for the entire lower Santa Clara River (and back to 1929 between Santa Paula and Piru creeks), noting trends by reach in incision and aggradation. As is the case for many historical studies, however, we did not recover documents in the historical record to permit a comprehensive quantification of earlier trends in bed level. It is possible that human actions may have created local changes in bed level prior to 1929/1949. For example, changes associated with the St. Francis Dam break flood of 1928 may have caused incision of the Santa Clara River above Fillmore (Downs et al., submitted), or changes in hillslope vegetation associated with grazing and introduction of invasive species could have caused channel aggradation. However, it is also possible that regional bed level changes prior to the 20th century would have occurred primarily in response to avulsion of the lower reaches across the Oxnard Plain rather than as a response to human activity.

While no comprehensive data set detailing bed elevation exists for the period before 1929, scattered early observations provide limited evidence for changes in bed level since the 1700s. Notably, near Saticoy and Piru in 1769, Crespí noted that the active channel was quite shallow: “the bed does not lie very deep” (Piru, Crespí and Brown 2001) and “the bed must have a width of fifty varas [140 feet] of sand... very shallow and on a level with the land of this great plain” (Saticoy, in Crespí and Bolton 1927). Almost 100 years later, another traveler also described the Santa Clara River near Montalvo as having “a wide, sandy, shallow bed” and “low banks” (*Daily Alta California* 1868).

In some areas high bluff banks were (and still are) present, such as near the Olivas adobe (built 1837, enlarged in 1849) on the right (north) bank of the river near its mouth, where a bank 20 feet high (Hancock 1854) provided some protection from flooding. King (1883) also noted around Piru that “at some points the banks of the river are 20 ft high.”

CONNECTIVITY TO MINOR TRIBUTARIES Prior to the widespread construction of channels connecting them to the Santa Clara River, most small creeks appear to have sunk into the coarse soils of their alluvial fans rather than maintaining a defined channel all the way to the river. In the 19th century, these small creeks would have mostly maintained a subsurface connection

with the Santa Clara River, and possibly a brief seasonal surface connection through poorly defined channels in times of high water.

In contrast, in the present-day drainage network nearly every tributary is directly connected via engineered channels to the river. Even relatively small channels with limited flow are currently connected with the river’s mainstem. This change is captured on numerous historical maps which show the unconnected streams disappearing on the valley floor (e.g., Holmes and Mesmer 1901b, USGS 1903a). In addition, many anthropogenic surface connections are striking on the historical (1927/1938) aerials for the river valley, which often clearly show the transitional point between the sinuous, natural upstream portion of a creek and the straight, engineered downstream portion. This systemic change has implications for the density of the drainage network of the valley and the speed at which water is delivered to the Santa Clara River. Increased drainage density has the potential to create higher flood peaks and bank erosion downstream, as well as reducing groundwater recharge (SFEI 2011).

Dry Season Flow

While some research has been conducted to determine the nature of flow on the Santa Clara River prior to significant Euro-American modifications (cf. Schwartzberg and Moore 1995, Nautilus Environmental 2005) and some researchers have speculated that perennial flow would have been present along much of or the entire river (Stillwater Sciences 2007b; see also Boughton et al. 2006 for general Southern California historical flow), little comprehensive research has been conducted to assess specific local historical conditions.

Information compiled from narrative accounts, maps, and photographs suggest that while substantial persistent, perennial reaches were present along much of the Santa Clara River, there were also extensive sections of consistently intermittent flow. From Crespí’s journey in the summer of 1769 to water availability reports of the early 20th century, the historical record consistently defines certain reaches as intermittent, while others are commonly described as having water year round. These patterns in summer base flow reflect surface water-groundwater interactions, which are controlled broadly by groundwater basin location and the faults and structural variations in valley width and depth.

Crespí’s River

Fortunately for current researchers, Spanish explorer Crespí’s expedition traveled down the Santa Clara River from near Saugus to Saticoy in mid-August 1769, describing flow conditions in many places. Crespí observed that large portions of river maintained substantial summertime flow, while others were completely dry (fig. 3.23). Though 1769 was part of a relatively wet period, Crespí’s descriptions appear representative of larger trends supported by additional sources, as discussed in detail below (Lynch 1931).

On the Santa Clara River above Camulos on August 10, 1769, Crespi recorded a “good-sized stream of running water following us ever onward,” with cottonwoods, willows, grapevines, and live oaks along the channel (Crespi and Brown 2001). The river continued to have a “large flow of water” until just above Camulos the next day, where Crespi noted that

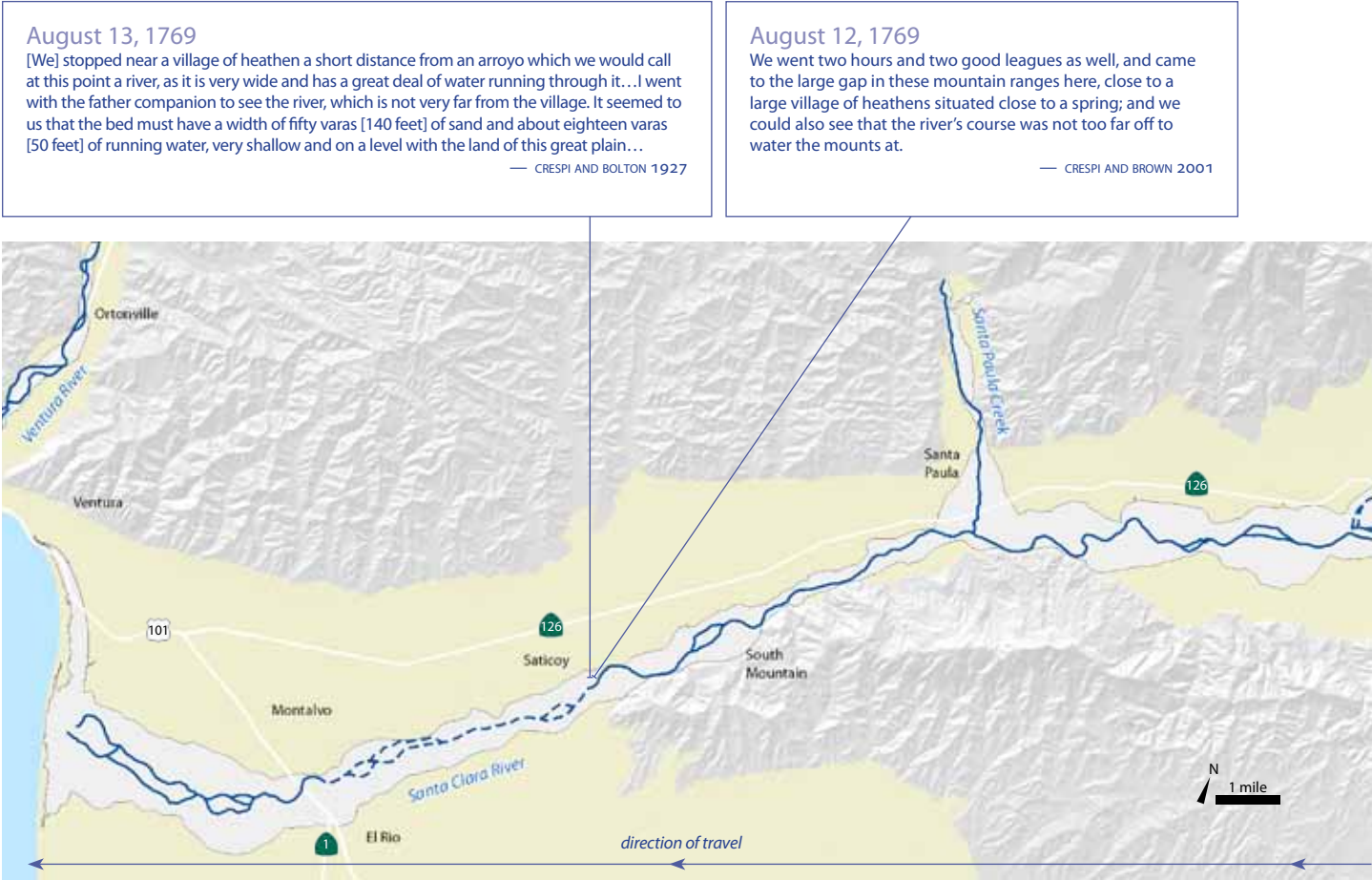
After accompanying us with a good-sized flow of running water all during yesterday’s march, the stream, shortly after we set out today, stopped flowing amid the great amounts of sand in the bed of this stream, seemingly sinking into its many sands; the bed is plainly over a hundred yards in width in spots, and must be a very full-flowing river at some seasons, as is shown by its many piles of drift and large banks of sand.

Approximately 9 miles later, around the widening of the valley east of Fillmore, Crespi noted that they “once more came across a good-sized stream of running water” that continued for “some leagues down the hollow.” He made no more explicit mention of flow until around Saticoy, where he noted that the river was “not too far off to water the mounts at”:

The river bed here must be about fifty yards wide across the sand; the breadth of water flowing must have been about some eighteen yards, running very shallow—very good, pure water.

At this point Crespi ceased following the river, though he does note that the river “runs through this plain, flowing down onto it from the Santa Clara

Fig. 3.23. Crespi’s River, August 1769. The Santa Clara River exhibited a pattern of alternating reaches of perennial and intermittent summer flow, as depicted below (dashed reaches are intermittent). These patterns were recorded in the observations of Spanish explorer Juan Crespi, travelling downstream along the river from August 10-13, 1769. Though Crespi’s observations cannot all be placed precisely, they provide detailed, early observations of flow patterns on the river.



Hollow we have just come through, southwestward, and on out over the aforesaid plain here to empty into the sea.”

Supporting Evidence

Crespi’s assessment of summer flow along the Santa Clara River is largely corroborated by other, later observations of flow characteristics (table 3.2). One late 19th century source estimated that the Santa Clara River was “dry for four-sevenths of its course during a part of the year” (Porter et al. 1882), a depiction that is overstated but roughly reflective of flow conditions portrayed by more specific accounts. More than 160 years later, Freeman (1930) described similar, if somewhat diminished, flow patterns along the river (see page 82).

In particular, the disappearance of summer flow around Camulos is well documented. Above Camulos (in the Del Valle reach), Freeman (1930) noted summer surface flow, and King (1883) observed an “ample supply of nice, clear water” when traveling in mid-October. Just above Camulos, however—where Crespi observed flow disappearing into the river bed — Freeman notes that “water begins to disappear,” and a September 1858 survey of Camulos Ranch notes that the “river at this time is dry” (Hancock 1858). An early *diseño* shows the river disappearing a little after Camulos, and well before reaching Piru Creek. This transition is also captured by the

The ride back to the Camulos was one of the pleasantest features of the day...Farther to the east outspread the russet fields of the Newhall Rancho, a magnificent stretch of sixteen miles of valley, with the blue artery of the Santa Clara river running its entire length.

—NINETTA EAMES, EARLY FALL 1889, AUTUMN DAYS IN VENTURA

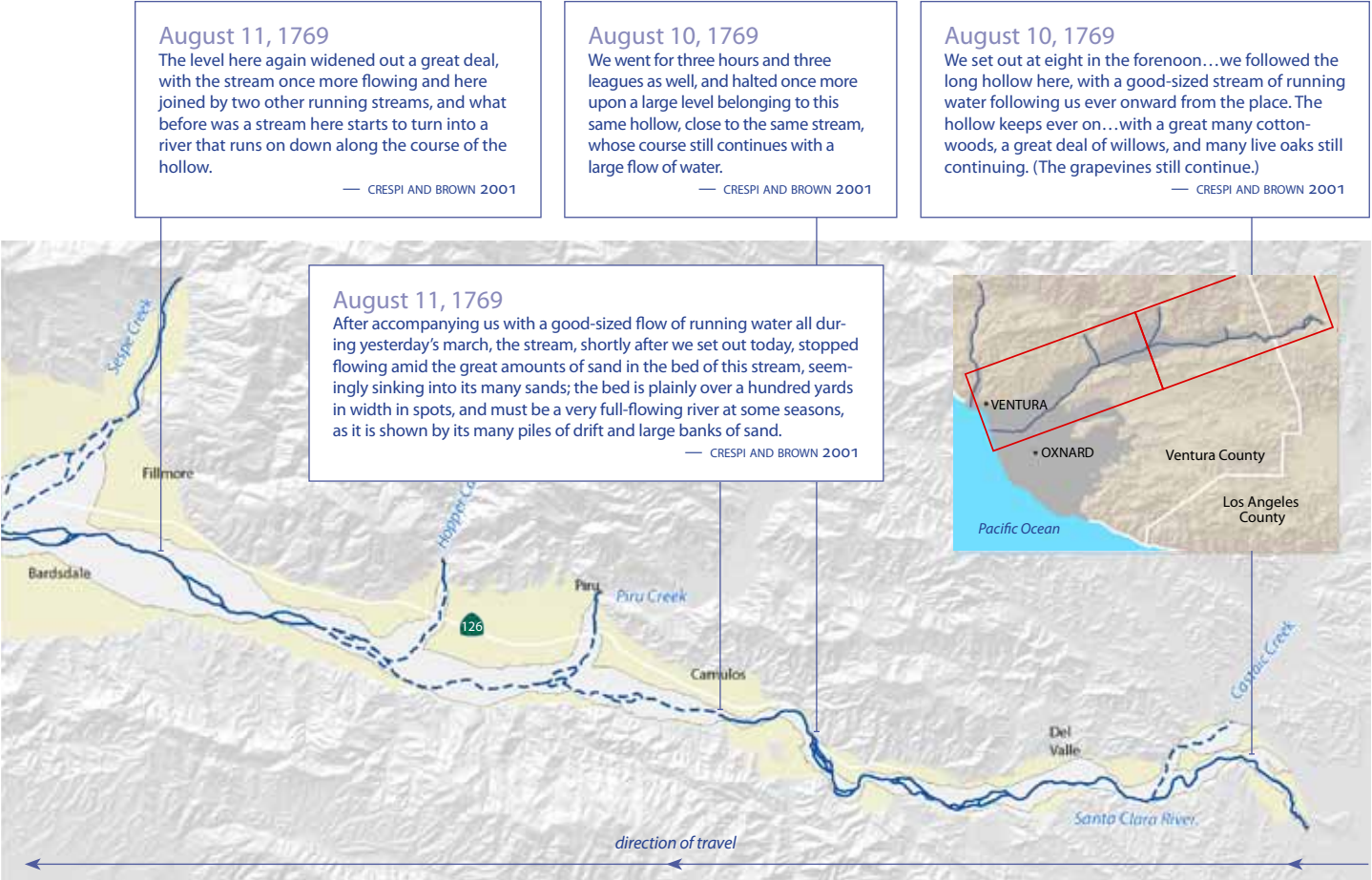


Table 3.2. Evidence of summer flow by reach on the Santa Clara River, 1769-1930.

Reach	Date	Evidence	Reference
Oxnard (river mouth)	early October 1855	“an insignificant stream, with but an inch or so of water in its channel.”	Johnson 1855a
Oxnard (river mouth)	October 24, 1879	“somewhat rapid stream”	Bowers 1879, in Benson 1997
Oxnard (river mouth)	June 1, 1899	“running water”	Waud ca. 1899
Oxnard (river mouth)	September 1857	“nearly dry during the summer”	<i>Daily Alta California</i> 1857
Oxnard (101 crossing)	August 1868	“some water flowing where we crossed it, and quite a large body a few miles above”	<i>Daily Alta California</i> 1868
Oxnard (101 crossing)	June 18, 1883	“wide sandy bed where an emaciated stream reposes till revived by winter rains”	Seward [1883]1937
Oxnard (Saticoy)	Late summer/early fall 1889	“loitering along its sandy bed as if it were loth to reach the sea”	Eames 1889
Oxnard (Saticoy)	August 13, 1769	“the breadth of water flowing must have been about some eighteen yards, running very shallow”	Crespí and Brown 2001
Oxnard (Saticoy)	Summer 1872-3	“dry in summer for seven or eight miles”	Cooper 1887
Oxnard (Saticoy)	June 8, 1854	“water of Rio Santa Clara, current near 6 miles per hour and average depth 9 inches”	Hancock 1854
Santa Paula	Summer 1872-3	“Santa Clara River runs permanently”	Cooper 1887
Sespe (at Sespe Creek confluence)	October 12, 1853	“to water”	Norris 1853
Sespe (E of Fillmore)	August 11, 1769	“good-sized stream of running water”	Crespí and Brown 2001
Sespe (3 miles E of Bardsdale Bridge)	Summer	“water again comes to the surface”	Freeman 1930
Piru (~2 miles west of Piru)	October 1853	“the water of the river has sunk at this point”	Norris 1853
Piru (~1 mile west of Piru)	Oct 7-11, 1878	“dry bed of Santa Clara River”	Chillson 1878
Piru (3 miles east of Piru)	Summer	“water begins to disappear”	Freeman 1930
Piru (above Camulos)	August 11, 1769	“the stream...stopped flowing amid the great amounts of sand in the bed”	Crespí and Brown 2001
Piru	September 1, 1858	“river at this time is dry”	Hancock 1858
Del Valle	October 16, 1883	“ample supply of nice, clear water”	King 1883
Del Valle	August 10, 1769	“large flow of water”	Crespí and Brown 2001
Del Valle	Summer	“ground water...rises to flow along the surface”	Freeman 1930

USGS topographic quad from 1903 [Santa Susana], which shows a solid blue line in the sandy bed of the Santa Clara River (the conventional USGS symbol for a permanent stream) from west of Saugus to ½ mile east of Camulos, where a forked distributary represents the stream sinking into its sandy bed (fig. 3.24).

The Santa Clara River remained dry until above the confluence with Sespe Creek (about 1.5 miles east of the fish hatchery), where surface flow resumed (Freeman 1930). Around Fillmore, Fray Seán of Mission San Buenaventura noted that substantial summer water was present above Sespe Creek : “in time of flood or after heavy rains it is impossible to cross the river for 2 or 3 days...Throughout the rest of the year the river carries no small volume of water” (Seán 1804). Historical data are not abundant in the area around the Sespe confluence, though one surveyor does note water in the channel in early October (Norris 1853) and a few survey maps show diversion dams and summer (June) flow (Barry 1892b, Unknown 1894). Definitive descriptions of flow resume above Santa Paula Creek: around Santa Paula extending east toward Fillmore, ornithologist Cooper wrote that “the Santa Clara River runs permanently and a grove of poplars [cottonwoods; *Populus* spp.] and willows lines its marshy shores for several miles” (Cooper 1887).

Evidence for dry season flow is more ambivalent in the area around Montalvo and Saticoy, though it appears that this reach was most likely intermittent as water spread and sank into the coarse gravels of the Oxnard Plain below South Mountain. Cooper (1887), who spent time near Saticoy during 1872-3, described the river as completely dry during the summer along this reach:

The Santa Clara River runs half a mile distant, but is dry in summer for seven or eight miles along that part of its course, leaving a wide, sandy and gravelly bed, destitute of vegetation except on a few higher patches where small poplar and willow trees grow, with low shrubbery, and which become islands in the high water of winter.

While most other historical accounts do describe the presence of some summer water in this reach, almost without exception they also mention the limited amount of water present (as opposed to the Santa Paula reach, where the river had abundant summer water). Just above Saticoy, near where Crespí described watering his mounts in the “very shallow” river in 1769, Freeman (1930) remarked that surface water “begins to disappear into the gravels beneath the Oxnard Plain,” and an 1889 depiction of the river late in the dry season in the same area described it “loitering along its sandy bed as if it were loth to reach the sea” (Eames 1889). Also near Saticoy, General Land Office surveyor Henry Hancock reported in June 1853 a “current near 6 miles per hour and average depth 9 inches,” indicating that by late summer flow would have been extremely shallow or nonexistent. Cooper’s interpretation of the Saticoy-Montalvo area as summer dry is supported by USGS (1903a) historical mapping and Crespí’s earlier observations that “no trees are to be seen nearby” in the area (Crespí and Brown 2001), indicating limited summer water availability.

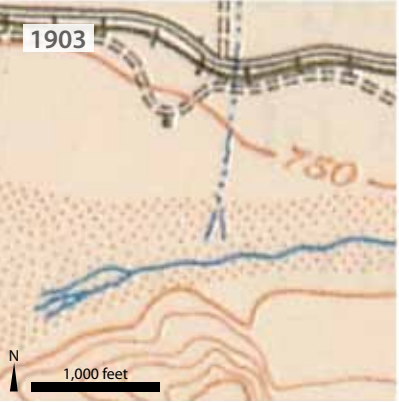
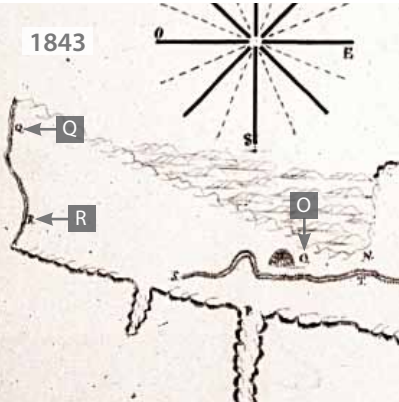


Fig. 3.24. An early *diseño* (top) shows the Santa Clara River—which it calls the “Arroyo de la Soledad”—stopping abruptly before reaching Piru Creek (labeled on the *diseño* as “Q-R”). This corresponds to the well documented location of the loss of summer surface flow in this reach, near Camulos (which is labeled with a small hut and “O” on the *diseño*). A historical USGS quad (bottom) shows the loss of flow in the same location, around sixty years later. (Unknown ca. 1843, courtesy of John Johnson and Santa Clarita Valley History; USGS 1903b, courtesy of the CSU Northridge Map Library)

TRENDS IN SANTA CLARA RIVER HYDROLOGY

The Del Valle, Sespe, and Santa Paula reaches were consistently perennial across the historical record, with abundant summer water (as evidenced by the presence of other features as well, such as freshwater wetlands, ponds, and willow-cottonwood forest; see page 94). The Piru reach, on the other hand, was consistently drier. The upper Oxnard reach (around Saticoy) also appears to have had limited, if any, summer water. In semi-arid systems in the southwestern United States, this type of system—with alternating perennial and summer-dry reaches—is called an interrupted perennial river (Stromberg et al. 2005).

Many of the same physical factors that historically controlled summer surface flow are still relevant today, and as a result many of these hydrologic trends are reflected along the Santa Clara River today (UWCD and Castaic Lake Water Agency 1996). Valley narrowing and geologic constraints force groundwater to the surface at the transitions between groundwater basins in the Del Valle, Sespe, and Santa Paula reaches, while inputs from tributaries (in particular Sespe Creek, which is still unregulated) also help maintain surface flow. On the other hand, in the Piru reach and downstream of South Mountain surface water is quickly lost in the broad, unconfined alluvium. The reach of perennial flow at the river mouth coincides with extent of the former artesian zone (Lippincott ca. 1930), the lowest portion of which is currently affected by the City of Ventura’s wastewater treatment plant.

However, the presence of surface water would have been readily impacted by surface diversions, groundwater extraction, and climatic variability. Thus while broad patterns in surface water availability have persisted to the present day, the factors listed above have impacted the extent and hydrology of perennial and intermittent reaches along the river. In particular, on the Oxnard Plain (where surface flow was already often shallow), summer water availability would have been very sensitive to changes in hydrology and water management. This would have been true in dry years (e.g., Cooper (1887) described summer-dry conditions around Saticoy in 1872-3, noting that the season had been “uncommonly dry”), as well as after impacts of

flow diversions and groundwater extraction of the late 19th and early 20th century.

This sensitivity is reflected in changes in flow regimes in the river in the first part of the 20th century, most notably on the Oxnard Plain. By the beginning of the 20th century, portions of the river once considered perennial were described as seasonally dry: “For the greater part of the year both the Santa Clara and Ventura rivers are dry in their lower reaches” (Holmes and Mesmer 1901c). Cooper (1967) expanded this observation to the entire river, noting that both Ventura and Santa Clara river were “dry most of the time but carrying very heavy loads during occasional floods.” Tait (1912) was even more explicit (and extreme) about the cause of this drying, stating that “all of the summer discharge of Santa Clara River is taken out for irrigation and about forty pumping plants take water from wells.”

Engineer Vern Freeman, writing in 1930, provides more resolution to the mid-century state of summer flow on the river. Consistent with Crespí and other accounts, Freeman recorded that the Santa Clara River was perennial until a point about three miles east of Piru, and then again for extensive sections around Fillmore and Santa Paula. However, he does record a summer-dry reach not mentioned by Crespí or 19th century sources between Santa Paula and Sespe creeks, and does not mention any summer surface flow present on the Oxnard Plain (though Mann (1958) does note that “there is little further percolation” below the Highway 101 bridge, a formerly perennial reach). Contractions in the extent of summer water in the river by 1930 could be indications of the impacts of surface diversions and groundwater extraction.

Currently (2011), flow patterns on the river appear to broadly mirror historical trends. Of course, while physically-controlled rising groundwater patterns remain generally consistent, water impoundments, diversions, and releases continue to affect extent and location of summer water, in addition to the quantity of surface water in the perennial reaches and the relative dryness of the intermittent reaches.

Below the Montalvo (Highway 101) bridge and closer to the river mouth, early descriptions also indicate that while the river was likely perennial in most years, surface water was not as abundant as in perennial reaches upstream, and flowed shallowly over the Oxnard Plain. Surface water was perennially found where the zone of artesian water intersected the river in this lower reach (Lippincott ca. 1930). Johnson (1855a) recorded that in early October, the river was “an insignificant stream, with but an inch or so of water in its channel.” This sentiment was echoed by numerous observers, who described minimal surface flow from Saticoy to the ocean: what Seward ([1883]1937) called “an emaciated stream.” Davidson (1864) wrote that the river was “nearly dry during the summer, and terminates in lagoons and marshes,” while a traveler crossing the river near its mouth (presumably the Montalvo crossing) in late August 1868 wrote that “There was some water flowing where we crossed it, and quite a large body a few miles above” (*Daily Alta California* 1868). Bowers (1879, in Benson 1997) called the river a “somewhat rapid stream” near the mouth in late October.

Riparian Habitats and Ecology

Riparian vegetation along the Santa Clara River was historically heterogeneous and diverse. Habitat features commonly documented along the Santa Clara River include willow scrub, alluvial scrub, herbaceous cover, cottonwood-willow forest and woodland, freshwater marshes, and mature individual sycamores and oaks. Unlike the Ventura River, much of the Santa Clara River was characterized by the absence of mature stands of riparian woodland or forest, though there were a few notable exceptions along the river. While the historical data set generally lacks the resolution to map these riparian characteristics at a fine scale, emergent patterns are evident; these define the coarse-scale variation in riparian vegetation found along the river corridor. These broad associations between landform or topographic setting, river reach, and vegetation are discussed below.

Distinct vegetation patterns characterized the outer banks, bottomlands, and active channel of the Santa Clara River (for definition of terms see morphology section, page 61). Large live oaks and sycamores (documented between two to four feet diameter) were found along portions of the outer banks, removed from the regular overflow zone. Bottomland areas were primarily dominated by riverwash, herbaceous cover, and willow/riparian scrub, though in some perennial reaches densely vegetated, mature stands of willow-cottonwood forest and wetlands (which we term “persistent wetland riparian areas” or “willow-cottonwood forested wetlands”; see page 94) were prevalent. Within the active channel, scrub colonized bar and island surfaces slightly elevated above the mostly sandy (and sometimes gravelly) river bed. The river bed itself would have been often bare in the winter and early spring, and covered in herbaceous vegetation by summer. Sloughs and side channels supported in-channel valley freshwater and alkaline marshes (fig. 3.25). GLO notes confirm the position of riparian trees on distinct geomorphic surfaces: in the Santa Paula reach, one

The water of the river at its low stages disappears in one stretch of the river to reappear in another.

—GRUNSKY 1925

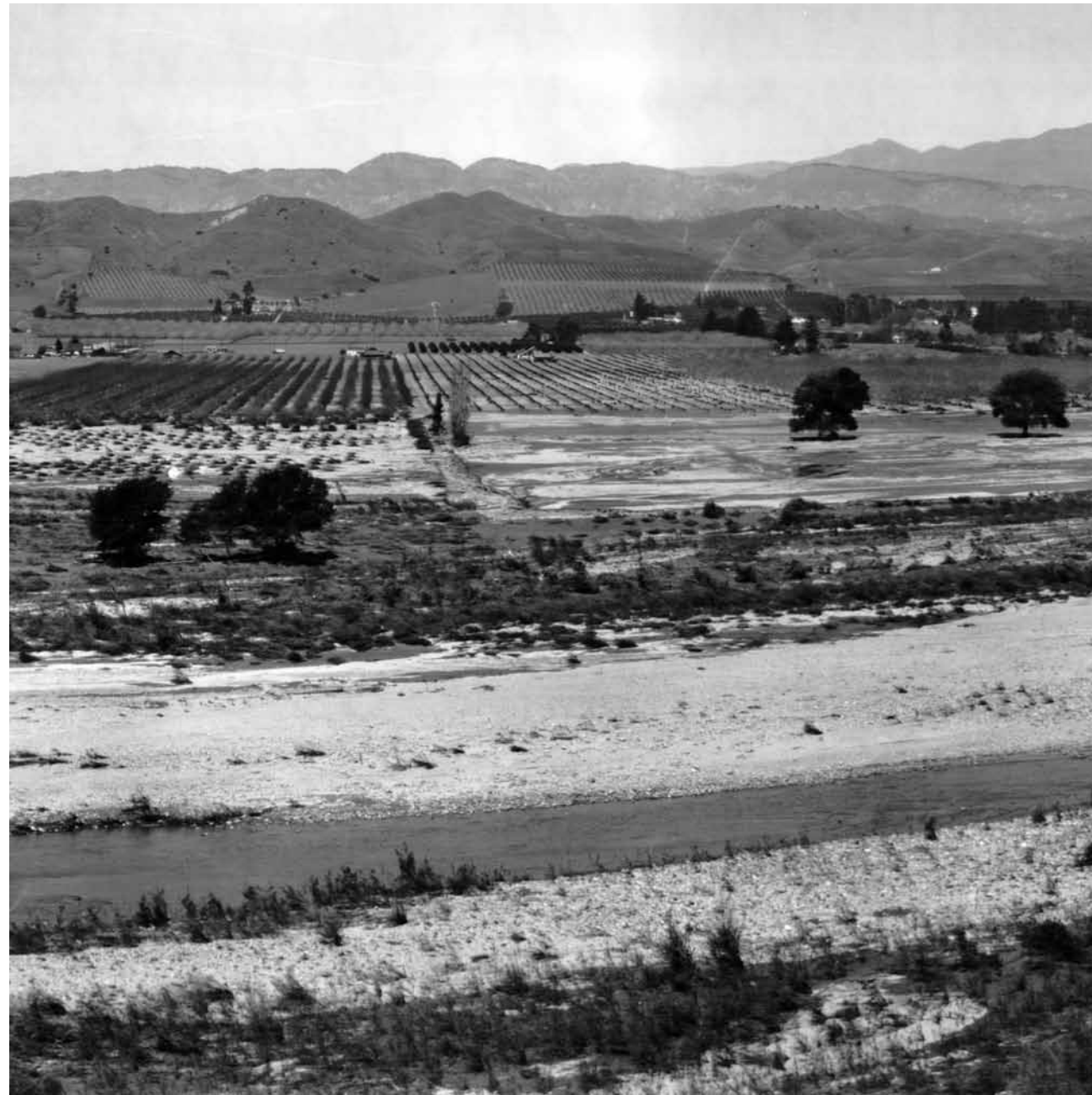


Fig. 3.25. This image of the Santa Clara River west of Santa Paula was taken on March 17, 1928—only five days after the St. Francis Dam break swept through the Santa Clara River valley. The recent presence of high flows is evident in the low vegetation along the river, which is bent downstream in the direction of flow. Even after such a large event, riparian patterns are evident: live oaks are seen bordering the river, while the bottomland surfaces are dominated by low scrub. The active channel is largely unvegetated, having been recently scoured by the flood. (Isensee 1928b, courtesy of the Museum of Ventura County)

survey note describes a “large live oak on high bank of Santa Clara River” (Hoffman 1868b), while nearby a 16-inch diameter cottonwood was found at the “foot of [the] perpendicular bank” (Norway 1878b).

Riparian characteristics also varied broadly by reach, with well developed trees flanking some portions of the river, and little to no riparian cover in other reaches. This reach-level variability in vegetation was observed by early explorers, travelers, and surveyors. In the lower Oxnard, Santa Paula, and Sespe reaches, for example, the active channel was narrower, and substantial bottomlands—many supporting wetlands and dense riparian forests—developed along much of the river. In the wettest portions of these reaches, GLO surveyors recorded willows and a few alders and box elders on bottomland surfaces, along with live oaks and sycamores on the high banks (Norris 1853, Hoffman 1868b, Thompson 1869). In contrast, in the historically intermittent Piru reach bottomlands were narrow and sparsely vegetated, while sandy riverwash in the active channel spread almost bank to bank. This reach stands out for its lack of riparian trees recorded by GLO surveyors (only one sycamore 14 inches in diameter, and two “no timber” points).

As a result, riparian forest along the Santa Clara River did not create a continuous corridor (fig. 3.26, 3.27). In the perennial reaches, explorer Crespí’s 1769 account describes the river with “a great many cottonwoods, a great deal of willows, and many live oaks” in addition to wild grapes (Del Valle reach), or with “vast numbers of lush plants (the grapevines still continue)” (Sespe reach), or with “trees on all the river bed...sycamores, live oaks, willows and white [Fremont] cottonwoods” (Santa Paula reach; Crespí and Brown 2001). Conversely, accounts of the river outside of these wetter reaches describe more dispersed trees. In the intermittent portion of the Oxnard reach near Saticoy, for example, Crespí notes that “no trees are to be seen nearby” (though he did see “a great deal of trees” near the shore; presumably West Grove in the perennial reach near the river mouth). One article describes the river with “no gigantic trees bordering its low banks, only a group of cottonwoods; and a clump of willows, here and there” (Clifford 1872), and another “small, isolated groves of cottonwoods and willows, with here and there an occasional sycamore” (Evermann 1886). One writer even called the Piru reach a “desert” (Eames 1889).

These historical patterns—differences in riparian vegetation on different geomorphic surfaces, as well as longitudinal variations between reaches—are consistent with findings in other semi-arid streams and even with present-day patterns observed along the highly modified Santa Clara River. In general, water availability is considered to often be the strongest limiting factor in determining riparian vegetation composition and distribution in semi-arid streams (Hupp and Osterkamp 1996, Tabacchi et al. 1996, Lite et al. 2005, Sandercock et al. 2007, Stillwater Sciences 2007a, Osterkamp and Hupp 2010, Orr et al. 2011). Water availability varies laterally (depth to groundwater), as well as longitudinally based on geologic and topographic

Beautiful, indeed, is the Valley of the Santa Clara. Graceful the limpid waters of the river, fringed with willow and cottonwood...

—DAILY ALTA CALIFORNIA 1865



Fig. 3.26. Camulos Ranch in Piru, September 1924. Upstream of Camulos Ranch (marked **a** in the photograph), a continuous belt of riparian trees flanked the Santa Clara River. Downstream of the ranch, the river widened considerably; forest disappeared and was replaced by alluvial scrub and riverwash **b**. This ecological transition also marked a hydrologic one: the location of disappearance of summer surface water on the river. Piru Creek can be seen in the foreground. (Spence 1924, courtesy of Benjamin and Gladys Thomas Air Photo Archives, Spence and Fairchild Collections, UCLA, Department of Geography)

controls (e.g., depth to groundwater and to bedrock, depth of alluvium, and summer surface flow). As a result, variations in riparian characteristics across both gradients can be expected.

Longitudinally across different reaches of a semi-arid river, heterogeneous hydrology (in particular, presence of summer surface flow and depth to groundwater) can drive corresponding patterns of riparian vegetation (Tabacchi et al. 1996, Sandercock et al. 2007, Stillwater Sciences 2007a). This interaction between stream seasonality and vegetation can be clearly seen on the Santa Clara River, where the presence of mature willow-cottonwood riparian forest corresponds with perennial flow. This is what Sandercock et al. call “abrupt changes in patterns of riparian vegetation” along a longitudinal gradient. Similar patterns are still visible on the river today, though the extent of native riparian forest has been drastically reduced (Stillwater Sciences 2007a, Stillwater Sciences and URS Corporation 2007, Orr et al. 2011; see fig. 3.43).

Vegetation characteristics are also influenced by the lateral variations in hydrology and geomorphology across the river, though (as is the case for the Santa Clara River) patterns are often less distinct. Both groundwater availability and flood disturbance frequency, two of the primary driving



factors in semi-arid systems, (Hupp and Osterkamp 1996, Lite et al. 2005, Stillwater Sciences 2007a), vary laterally across the river (increased depth to groundwater and decreased flood frequency with increasing distance and elevation from the active channel). As a result, the position of the bottomland surface plays a crucial role in determining the riparian vegetation able to colonize it (Bendix and Hupp 2000).

Unfortunately, however, the identification and characterization of fluvially-created bottomland surfaces in semi-arid systems can be challenging. High discharge, low recurrence floods contribute to the shape of the channel and riverine landforms. The morphology of these systems is complex and not easily characterized. Bottomland location and elevation can change quickly, and bottomland appearance may often resemble that of the active channel (Bendix and Hupp 2000, Sandercock et al. 2007). Osterkamp and Hupp (2010) refer to bottomlands as “shifting mosaics of landforms adjacent to stream channels.” This morphologic complexity is matched by—and partially drives—spatially variable, heterogeneous patterns in riparian vegetation distribution seen in semi-arid streams. As a result, the interaction of vegetation with geomorphic processes in semi-arid systems is particularly complex and challenging to characterize.

The following sections describe more of the vegetation characteristics along the length of the Santa Clara River, as found in the active channel and bottomland surfaces. For the reasons detailed above, it is challenging—if not impossible—to provide much reach-level detail regarding the historical location of various in-channel habitat types. Instead, we provide broad characterizations of the suite of riparian habitats historically documented within the river corridor.

Bottomland and Active Channel Habitats

A variety of habitats were found within the active channel and bottomlands of the Santa Clara River, including willow scrub, alluvial scrub, herbaceous cover, freshwater wetlands, side channels, and sloughs (fig. 3.28). (Large persistent wetland riparian areas are discussed separately in the subsequent section; see page 94.) With the exception of the persistent wetland riparian

Fig. 3.27. This *diseño* captures a similar pattern of discontinuous riparian forest (shown here as closely spaced, small, circular trees) east of Piru Creek at **a**. Though the location of this transition is highly generalized, it is shown here east of Camulos and extending up what is likely Castaic Creek **b** in Los Angeles County. (U.S. District Court ca. 1840c, courtesy of The Bancroft Library, UC Berkeley)

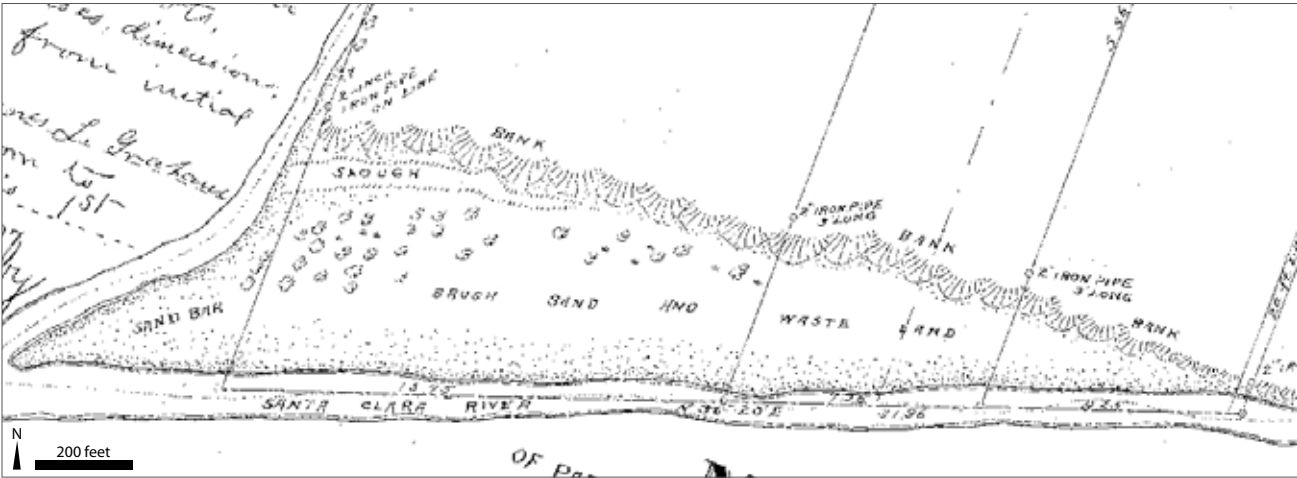


Figure 3.28. This 1897 map shows the variety of habitats found within the clearly delineated banks of the Santa Clara River, including a slough, “brush sand and waste land” with scattered willows, and a sand bar. Adams Barranca can be seen joining the river at left. (Orcutt 1897, courtesy of the Ventura County Surveyor’s Office)

In this glad clime breathing is a refreshment, and the mere act of living a delight. The warm, healing winds, the glancing sunshine, the serpentine line of the river, stealing through its desert of sands...

—NINETTA EAMES, FALL 1889

areas, in-channel habitats are poorly documented in the historical record. Since the historical record rarely specifies whether a feature is in the active channel or on the bottomland (and given the challenges outlined above in characterizing bottomlands in semi-arid systems), the two are mostly undifferentiated, and we treat them together here.

Features in the active channel included the low-flow channel, as well as side channels and sloughs which carried water during floods. The channel itself is consistently described as being sandy riverwash, and almost completely unvegetated or covered in herbaceous vegetation, depending on the season (fig. 3.29). The 1917 soil survey describes the active channel of the river as composed of “sand and fine sand” (Nelson et al. 1920), and GLO quotes repeatedly characterize the river as “sandy bed” (e.g., Hoffman 1868b, Barry 1892a). One surveyor traveling through the Cienega area noted “leave swamp for sandy plain” as he entered the active channel, emphasizing the abrupt shift between moist bottomland and the active channel (Norris 1853). Near Camulos (upper Piru reach), explorer Crespi noted that the bed of the river has “piles of drift and large banks of sand” (though he also notes “large bottomlands of very good soil”; Crespi and Brown 2001). In some places, this riverwash occupied all or nearly all of the area between the outer banks, with no other recorded major habitats present in the active channel or on bottomland surfaces. Near Camulos, the soil survey shows nearly the entire width of the Santa Clara River dominated by riverwash, a swath about ½ mile wide which would likely have been treeless and vegetated with only herbaceous cover, with minimal or no bottomlands (fig. 3.30). The presence of extensive areas of riverwash and herbaceous cover clearly predates many human-induced disturbances to the river, including the St. Francis dam break.

Occupying a position in the river corridor above the active channel and thus less prone to overflow, bottomlands hosted a wide array of riparian habitats, from freshwater wetlands to alluvial scrub. Some bottomlands relatively high above the river in reaches with perennial flow supported mature cottonwood-willow forest (see page 94), while in other areas only sparse scrub would have been established.



Fig. 3.29. A view of the river corridor south of Santa Paula (top) looking south toward South Mountain, 1888. The sparsely vegetated active channel can be seen behind the town of Santa Paula, with strips of dense riparian vegetation on bottomlands along both sides of the river. (Unknown 1888; courtesy of the Santa Paula Historical Society)

Fig. 3.30. Santa Clara River east of Piru Creek, 1898 (bottom). This view of the Santa Clara River, captured during the State Mineralogist’s 1898 field work, shows the broad expanses of sparsely vegetated riverwash characteristic of the Piru reach. The view is looking south east; Piru Creek can be seen coming into the Santa Clara River from the left. (Watts 1898, courtesy of the California State Archives)

In some areas, bottomlands may have closely resembled the active channel. The early soils report identifies a few slightly finer soils flanking the riverwash that correspond to bottomland habitats (e.g., Yolo sand and Yolo fine sand). Nelson notes that along the Santa Clara River, these soils “may resemble riverwash, from which they were separated, in many places, on the basis of slightly greater elevation and their growth of willow and vines,” or that “in many places [Yolo fine sand] much resembles riverwash, except in its slightly higher position and its covering of brush and willow” (Nelson et al. 1920).

In other areas, the bottomland would have been clearly differentiated from the active channel, both by its position and its vegetation. While this was most evident in the persistent wetland riparian areas, bottomlands also supported an array of other habitats, including willow scrub, alluvial scrub, herbaceous cover, and wetlands and sloughs (fig. 3.31).

Willow trees and scrub were historically widespread along the Santa Clara River. Many maps show willows growing on what are apparently islands, side bars on the margin of the active channel, or higher benches within the banks of the river (e.g., Craven 1874h, Barry 1892b, Barry 1893, Stocker 1894, Barry 1898, Everett 1907, Unknown 1911). On these maps, willows are labeled as “heavy willow and cottonwood brush,” “willow brush,” “willow land,” and simply as “willows” (Barry 1892b, Barry 1893, Stocker 1894, Waud ca. 1899, Waud 1916; fig. 3.32).

Narrative accounts also support the predominance of willow scrub (and the lack of established in-channel trees outside the wetland riparian areas) across most of the river. The historical soil survey describes riverwash in the active channel as “barren of vegetation except for small stands of sweet clover and willow over the least exposed parts” (Nelson et al. 1920). The Santa Clara River near Saticoy was described as “a wide, sandy and gravelly bed, destitute of vegetation except on a few higher patches where small poplar [black cottonwood] and willow trees grow, with low shrubbery,

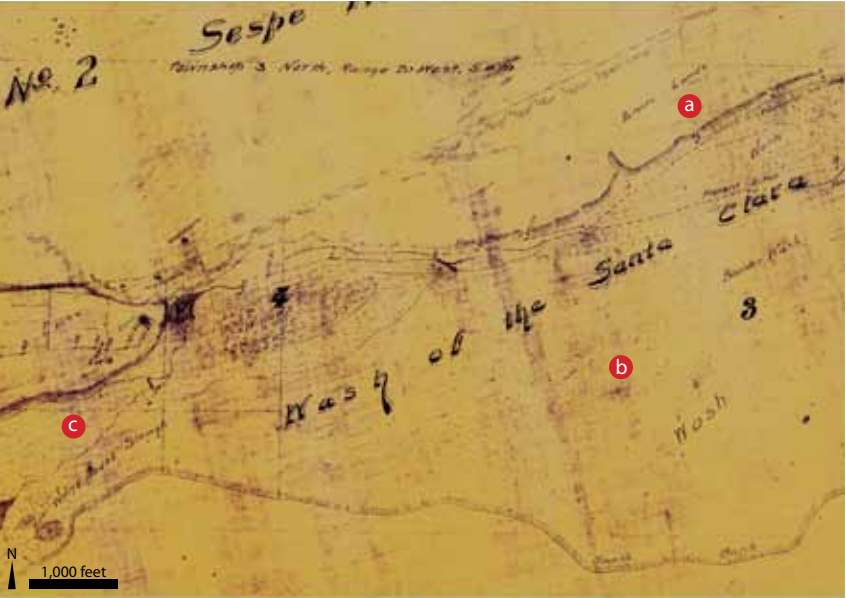


Fig. 3.31. This portion of a map showing the river immediately downstream of the confluence with the Sespe shows “Bottom Lands” **a sitting above a break in slope, at a higher elevation than the “Wash” of the Santa Clara River **b**. Ponds and a slough (the upstream end of East Grove, **c**) and willows are also noted. (Stocker 1894, courtesy of the Museum of Ventura County)**

and which become islands in the high water of winter” (Cooper 1887). GLO survey notes record a “small patch of willow” downstream of Saticoy (Hancock 1854), and east of Santa Paula the channel “covered with willow brush” (Craven 1874e). The only GLO survey trees found within the bottomlands or active channel were within persistent wetland riparian areas or near the confluence of the Sespe and Santa Paula creeks with the Santa Clara River, areas with many established islands that would have protected these trees from floods. By contrast, many large, mature sycamores and live oaks grew along the outer bank of the Santa Clara River. (These habitats are not represented on the historical habitat map.)

These areas would have also supported an array of willow-scrub associated plants, including arroyo willow (*Salix lasiolepis*), narrowleaf or sandbar willow (*Salix exigua*), red willow (*Salix laevigata*), and mulefat (*Baccharis salicifolia*). These species composed the “low shrubbery” mentioned by Cooper (1887). Early court testimony describes the river near Sespe as covered with mulefat:

As to the character of this river bed, I find that some portions of it are dry barren sand; on some portions, and perhaps the larger portion, there is a growth resembling the willow, called, as I understand by the Californians ‘Guatamote,’ [mulefat] generally but a few feet high. (Hopkins 1871)

In addition to willow scrub, several maps also show wetland features and sloughs in portions of perennial reaches outside of the persistent wetland riparian areas. Near the mouth of the Santa Clara River, on the north bank, maps show a marsh, sloughs, alkali land, and willows (Waud ca. 1899, San Miguel Company 1906, Nelson et al. 1917). Further upstream, a 1907 map shows a narrow strip of marsh along the Santa Clara River near Saticoy (Everett 1907), and just above the confluence of the Santa Clara River with Sespe an 1892 map shows sloughs and the low-flow channel flanked with “cienega [wetland] grass” (Barry 1892b; see also Barry and Isham 1894,

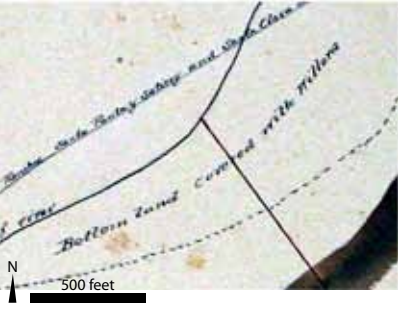


Fig. 3.32. Above the Highway 101 bridge, “bottom land covered with willows” was found on the protected bars at curves in the river. (Barry 1893, courtesy of the Ventura County Surveyor’s Office)

QUICKSAND AND THE SANTA CLARA RIVER BED

Historical accounts consistently describe the bed of the Santa Clara River as sandy, with only scattered accounts referring to coarser substrate. In addition, a number of travelers mentioned the presence of quicksand in the active channel. Bowers (1879, in Benson 1997) described the river bed near the mouth in late October as “a mass of shifting quicksands”; more than 30 years later Chase (1913) was warned to not ford the river on the Oxnard Plain in late spring due to “possible trouble with quicksand.” Sarah Eliot

Blanchard, who grew up near Santa Paula in the late 19th century, recalled trouble with quicksand near Montalvo (Blanchard 1961), and Jarrett (1983) wrote that in the Bardsdale area residents layered bean straw in the active channel to preclude wagons fording the river from sinking in. Accounts like these provide insight into the nature of sediment transported by the river, as well as the availability of near-surface water on the river in these reaches during late spring to early fall.

Alkali is present in large quantities in the lands bordering the coast and is also found in the low lands along the river.

—TAIT 1912

Stocker 1894). East of Santa Paula near East Grove, two maps depict a lagoon beside a strip of either marsh or herbaceous cover (the symbol is unfortunately ambiguous in both maps; Unknown ca. 1890a, Power 1892). There were undoubtedly many more small wetlands within the banks of the Santa Clara River not documented by the historical record, for example in side channels and sloughs. These small, in-channel wetlands would have provided valuable habitat for a variety of aquatic and terrestrial wildlife species.

A likely exception to the ubiquity of willow scrub and mulefat across the Santa Clara River is the intermittent Piru reach. While few details have survived about the character of the scrub in this reach of the river, it is clear that the limited availability of summer water would have been the major factor shaping riparian characteristics in this area, and it is unlikely that the groundwater table was high enough for willow establishment or sustained growth. As a result, we hypothesize the presence of alluvial scrub in this reach. Alluvial scrub, found across Southern California systems, is typically characterized by scale broom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), and mulefat (*Baccharis salicifolia*) (Hanes et al. 1989). This vegetation type is characterized on the San Gabriel River floodplain by Smith (1980) and as scalebroom scrub by Magney (1992), who notes that development of alluvial scrub in stream floodplains is encouraged by limited flooding frequency (only every 5-10 years). Analysis of vegetation patterns, flood dynamics, and other environmental factors along the Santa Clara River (Stillwater Sciences 2007a), the upper Santa Ana River (Burke et al. 2007), and various other Southern California rivers (Hanes et al. 1989) suggests there may be a general succession pattern with scale broom, California buckwheat, mulefat, and golden-aster (*Heterotheca* species) as indicators of early successional stages, and with species such as sagebrush (*Artemisia californica* or *A. tridentata*), black sage (*Salvia mellifera*), and cactus (*Opuntia* spp.) more characteristic of later successional stages.

This interpretation of historical presence of alluvial scrub is consistent with sagebrush and cactus recorded by GLO surveyors on the high bank of the river (Craven 1874f). It is also supported by modern vegetation classification and mapping (Stillwater Sciences 2007a, Stillwater Sciences and URS Corporation 2007, Orr et al. 2011), which records areas of scalebroom scrub and patches of other related vegetation types that are often considered to be components of Southern California alluvial scrub (e.g., *Artemisia tridentata*, *Atriplex lentiformis*, *Pluchea sericea*, *Salvia mellifera*, and *Yucca whipplei* vegetation alliances) in the Piru reach and along lower Sespe Creek near its confluence with the Santa Clara River. Smaller unmapped patches of sparse alluvial scrub dominated by sessileflower false goldenaster (*Heterotheca sessiliflora*) and scale broom (*Lepidospartum squamatum*) are also currently observed on bar features upstream of the Freeman Diversion Dam (Orr pers. comm.)

FISH SLOUGH

Along the Santa Clara River, the most heavily documented slough in the historical record is Fish Slough. Located in Sespe Creek at its confluence with the Santa Clara River, Fish Slough was the site of an in-channel wetland complex and (as per the name) fishing

spot for steelhead trout in the early 20th century (Jarrett 1983; fig. 3.33). It was also the site of late 19th-century irrigation diversions (Crawford 1896). Large willows—up to 2 feet in diameter –grew in Fish Slough, as well as watercress (Jarrett 1983).



Fig. 3.33. Fish Slough complex, 1894. This map of the Santa Clara River-Sespe confluence shows the whole length of Fish Slough, extending about half a mile upstream on Sespe Creek. (Stocker 1894, courtesy of the Museum of Ventura County)

In addition, a number of quotes and maps also indicate the prevalence of herbaceous cover within the river corridor. In the *Overland Monthly*, Clifford (1872) described the Santa Clara River “gilding through its even, grassy fields,” while another traveler wrote of “much fine meadow” along the river near the Los Angeles County line (Holton 1880). Near Camulos, an early account described “low, reed-grown banks” (Roberts 1886), while near Sespe, one observer reported that “...on the flats bordering the river we found a greensward, much of which was made up of sour grass, that a mule will eat rather than starve” (Rothrock 1876). Near Santa Paula, Crespi described the river “with a great deal of green flats along its bank” (Crespi and Brown 2001).

This grass was also valuable as forage for livestock. The 1871 court case for Sespe Rancho hinged on whether the lands within the banks of the Santa Clara River were valuable, and repeated testimony described how settlers used these lands as pasture for their livestock, especially during dry periods when forage elsewhere was limited (see pages 96-97). Mission-era accounts also describe

The river bank on each side is composed to a considerable extent of sandy plain or ‘arenal’...arable and pasture land form on each side of the river a comparatively narrow strip...

—SMITH AND STUART 1871



Fig. 3.34. Detail of a “willow swamp” at the confluence of Santa Paula Creek and the Santa Clara River. Though the map is coarse, this appears to be an early representation of East Grove. The cartographer also drew a “swamp” on the Santa Clara River east of Sespe Creek (the Cienega, not shown here). (Unknown ca. 1860, courtesy of The Bancroft Library, UC Berkeley)

The river was whirling along to the sea through banks clad in long grass, wild-rose, and sweetbrier, with tangles of wild-grape overshadowed by willow, cottonwood, and sycamore, and its mica sands sparkling like flakes of gold as they rolled over in its swift waters.

—VAN DYKE 1890,
SPEAKING OF THE DEL VALLE REACH

the desirability of these lands for cattle, noting that when there was no more pasturage near the Mission and on the Oxnard Plain, cattle would “roam farther up to the meadows along the river” to graze (Senán 1804).

Persistent Wetland Riparian Areas

In addition to the array of bottomland habitats described above, large areas of freshwater wetland and willow-cottonwood riparian forest were also documented on bottomlands along the river. These habitats, which we call “persistent wetland riparian areas,” were found in perennial reaches of the Santa Clara River and occupied bottomland surfaces that were less frequently disturbed by flooding than other in-channel habitats. Because of the abundance of water and timber, they were often significant cultural areas, and as a result are often well documented in the historical record (fig. 3.34).

“Persistent wetland riparian areas” were unusually large (aggregate size over 200 acres) areas of wetland riparian habitat whose presence transcended significant flood events of the late 19th and early 20th centuries. While other areas of riparian forest were present inside the river corridor, they were more variable, shifting in location and extent with major flood events.

The following section characterizes the four documented persistent wetland riparian areas historically found along the lower Santa Clara River. These areas include: south of the river from the Highway 101 crossing to the mouth, east of Santa Paula, east of Fillmore, and east of Camulos. While it is possible that additional large wetland riparian features persisted elsewhere, insufficient documentation exists to confirm their presence.

WEST GROVE (SANTA CLARA RIVER MOUTH RIPARIAN FOREST) Along the south side of the Santa Clara River, a substantial, continuous strip of riparian vegetation extended from the river mouth to around the Highway 101 bridge about three miles upstream. This section of riparian forest covered about 1,200 acres. It was particularly notable to early travelers and settlers given the lack of other timber on the Oxnard Plain, and is included in many early maps of area as a prominent feature of the plain.

In 1769, Crespi noticed this grove from afar as his expedition traveled along the Santa Clara River near Saticoy: “Though no trees are to be seen nearby, a great deal of trees was visible afar off where we thought the shore must be close by” (Crespi and Brown 2001). The earliest map found that depicts the grove, drawn in the 1840s, shows a continuous willow grove (*sausal*) extending from the river mouth beyond the current location of the Highway 101 bridge (already labeled *camino*, or road, on the map) at a more or less continuous width (fig. 3.35). The map also shows willows extending along the south side of the road. While this map is clearly only a rough sketch of features on the Oxnard Plain, it does include the *sausal* as one of the key landmarks of the plain.

While they do not accurately depict the extent of the grove, other early maps confirm its presence south of the river, indicating its prominence

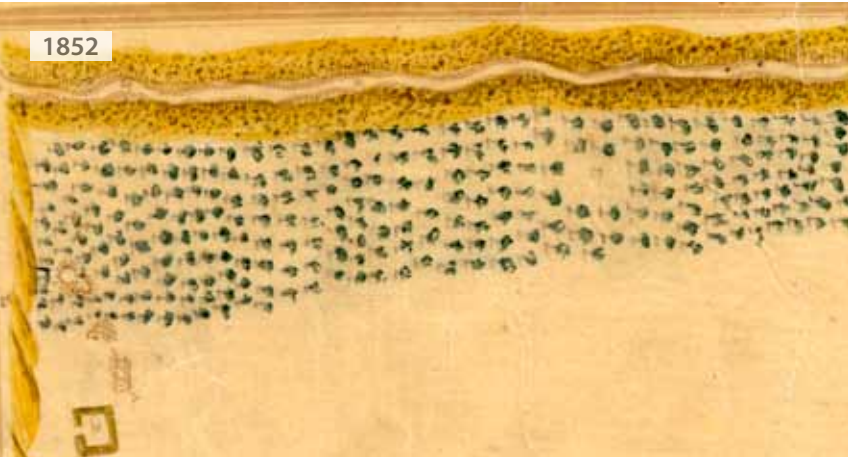
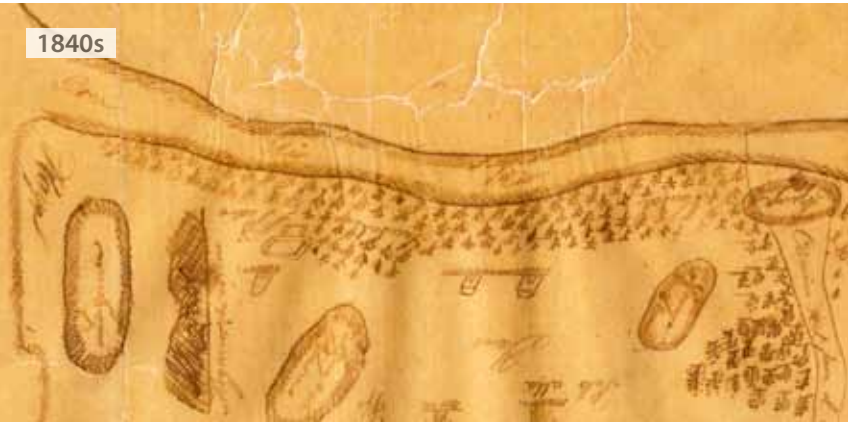


Fig. 3.35. Riparian forest (West Grove) on the lower Santa Clara River, 1840-1852. An early map (top, 1840s) shows extensive riparian willows (labeled *sausal*) along the south side of the river, extending beyond and along the camino (now Highway 101). About a decade later (1852), the grove is still a major landmark on the south side of the river (bottom). (U.S. District Court ca. 1840e, Ardisson 1852; courtesy of The Bancroft Library, UC Berkeley)

as a landmark on the Oxnard Plain (e.g., Reed ca. 1871). Another early map (Ardisson 1852) shows a continuous strip of trees of consistent width along the river (see fig. 3.35). While this map does not show the road crossing, the scale indicates that the trees are present along the river for about three miles, roughly the distance from the river mouth to about a mile downstream of the Highway 101 bridge. This estimation of the grove’s extent is corroborated by Cooper (1887), who described a grove in 1872-73 beginning three to four miles west of Saticoy (either just above or just below the bridge) and extending “along the south bank of the river for three miles.” Cooper called this grove West Grove (as opposed to the East Grove near Santa Paula), a name we have adopted here. The name also affirms the discontinuity of riparian forest along the river.

Later observers also made note of this riparian forest, providing more detail on species composition: a mix of willows, cottonwoods, sycamores, and live oaks. While the *diseño* labeled the grove a *sausal* (willow grove), Brewer ([1930]1974) noted “a grove of cottonwoods which came nearer to a forest than anything I have yet seen here” in March 1861. Another traveler described “a considerable body of willow, cotton-wood and some sycamore” (*Daily Alta California* 1868). Cooper (1887), describing the grove in 1872-73, noted “poplars, willows, and stunted live-oaks” (Cooper’s poplars were likely black cottonwood (*Populus balsamifera* ssp.

TRANSFORMATION OF THE BOTTOMLAND

...the bed of the Santa Clara River is not entirely waste land...a large portion of said river bed affords fine pasture land, and a considerable portion has been cultivated and farmed successfully during the last season in corn and other crops...

—RANDOLPH ET AL. 1870

Differences in native vegetation and disturbance regimes along Santa Clara River bottomlands were reflected in variations in the agricultural value of the bottomlands. Persistent wetland riparian areas boasted dense vegetation, a relatively low depth to groundwater, and fertile sediments deposited during occasional flooding. In contrast, bottomlands along other parts of the river were often sandy and used primarily for grazing or hardy annual crops. Even in these less fertile regions of the river, access to water for irrigation made bottomlands attractive places to farm and pasture livestock in an otherwise largely arid valley:

...were it not for the pasture which said river bed has afforded Mr. Moore could not have well kept his sheep alive on said Ranch the present season. I have known crops of corn and vegetables raised in said river bed this season... (Qualls 1871)

Fertile pockets of bottomland were widely recognized by early settlers, many of whom took advantage of what the river’s bottomlands had to offer. South of the Santa Clara River mouth in West Grove, landholders cleared portions of the bottomlands for cultivation:

...about 40 acres of the rich bottom is now being cleared off and will be farmed this coming season...the Santa Clara river with its fine timber and rich bottom lands form the northern boundary; in this timber wild blackberries are found in great profusion and of good quality... (Ventura Signal 1879, in Hampton 2002)

On the south side of the river above Highway 101 near West Grove, a newspaper columnist described a “low bottom to the left moist and good for crops of various kinds,” in contrast to the scrubby, drier land on the valley floor (*Daily Alta California* 1868). Around Piru, explorer Crespí noted “large bottomlands of very good soil that could be cultivated by irrigation” (Crespí and Brown 2001). General Land Office surveyor Craven (1874f) described their value for raising corn

and barley along the river between Fillmore and Piru, noting that “during the winter seasons the freshets cause the Santa Clara river to rise and overflow the old river bed and it has the effect of improving the land making it easier to cultivate and more productive.”

In less fertile regions, or regions that were more regularly flooded, it appears that most agriculture took place outside of our mapped outer banks, in areas that could still benefit from the irrigation water provided by the river but were better protected from floods (Petit 1925). Within the outer banks, farming could only be practiced for portions of the year:

In the rainy season the bed of the river is overflowed with water, consequently no one could settle on or live on the land in the river bed during the rainy season...in the summer season they can raise their crops on the lands in the bed of the Santa Clara River. (Stuart 1871)

Bottomland farms date at least to the middle of the 19th century. An early map from the 1840s shows an irrigated field on bottomland just east of Timber Canyon, on the north side of the river between Santa Paula and Sespe creeks (U.S. District Court ca. 1840d; see fig. 3.39). Early farmers planted seasonal crops, such as beans, sugar beets, alfalfa, and potatoes, which allowed them to retreat during the wet season, with orchards planted only on “better drained areas” (Nelson et al. 1920).

By the 1870s, large portions of forested bottomland were in the process of being cleared and planted to these crops (and later, even orchards in some places). One writer described “fields of deep alfalfa along the river bottom” in upper Ventura County (Van Dyke 1890), and another noted that “the orchards crowd down to the very bed of the river” (Eames 1889) in the Camulos region. These lands were often irrigated.

However, even these seasonal crops were sometimes destroyed by flooding; during the 1884 flood, one resident recalled “many small alfalfa fields and garden patches on the river bottom that could be irrigated from the river that were entirely wiped out” (Hardison, in Freeman 1968). As farmers began to establish more permanent cultivation, bottomland development remained vulnerable to these events: “The high water of two weeks ago did a good deal of damage in the river bottom, washing away fences etc.” (*Ventura Free Press* 1876).

The value of these lands was at the heart of one of the most infamous land squabbles in Ventura County history, between Thomas More and other settlers in the Sespe area. In claiming the two leagues of land allocated to him by the court, More wanted to claim land on either side of the Santa Clara River while excluding the river bed itself, in order to maximize land holdings outside the river while still retaining control of the river’s water and bottomlands. To justify doing so, More argued (as did Carrillo, the grant’s

previous owner) that the river bottom lands were worthless since they were sandy and frequently flooded and scoured by the river, and therefore should not be included in the grant (Carrillo 1829, in Outland 1991). The settlers, however, argued that these lands were extremely valuable as grazing and agricultural land, testifying that they were “fine pasture land” (Randolph et al. 1870), “equally valuable to any lands upon said Ranch of Sespe” (Herrett 1871) and were used in the dry season for cultivation (Stuart 1871). Ultimately, More’s claim to the river bed was denied by the U.S. Supreme Court, and the land was opened to settlers against More’s wishes. The conflict culminated in More’s murder in 1877.

Through the 20th century, levees constructed along the lower Santa Clara River enhanced farmers’ ability to cultivate in these areas (fig. 3.36). At the mouth of the Santa Clara River, levees bordering the active channel of the river have contributed to the elimination of West Grove, allowing cultivation to cover this fertile land.

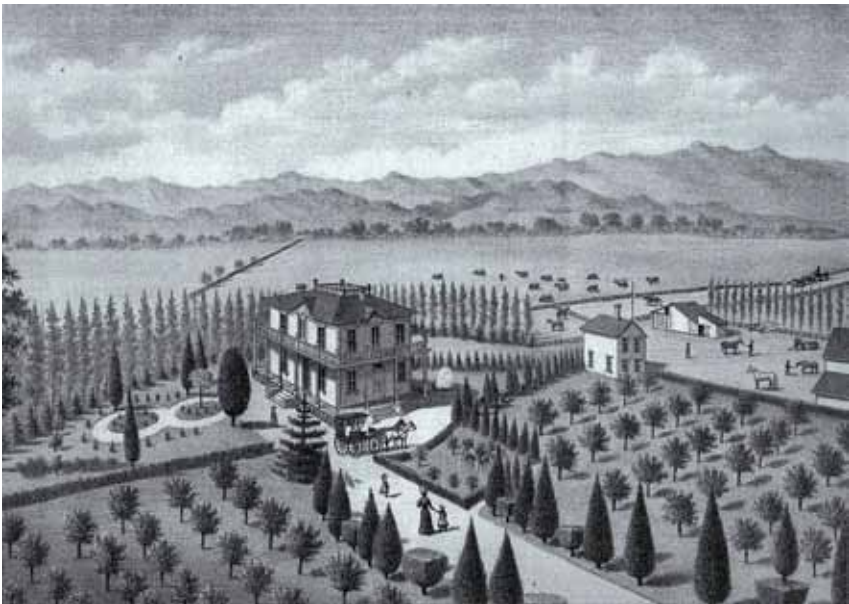
During the winter seasons the freshets cause the Santa Clara river to rise and overflow the old river bed and it has the effect of improving the land making it easier to cultivate and more productive.

—CRAVEN 1874f



Fig. 3.36. This bottomland surface west of the Sespe Creek confluence remained uncultivated in the late 19th century, as shown here in this 1894 map (left). By 1938, the surface had been converted to mostly walnut, orange, and lemon orchards. The area is still farmed today (right). (Stocker 1894, courtesy of the Museum of Ventura County; USDA 2009)

Fig. 3.37. John Scarlett’s ranch abutted the south bank of the Santa Clara River, just east of McGrath’s oceanfront property. Scarlett’s ranch included a large portion of the forested bottomland (West Grove) along the river, as can be seen in the background in this image. The *Ventura Signal* (1879, in Hampton 2002) printed that “the Santa Clara river with its fine timber and rich bottom lands form the northern boundary; in this timber wild blackberries are found in great profusion.” (Thompson and West [1883]1961)



trichocarpa; Stillwater Sciences 2007a, Orr et al. 2011). Henry Hancock (1854), surveying a GLO transect across the river and through the grove in 1854, noted discrete cottonwood groves and willow groves within the larger riparian zone (fig. 3.37).

In addition to riparian forest, West Grove contained a matrix of open areas, dense underbrush, and low ponds and sloughs. Cooper (1887) described the grove as “partly open and partly crowded with dense shrubbery.” The early U.S. Coast Survey T-sheet captures this characteristic in the westernmost part of the grove, showing open, grassy areas between denser thickets (Johnson 1855b, c). Another source describes the presence of dense undergrowth in the grove:

...the Santa Clara river with its fine timber and rich bottom lands form the northern boundary [of the property]; in this timber wild blackberries are found in great profusion and of good quality... (Ventura Signal 1879, in Hampton 2002)

This diverse, heterogeneous riparian area would have provided habitat for a number of wildlife species (RHJV 2004, Stillwater Sciences 2007c). Cooper (1887) called West Grove “the most productive bird-hunting locality I found in the valley,” and Evermann (1886) described numerous birds found in the willow and cottonwood thickets at the mouth of the river, including Rufous hummingbird (*Selasphorus rufus*) and Wilson’s warbler (*Wilsonia pusilla*). Wilson’s warbler, which Evermann describes as “abundant in the willows near the mouths of the Santa Clara and San Buenaventura Rivers,” is also a common species found in many western willow thickets today (Otahal 1998, Cornell Lab of Ornithology 2009).

Mapping of West Grove (see page 48) was based on a few detailed sources which depicted the location and width of parts of the grove with spatial accuracy. A USCS T-sheet (Johnson 1855c; fig. 3.38) shows dense thickets approximately 3,700 feet wide at the mouth of the river, and GLO surveyors

Mr. Adolf Camarillo says that the lowlands south of Ventura used to contain many sycamores. The whole country there (the lowlands south of Ventura) used to be called in Sp[anish] Monte de San Pedro. It has since that time been grubbed out. There used to be tule sloughs and willowy places.

—ADOLFO CAMARILLO, INTERVIEWED
BY JOHN F. HARRINGTON CA. 1913
(HARRINGTON 1986B)

ARUNDO ON THE SANTA CLARA RIVER

Today, the non-native giant reed (*Arundo donax*, commonly referred to as Arundo) has colonized large portions of the Santa Clara River and Ventura River floodplains and Calleguas Creek. Arundo often forms dense, massive stands along the river, displacing native riparian vegetation and limiting bird species and other wildlife abundance in invaded areas (Stillwater Sciences 2007c).

In addition to direct habitat displacement, Arundo negatively impacts streams in a number of ways. It has the potential to cause large-scale changes in stream morphology and hydrology by lowering groundwater levels, slowing the downstream transfer of sediment, and impeding flows (Dudley 2000, Coffman et al. 2004, Coffman 2007). In addition, it has increased the susceptibility of riparian corridors to wildfires, potentially creating a positive feedback cycle wherein more frequent fires promote more intensive Arundo growth (Coffman et al. 2010).

The timing of Arundo’s arrival to Ventura County is unknown. It was described as “plentiful” along the Los Angeles River by 1820, where it was used to roof houses (Robbins et al. 1951). Given its proximity to

and early use by the San Buenaventura Mission, a similar introduction history is possible along the Santa Clara River. This is potentially supported by Chumash ethnographic records, which describe Arundo as “Carrizo de Castilla” (that is, large grass from the Spaniards) or “European bamboo” (Timbrook 2007; Timbrook also provides an excellent treatment of the Chumash and Spanish uses for Arundo).

However, though it is possible that Arundo was present very early in both the Ventura and Santa Clara river watersheds, no definitive evidence was found confirming its presence or absence in the 18th and 19th centuries. Although Arundo may have been present along the Santa Clara River or Ventura River by the early 1800s (if not before), its widespread expansion in riparian ecosystems appears to be relatively recent, corresponding to widespread colonization following the floods of 1969 (Bell 1997, Coffman 2007). This is consistent with the absence of Arundo in historical descriptions of riparian character, which implies either the absence or limited distribution of Arundo along the river.

(Terrell 1861b, Thompson 1867) crossed 2,600 feet of “thick timber” at the highway bridge. These two sources provide riparian zone width on either side of the forest. County survey maps (e.g., Barry 1893) and the historical aerial mosaic were used to complete the mapping process. There is some indication that the upstream portion of the forest was wider than mapped; an earlier GLO survey (Hancock 1854) took a bearing on a tree on the “north end of the timber of Rio Santa Clara” that implies that the timber was much wider than we have mapped. Since he gives no precise location, we have not mapped this wider zone at the top of the forested area. However, this would seem to be supported by the early *diseño* which also shows vegetation extending east along the road (see fig. 3.35a).

As the above evidence shows, West Grove persisted in extent and location through the major flood events of the second half of the 19th century (e.g., 1861-62, 1867-68, and 1874-75). However, the forest is mostly absent in 20th century images of the lower river due to agricultural reclamation. The 1927 aerial imagery shows a dense (albeit narrower than in the GLO survey) stand of trees north of the Highway 101 bridge, but only scattered

...the first [left] bank...yet presents the original forest of willow and other trees as shown upon the diseño... -

—REED 1871

Fig. 3.38. Santa Clara River mouth, 1855. This early USCS survey shows the westernmost end of West Grove as it stood in 1855. Dense stands of trees surround an open area (including an “old corral”). Auxiliary sources describe the grove as a mix of willows, cottonwoods, and sycamores. (Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration)



patches of forest remain downstream, and the area appears to have been heavily reworked. Oblique photographs from the 1930s through 1950s show similar patterns: patches of vegetation are narrower, more scattered along the south side of the river, or are completely absent (Fairchild Aerial Surveys 1934, Spence Air Photos 1952). Interestingly, in some of these later photographs riparian trees appear to have colonized the northern side of the river (e.g., Fairchild Aerial Surveys 1934; see fig. 3.1). This shift may have been in response to infrastructure development which redirected flows southward, creating a more protected surface on the north side of the river.

While the forest had mostly disappeared by 1927, the outline of the low-disturbance bottomland is still visible on an aerial image. By 2005, nearly all traces of the forested area had disappeared into farmland, housing, a landfill, and golf course, and the area had been largely cut off from the river by a levee built by the Army Corps of Engineers in 1961 (Stillwater Sciences 2007b; see fig. 3.41).

EAST GROVE (SANTA PAULA WETLANDS) Another prominent area of mixed riparian willow-cottonwood forest occurred just east of the Santa Clara River’s confluence with Santa Paula Creek. At least two large sections of forest were present, one on each side of the river, with a probable extent of 620 acres. These forests included willow and cottonwood stands and freshwater marshes within the outer banks of the river.

These forests appear to be among the most substantial and persistent sections of riparian forest/wetland along the lower river. They are depicted by a number of early cartographers as a large area with both dense trees and surface water; one map (Unknown ca. 1860) labels the area “willow swamp,”

WILDLIFE IN THE HISTORICAL LANDSCAPE

This report focuses on establishing the ecological and hydrological characteristics of the historical landscape. Interpreting this environmental setting with respect to the needs of native species of concern and other wildlife is an intensive, challenging process, and is not addressed here. A key next step is to work with experts to translate relevant findings into ecological functions and wildlife presence probabilities (e.g., Goals Project 1999, Sanderson 2009). This task involves both detailed interpretation of historical faunal records and interpretation of historical habitats and hydrology to project the probable former wildlife species support functions of the region.

It is clear that the Santa Clara River habitat mosaic supported a rich faunal community of native fish and wildlife species, which have been appreciated—and often exploited—by many generations of residents and visitors. While not covered here, based on our historical reconstruction we can speculate about the kinds of species support functions provided by the matrix of riverine habitats. For example, birds such as endangered least Bell’s vireo (*Vireo bellii pusillus*), yellow-billed cuckoo (*Coccyzus americanus*), and southwestern willow flycatcher (*Empidonax traillii extimus*) would have likely utilized areas such as West Grove (river mouth) and East Grove (Santa Paula) as breeding habitat; some of these species are still supported on the river today (Stillwater Sciences 2007c, 2008). The presence of perennial ponds and sloughs in areas of rising groundwater suggests these reaches may have supported California red-legged frog (*Rana draytonii*) and western pond turtle (*Clemys marmorata*). Tidewater goby (*Ecuycclogobius newberryi*), a brackish water species indigenous to California estuaries, would have utilized the lagoon at the Santa Clara River estuary (USFWS 2005).

In addition, the Santa Clara River basin has been cited as one of the most important potential areas for southern steelhead habitat restoration today (Boughton et al. 2006). Recent research (e.g., Stoecker and Kelley 2005, Boughton et al. 2006, Pearse and Garza 2008,

NOAA/NMFS 2009) supports the conclusion that the river was a historically important corridor for the federally endangered Southern California steelhead (*Oncorhynchus mykiss*). The floodplain and wetland habitats along the river and estuary would have likely been important rearing habitats for outmigrant juveniles, as has been documented on other systems (e.g., Sommer et al. 2001, Henning et al. 2006). For example, one early description stated that a type of trout, presumably adult steelhead, was found “in the scienegas [sic] and along the Santa Clara River where the watercress abounds” (Ventura Free Press 1878d), referring to the rising groundwater reaches. The use of refugia in perennial reaches, even on streams with significant summer-dry portions, is consistent with studies of intermittent stream use by anadromous steelhead for spawning and rearing (Ventura County Fish and Game Commission 1973, McEwan 2001, Boughton and Garza 2008; see also Ebersole et al. 2006, Wigington et al. 2006 for Coho salmon use of intermittent streams).

The habitat complexes associated with the seasonally closed river mouth would have provided important rearing habitat for salmonids and other fishes, as has been shown for other California estuaries (Bond 2006, Hayes et al. 2008). Though the use of river mouth estuaries by Southern California steelhead is poorly understood, even today the Santa Clara River estuary has been found to support rearing steelhead (Kelley 2008).

An understanding of the historical support functions provided by the river and its tributaries is a key component of effective restoration. There is a need for a richer and scientifically-based evaluation of former habitat support functions, and current potential for rare/listed wildlife species. Further research, along with additional interpretation of the findings presented here in the context of contemporary ecological research, may more thoroughly explore the ecological functions of these former landscape features.

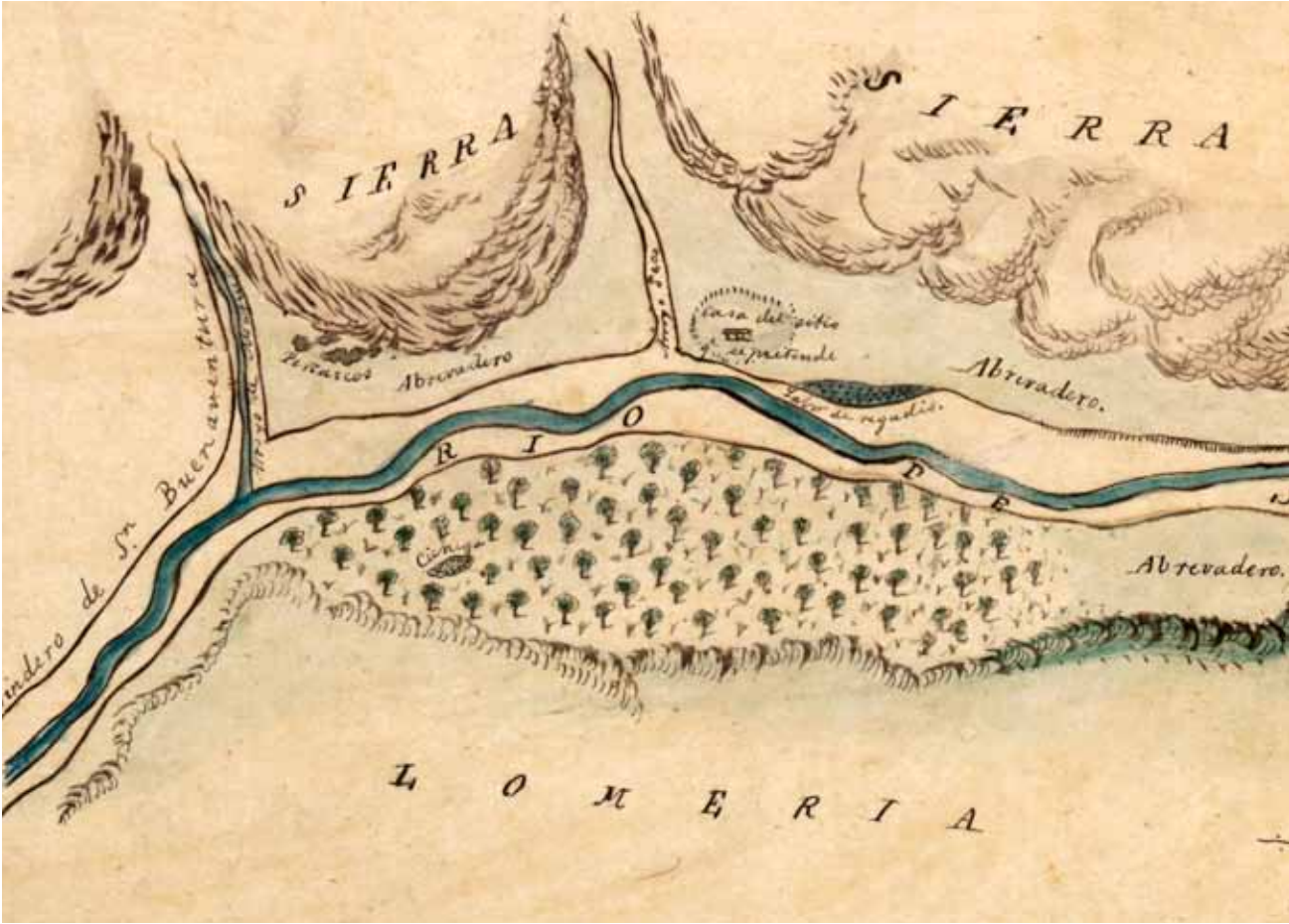


Fig. 3.39. This early map shows a number of in-channel features along the Santa Clara River, including an extensive forest south of the channel with a smaller *ciénega* (marsh) amongst the trees (East Grove, east of Santa Paula Creek/Arroyo de Mupu), and another eponymous *ciénega* (the Cienega) east of Sespe Creek/Río de Sespe. A bottomland field is shown as *labor de regadío* (irrigated field). (U.S. District Court ca. 1840d, courtesy of The Bancroft Library, UC Berkeley)

and a *diseño* (U.S. District Court ca. 1840d) shows a smaller *ciénega* within an extensive forested area south of the river (fig. 3.39). However, neither map gives detailed information on the extent or specific location of the forest-wetland complex.

Fortunately, a number of GLO survey lines also cross this area, and these surveys both support the existence of these large forest complexes and help define their historical extent. Five surveyors crossed this area when conducting surveys in 1853, 1868, 1869, 1874, and 1892. The terms they use to describe the riparian community depict a dense forest with often saturated soils and wetlands: “cottonwood and willow swamp” (Norris 1853), “willow brush” (Hoffman 1868c, Craven 1874e), “bottom land covered with willows” (Craven 1874e), or simply “swamp” (Norris 1853, Craven 1874e). Hoffman (1868a) notes “sandy and muddy” areas in the riparian area, and at one point is “in deep mud.”

While the size and extent has shifted over time, riparian forest has been consistently present in this area. A surveyor in the late 1870s mapped a “dense growth of young willows” (Norway 1878c), and one survey map from the 1890s shows patches of willows between the sandy wash of the river and the cultivated bottomlands above (Stocker 1894). Other maps from this era depict wetland areas and small ponds in the river bed (Unknown ca. 1890a, Power 1892, Stocker 1894). A few ornithological



records from near Santa Paula also support the presence of willows and marsh: a Traill’s flycatcher (*Empidonax traillii*) was found in a “nest situated in a willow tree among the willows bordering the Santa Clara river” (Burt 1904), and a common yellowthroat (*Geothlypis trichas*) was found with a “nest of marsh grass, leaves and straws” (Badger 1919). (The recorded Traill’s flycatcher was most likely a Southwestern willow flycatcher, currently a federally endangered subspecies.)

The 1938 aerial imagery shows large sections of forest, and a 1948 ornithology journal noted “a large grove of mixed willow and cottonwood trees” about three miles east of Santa Paula (Peyton 1948). Extensive riparian forest was still present in the vicinity in 2005, though the boundaries had shifted (see page 105).

FILLMORE CIENEGA An extensive freshwater wetland complex was located southeast of Fillmore, south of Highway 126 and north of the Santa Clara River and at the present site of the Fillmore Fish Hatchery. This wetland complex, known locally as the “Cienega” (Spanish for marsh), included approximately 340 acres of freshwater marsh, tules, and willow groves.

Maps and narrative accounts of the Cienega area describe a variety of habitats within the wetland complex, including mixed groves of willows,

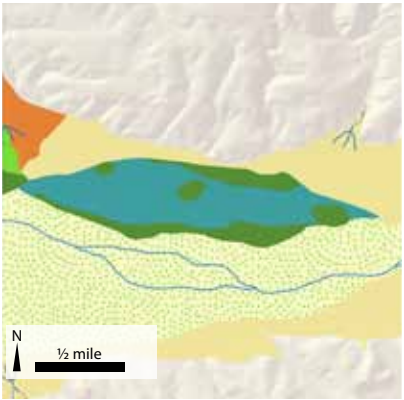


Fig. 3.40. Detail of Cienega, early 1800s. This in-channel wetland complex, located just east of the town of Fillmore, was a matrix of freshwater wetland and riparian forest.

alders, and cottonwoods (fig. 3.40). “Willow timber” was observed along the northern bank of the Santa Clara River, and “cienega and tules” further toward the middle of the marsh (Barry 1898). Jarrett (1983) recalls “2 feet in diameter” willows at Cienega. Hoffman (1868d) noted a series of box elders (*Acer negundo* var. *californicum*) on the slightly higher northern and western boundary of the marsh, and describes the Cienega as a “cienega and cottonwood grove” (Hoffman 1868d). The willow groves of the Cienega area likely extended west of the Cienega itself into “willow brush” between the Pole Creek fan and the Cienega (Craven 1874f,h).

Like Saticoy Springs and the Santa Paula marshes, the Cienega was a major landmark and water supply source in the otherwise relatively dry Santa Clara River Valley. A settlement at the Cienega (including post office and school, both established in the mid-1870s) predates the town of Fillmore, which was established in 1887 when the railroad was built through the area (Fillmore Historical Society 1989, Durham 2001). The Cienega corresponded with an area of rising water and perennial flow in the Santa Clara River, and was the site of a number of surface water diversions for agricultural irrigation. The South Side Improvement Company, organized in 1887, and the Cienega Water Company, established in 1910, both diverted surface water from the Santa Clara River at the Cienega and provided water to the Bardsdale and Fillmore areas on both sides of the river (Freeman 1968).

The Cienega and willow groves around Fillmore were disappearing as early as the 1880s. The *Ventura Free Press* attributed the drying of the Cienega to artesian development on Oxnard Plain: “the Scienega [sic], which was formerly a marsh, that would shake a rod from a man walking over it, is now dry enough to plow” (*Ventura Free Press* 1883b). An 1887 *Free Press* article called for protests regarding the cutting of trees in Sespe Grove (*Ventura Free Press* 1887a). By 1925, parts of the former Cienega were planted to alfalfa, a relative rarity by that time in a region dominated by oranges and lemons (Petit 1925); the 1938 aerial imagery shows the area partially planted to orchards, while a portion of the area is still densely covered with vegetation (USDA 1938). The Fillmore Fish Hatchery was established in 1940 within the original boundaries of the Cienega, an area then recognized as having high groundwater and surface flow in the Santa Clara River (Leitritz 1970). By 2005, the majority of the area was farmed, though a few patches of cottonwood-willow forest remain adjacent to the riverbed within the boundaries of the historical Cienega (Stillwater Sciences and URS Corporation 2007).

DEL VALLE RIPARIAN FOREST Above Camulos, a fourth willow-cottonwood forest flanked the Santa Clara River. Though this was a less populated area, and thus is less well documented in the historical record, it is clear that substantial riparian forest was found on this area’s bottomlands. The Del Valle forest marked a reach of perennial flow in a very narrow portion of the valley.

The river is generally on the south side of the valley + is very tortuous in its course + what might be termed the bottom land is apparently very rich from the rankness of its vegetation.

—KING 1883, OCTOBER 16, 1883,
SPEAKING OF THE DEL VALLE REACH

Early travelers in the area noted lush, dense vegetation along the river. Crespi, traveling in 1769, described the bottomlands as “a good extent of soil alongside the stream; with a great many cottonwoods, a great deal of willows, and many live oaks still continuing” (Crespi and Brown 2001). He also noted wild grapes (*Vitis californica*) along the stream. This description is corroborated by another traveler more than 120 years later, who described the river in this reach with “banks clad in long grass, wild-rose, and sweetbrier, with tangles of wild-grape overshadowed by willow, cottonwood, and sycamore” (Van Dyke 1890). At the lowest end of the reach, near Camulos, one account describes “clumps of willows and groves of wide-spreading sycamores” (Parkinson 1894).

This riparian forest is still visible in early 20th century oblique photography, and is particularly notable in contrast to the intermittent, sparsely vegetated Piru reach immediately downstream (see fig. 3.26). However, the area was highly affected by the St. Francis dam break in 1928 (Isensee 1928a; see fig. 3.15). It is likely that the forest’s upstream extent was much further east than we were able to map it, possibly extending well past the Los Angeles County line as it does today. Further research at Los Angeles County archives may help confirm the upstream extent of this riparian corridor.

Riparian Vegetation on the Santa Clara River Today

There has been a substantial loss of historical floodplain habitat due to the urban development and agricultural intensification of the 19th and 20th centuries. Riparian trees have been cut for fuel, cleared to make space for fertile bottomland agriculture, or killed by the lowering of the water table due to groundwater extraction. This trend is consistent with other central and southern California rivers, where similar effects have been documented (see Boughton et al. 2006).

The loss of vegetation is evident in a comparison of past and present willow-cottonwood forest below Highway 101 (near the river mouth), in the area formerly known as West Grove. This reach has been highly altered by floodplain development and constricted by levee construction, resulting in the near-complete loss of the most extensive historical grove of willow-cottonwood forest (approximately 1,200 acres; fig. 3.41). Near Fillmore, most of the 340 acre Cienega has also been converted to agriculture, though it clearly still experiences high groundwater levels (fig. 3.42). The riparian corridor is further threatened by the introduction of non-native plants, with the greatest threat currently posed by the extensive invasion of *Arundo* throughout the lower river.

Precise loss of riparian forest on the Santa Clara River over the past few centuries is impossible to calculate. The historical riparian mapping generated in this study is limited and coarse, and includes only prominent willow-cottonwood forest and wetland areas in four discrete nodes along the river (rather than detailed mapping of the entire corridor). In contrast,



West Grove, historical extent

Fig. 3.41. Lower Santa Clara river, 1927 (top) and 2005 (bottom). By the 20th century, the majority of the original 1,200 acres of forest along the southern side of the Santa Clara River had disappeared. (Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2005)

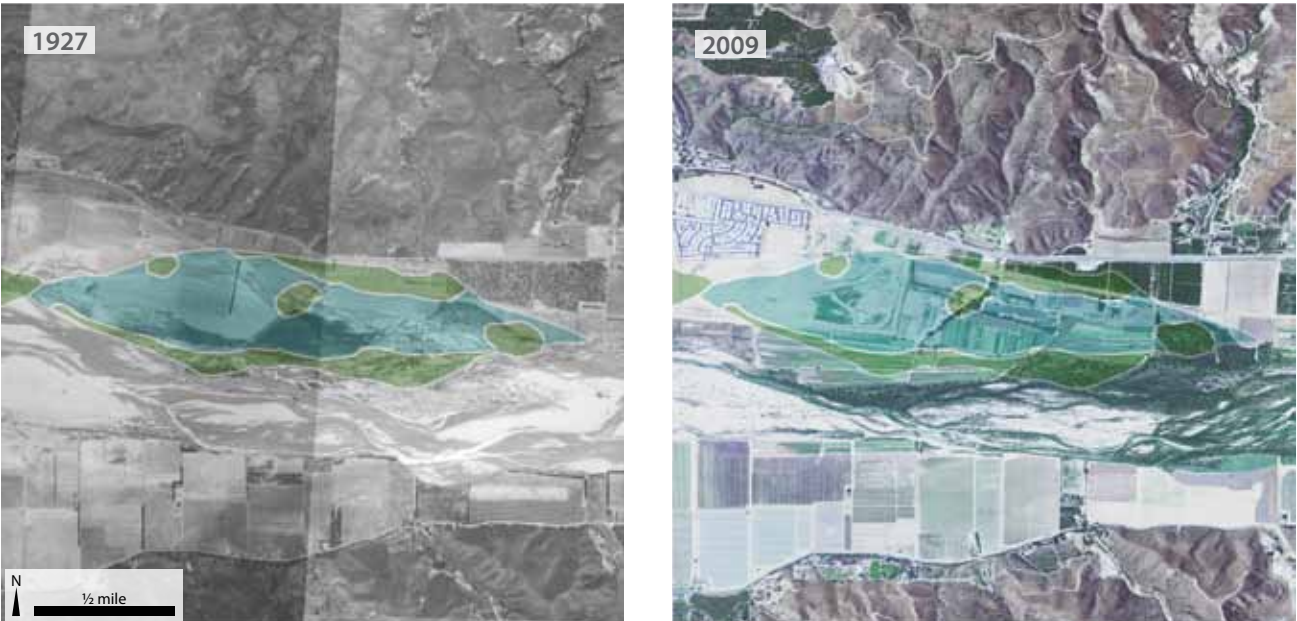


Fig. 3.42. Cienega, 1927 (left) and 2009 (right). As early as 1927, most of the original extent of the Cienega had been cleared. The former Cienega site is now the location of the Fillmore Fish Hatchery and crops tolerant of high groundwater conditions (e.g., watercress). Very little of the original Cienega extent remains, though substantial forest is found in the river corridor to the south. (Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2009)

the modern vegetation survey (Stillwater Sciences and URS Corporation 2007) was conducted at a finer spatial resolution and includes the entire river. These issues are compounded by the temporal variability of vegetation extent and distribution on the river over time, particularly associated with floods. A rough comparison is possible, however. In total, approximately 2,540 acres of willow-cottonwood forested wetland and valley freshwater marsh were present in the four persistent riparian areas in the early 19th century, compared to about 1,380 acres of mixed riparian forest and cottonwood-willow forest surveyed for the contemporary (2005) mapping (Stillwater Sciences and URS Corporation 2007; fig. 3.43). This represents a loss of 46%. The true percentage loss of riparian forest is likely far higher, since the historical figure does not account for riparian forest outside of the mapped persistent historical riparian areas.

Despite these changes, in comparison to other California lowland alluvial rivers the Santa Clara River still maintains a relatively high proportion of floodplain with native riparian vegetation and riverwash habitats (Orr et al. 2011). Valuable nodes of high quality native vegetation are still present in many reaches, reflecting the distribution of former forests. In particular, stands of willow-cottonwood forest still track gaining reaches and reaches

with shallow groundwater, and occupy historical locations. Hedrick Ranch Nature Area, a reserve that supports willow-cottonwood forested wetland and occupies a portion of the former East Grove east of the Santa Paula Creek confluence. Current nodes of willow-cottonwood forest also exist southeast of Fillmore near the Fillmore Fish Hatchery (corresponding to the historical Cienega area) and between Camulos and Del Valle along the upper river (historical Del Valle area).

In addition, plant communities associated with rare Southern California alluvial scrub are still found in intermittent reaches of the river today (e.g., the Piru reach). Sagebrush (*Artemisia tridentata*), California buckwheat (*Eriogonum fasciculatum*), and chaparral yucca (*Yucca whipplei*) vegetation alliances have been observed in reaches with high depth to groundwater, where historical observations recorded cactus and sagebrush. Alluvial scrub vegetation, once common in Southern California, has been greatly reduced from its historical extent (Smith 1980, Hanes et al. 1989, Burk et al. 2007, Rundel 2007, Sawyer et al. 2009). In concert with contemporary fieldwork and analysis, it may be possible for local and regional groups to incorporate these rare vegetation types into conservation and restoration efforts for the Santa Clara River corridor.

The Santa Clara River has experienced tremendous loss in riparian floodplain habitat (particularly persistent riparian forest) in many reaches over the past few centuries. Nevertheless, comparison of historical and contemporary ecology reveals that the largest present-day patches of riparian forest today occur in areas that historically supported much larger stands of willow-cottonwood forested wetland and mixed riparian forest. Though today’s nodes represent only a fraction of former riparian extent, they suggest substantial opportunity for riparian conservation and restoration in these areas. Restoration efforts at one of these nodes (Hedrick Ranch Nature Area) have been highly successful, with willow-cottonwood forest regenerating rapidly (Coffman, pers. comm.)

This research highlights that the underlying hydrologic and geomorphic processes driving the distribution of riparian forest nodes are still intact, at least in some form, today. Maintaining and enhancing the current hydrologic regime of the Santa Clara River so it remains reflective of the natural, unmodified regime may be critical for maintaining desired river and riparian-floodplain habitat, ecosystem functioning, and resilience.

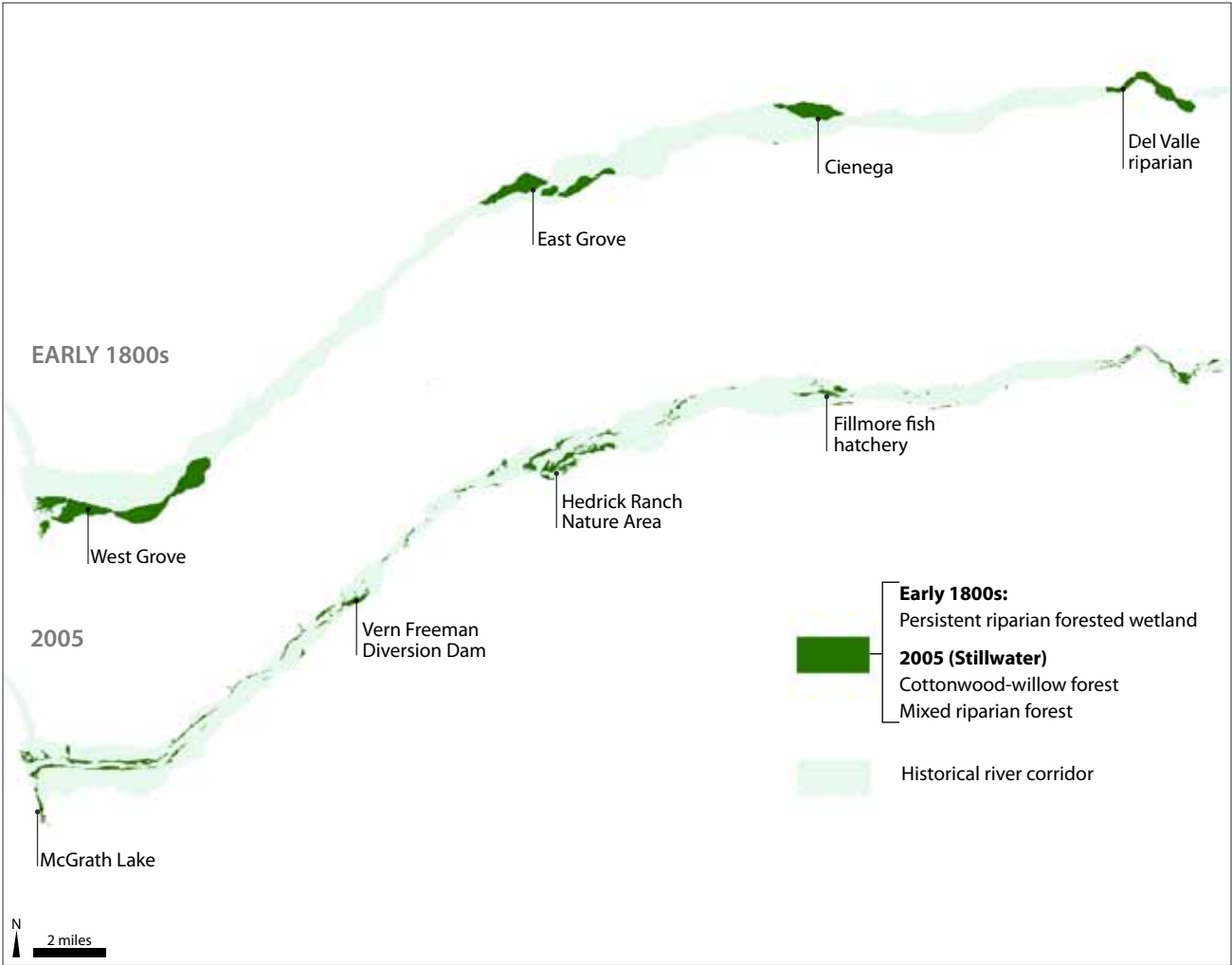


Fig. 3.43. Distribution of riparian forest on the Santa Clara River, early 1800s and 2005. The current (2005) distribution of mixed riparian and cottonwood-willow forest on the Santa Clara River closely mirrors the former distribution patterns of similar habitats in “nodes” along the river. Though the extent of these habitats has been sharply reduced, the persistence of these nodes over the past 200 years suggests relatively intact groundwater patterns and the potential for additional recovery.

Riverine transformation and synthesis

Two centuries ago, the Santa Clara River exhibited remarkable ecological, hydrologic, and geomorphic heterogeneity over the lower fifty miles of its course. In this chapter we documented this diversity, identifying patterns and characteristics of the historical river. This section synthesizes the foregoing descriptions of physical and ecological properties of the river in three sample reaches to provide a more comprehensive, integrative understanding of properties of the river both longitudinally and temporally. We also provide a summary of our Santa Clara River findings and the implications of our research for management strategies in the watershed today.

The Santa Clara River changes dramatically longitudinally, as well as throughout time. We chose three river reaches to illustrate both of these concepts in section: the river mouth, Santa Paula reach, and Piru reach (fig. 3.44). The cross-sections and accompanying plan form representations illustrate the historical hydrology, morphology, and ecology of the river in three very different locations in the mid-to-late 19th century (1853-1892). We also produced cross-sections presenting conditions in these reaches



Fig. 3.44. Locations of illustrated cross sections on Santa Clara River. The easternmost reach is just downstream of the Piru confluence, and is characterized by intermittent flow and sparse, scrubby vegetation. The middle reach is just upstream of the town of Santa Paula, an area of rising groundwater historically characterized by multiple channels and marshes bounded by willow-cottonwood forests. The westernmost cross-section depicts the mouth of the river. This area has changed from a broad deltaic formation with seasonal lagoons surrounded by grasses and willow-cottonwood forest to a narrow single-thread channel with levees protecting a golf course on the north bank and agricultural operations on the south.

during the mid-20th century (1927-1938) and early 21st century (2005) to depict the impacts of land use changes over this time. These dates reflect data availability for each reach, in addition to a desire to juxtapose years with comparable flood dynamics (both 1938 and 2005 sets of aerial images show the active channel after large flood events on the Santa Clara River). Taken together, these reaches represent the variability in vegetation and flow characteristics along the river.

We used a variety of methods and sources to produce 19th century cross-sections where no historical elevational data were available. We extracted the physical form for the three cross-sections from the 2005 LiDAR data from Ventura County, using these modern data for elevations and valley width (and making adjustments, such as removing anachronistic levees, as needed for the historical renderings). We used the 2005 NAIP imagery to locate land use changes, vegetation and channel features on the modern cross sections, augmenting this interpretation with modern riparian mapping by Stillwater Sciences/URS. For the mid-20th century snapshot, we used the 1927 and 1938 aerial photos to map land use patterns and channel changes onto the cross section. Finally, in order to graphically illustrate the 19th century cross-sections, we used USCS T-sheets (for the river mouth), GLO notes from several land surveyors, and the historical habitat mapping.

Though the channel forms, vegetation and land use patterns have changed drastically since the mid- to late-19th century, historical long profile data (Stillwater Sciences 2007b) indicated that there had not been continuous or reach-wide incision or aggradation in these three locations since the mid-20th century. Stillwater Sciences’ research indicates net changes in bed elevation for the two upstream cross sections between 1949 and 2005 as ranging from -2 feet to +5 feet. The cross section at the mouth experienced a general trend in downcutting of 4 feet during the time period examined; however, the scale of our cross-section was too large to effectively illustrate this. As such, we decided not to show bed elevation change as an important feature in the cross sections, since for most of the reaches depicted there was no conclusive evidence for systemic degradational or aggradational patterns.

These cross sections are only a snapshot of patterns at narrow locations and points in time within the watershed, though we believe they offer representative glimpses of temporal and spatial change in three different reaches of the Santa Clara River. Bear in mind that they are purely conceptual in nature, and are not intended to represent exact landscape patterns (e.g., tree density or marsh extent).

PIRU REACH

This reach of the Santa Clara River was intermittent, consistently drying out during the summer. Throughout the past 150 years, it has been characterized by a broad, sandy active channel and sparse scrub vegetation. Though its overall character has remained relatively stable over time, changes to the river corridor have occurred.

Surveyor H.S. Craven (1874f) walked north along this transect on March 12, 1874, documenting conditions along the river and valley 1.5 miles downstream of the Piru confluence. Craven noted “rocky” and sandy portions of the river bed, describing the active channel as a dry “sandy plain.” He described no vegetation in the channel, but noted cactus and sagebrush growing on the northern (right) bank between the river and the agricultural fields of the valley. He also noted ploughed fields and a house not far from the north bank of the river.

Though the river corridor maintained most of its width between 1874 and 1938, aerial photography reveals several distinct changes. Most notably, the scrub recorded in Craven’s 19th century survey notes had been cleared and replaced by orchard plantings, though limited xeric vegetation remained and washy arcuate patterns in the aerial image indicate that the plot was either recently ploughed or recently flooded.

Similar hydrology and vegetation persist today, though invasive giant reed (*Arundo donax* or *Arundo*) is now present and the river corridor has narrowed due to agricultural development on the floodplain. Between 1938 and 2005, the most drastic change was the addition of orchards on the south bank between Guiberson Road and the active channel, resulting in the constriction of river corridor width by 43% from 1874. The riverbed remains sandy and actively scoured, with some alluvial scrub and *Arundo* in 2005. Orchards and nurseries continue to occupy the right side of the river.

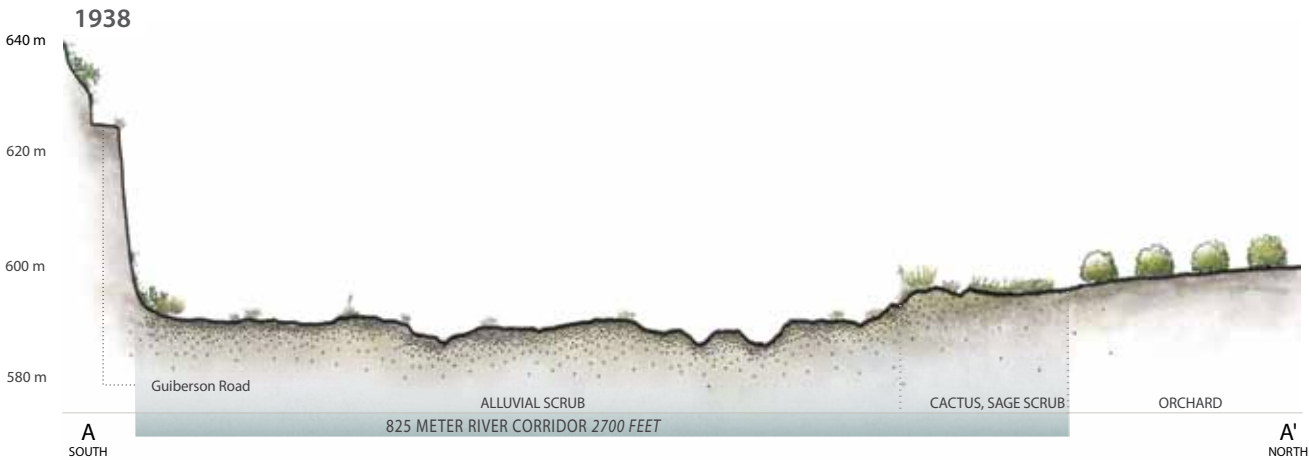
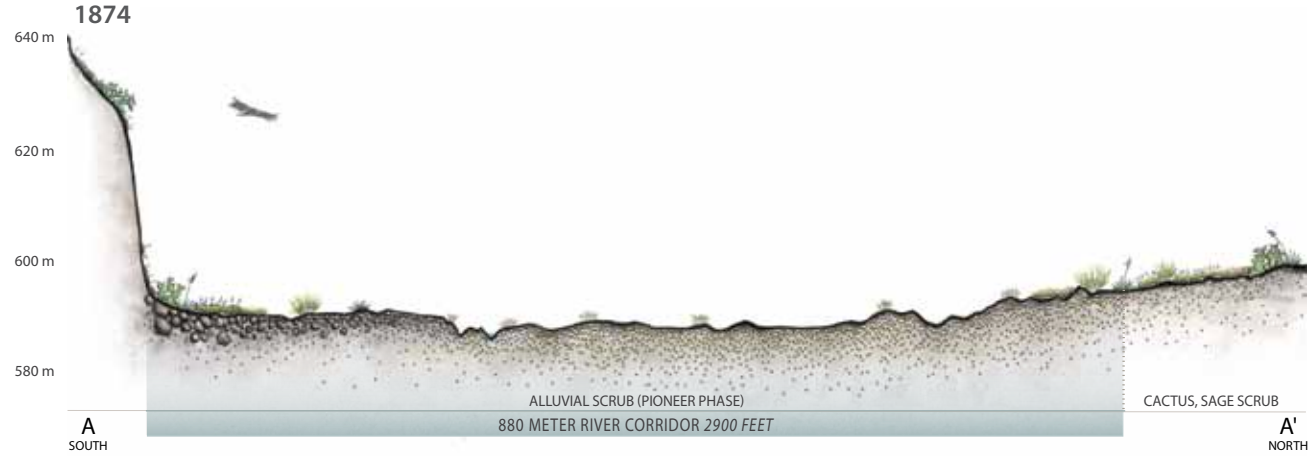
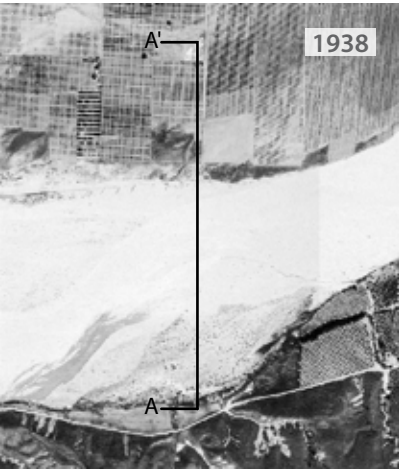
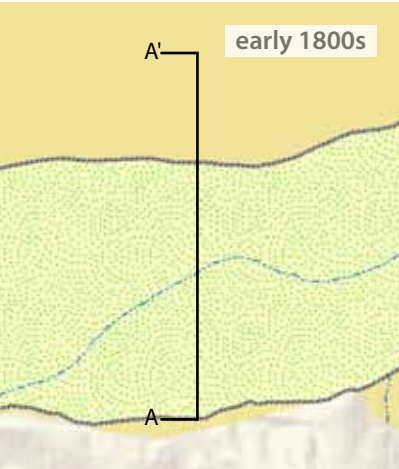


Fig. 3.45. Historical cross-sections at Piru, 1874-2005. This series shows the Santa Clara River west of Piru, between Piru Creek and Hopper Canyon. This intermittent reach was characterized by a broad active channel dominated by sand and scrub vegetation. Similar hydrology and vegetation persist today, though *Arundo* is now present and the river corridor has narrowed due to agricultural development on the floodplain. Cross-sections are drawn with 5x vertical exaggeration. (Craven 1874f; USDA 1938, courtesy of Ventura County; USDA 2005; Stillwater Sciences and URS Corporation 2007. Cross-sections produced by Jen Natali)

SANTA PAULA REACH

Just east of the Santa Paula Creek-Santa Clara River confluence, rising groundwater created an extensive zone of willow-cottonwood forest and freshwater wetlands situated on the river’s bottomlands. Though the riparian forest in this area has been whittled away to make room for agricultural fields over the past century, substantial willow-cottonwood forest is still present in this reach, and the reach’s former hydrology (gaining reach, perennial surface flow) is still intact.

Several surveyors took evocative notes along the same transect between 1853 and 1892, and their efforts are compiled in this illustrative cross-section (Norris 1853, Hoffman 1868b, Thompson 1869, Barry 1892a). Their notes record bottomland covered with willow scrub, willow-cottonwood forest, and freshwater marsh below the northern bluff bank, and an active channel with multiple shifting mainstem channels and bars. Though the surveys span 40 years, they are consistent in their descriptions of entering and exiting a “cottonwood and willow swamp” (Norris 1853), sandy and muddy substrates (including an area of “deep mud”; Hoffman 1868b), and mature timber and scrub on the north bank. This is part of East Grove (see page 100).

By the time the 1927 aerial photos were taken, some of the cottonwood and willow forest had been cleared and drained, and replaced with bottomland farms and orchards. Substantial dense riparian forest remained, though the river corridor width shrunk by just over 30%.

By 2005, the formerly 3,900 foot wide river corridor had been constrained to about 1,600 feet across, an overall loss of 58%. Orchards and other agricultural developments have replaced much of the former forest.

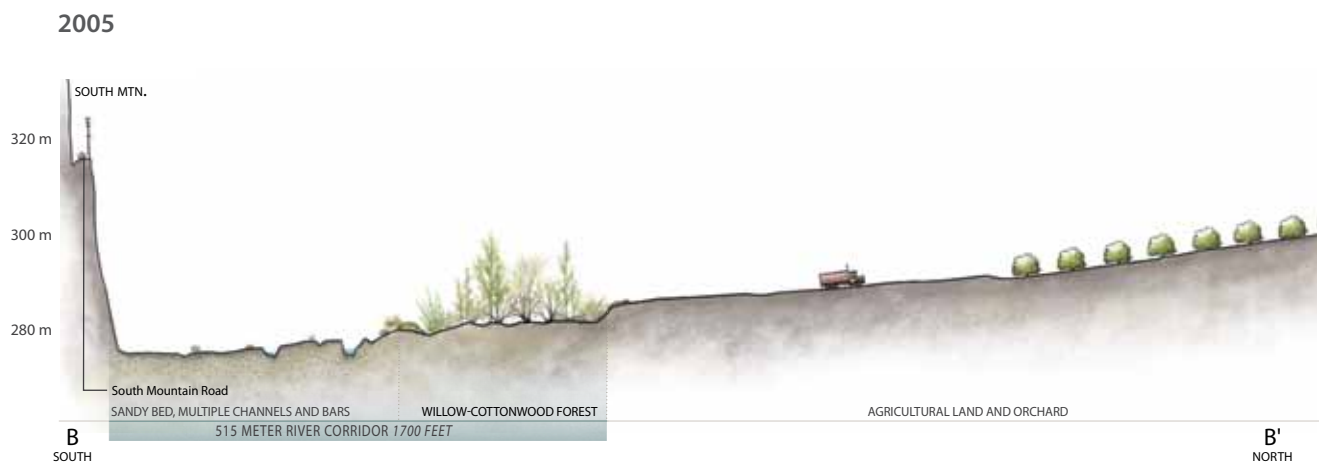
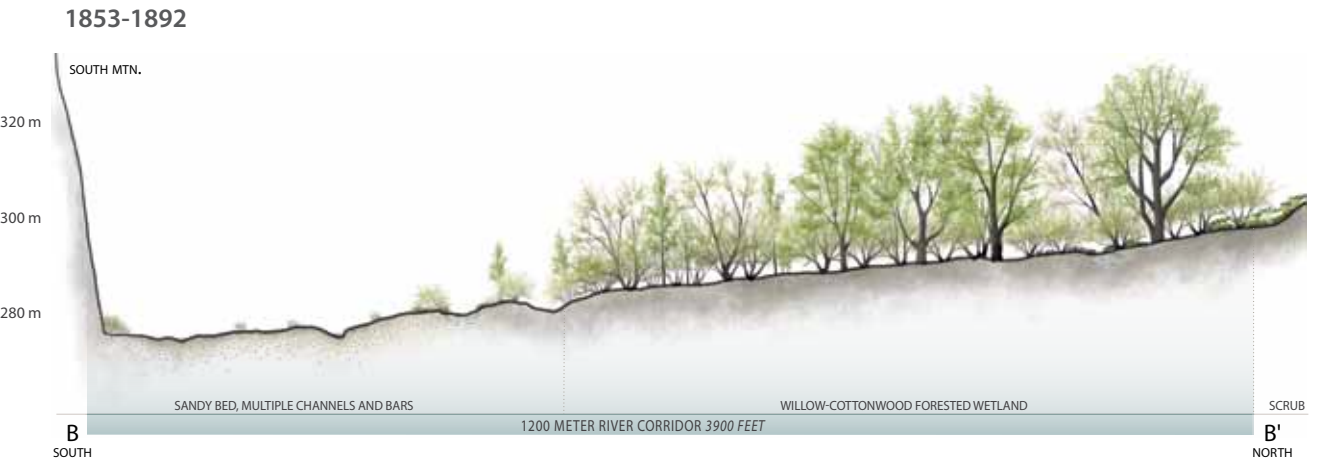
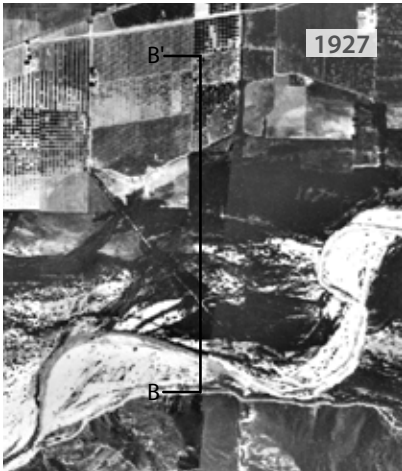
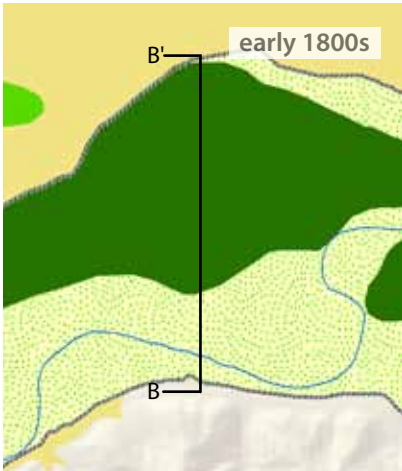


Fig. 3.46. Historical cross-sections at Santa Paula, 1853-2005. This series of cross-sections shows the Santa Clara River east of the Santa Paula Creek confluence, where the south bank of the river abuts South Mountain. The transect is in a perennial reach of rising groundwater, characterized in the 19th century by extensive willow-cottonwood forests and freshwater wetlands. Substantial willow-cottonwood forest remains in the area today, though much diminished from former extent. The earliest cross-section is derived from a composite of GLO surveys spanning the second half of the 19th century. Cross-sections are drawn with 5x vertical exaggeration. (Norris 1853; Hoffman 1868b; Thompson 1869; Barry 1892a; Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2005; Stillwater Sciences and URS Corporation 2007. Cross-sections produced by Jen Natali)

MOUTH OF SANTA CLARA RIVER (OXNARD REACH)

The Santa Clara River mouth south of Highway 101 has experienced dramatic changes over the 19th and 20th centuries, including the near-complete loss of West Grove and the contraction of river corridor width by over 85%. The reach has been transformed from a broad estuarine delta about 1.25 miles wide to a narrow river corridor separated by levees from intensive agricultural and recreational uses. The Olivas adobe (pictured on the right bluff bank), built in 1837 and enlarged in 1849 (OHP 2011), has stood watch over these changes.

Early surveyor’s notes describe cottonwood and willow “belts” and “groves” near the mouth (Hancock 1854). These descriptions are corroborated by the 1855 T-sheet, which depicts dense willow-cottonwood forest south of the active channel, and broad distributary channels and grassland to the north. This area maintained shallow summer surface flow due to perched groundwater conditions.

Over 70 years later, in 1927, most of West Grove had been cleared for agriculture. Broad floodplain areas on both sides of the active channel were subdivided into farmland, and irrigation ditches and levees are evident. However, patterns visible on the aerial affirm that much of this area (particularly on the south side) continued to be regularly flooded. By 2005 levees bound the river, including a levee on the south side of the river originally built by the Army Corps in 1961 (Stillwater Sciences 2007b). Levees and land use constrain the formerly 6,900 foot wide river to a 1,000 foot corridor. Intensive agriculture and the Olivas Park golf course inhabit the former floodplain. Herbaceous cover, willow-cottonwood forest, and invasive *Arundo donax* flank the mainstem.

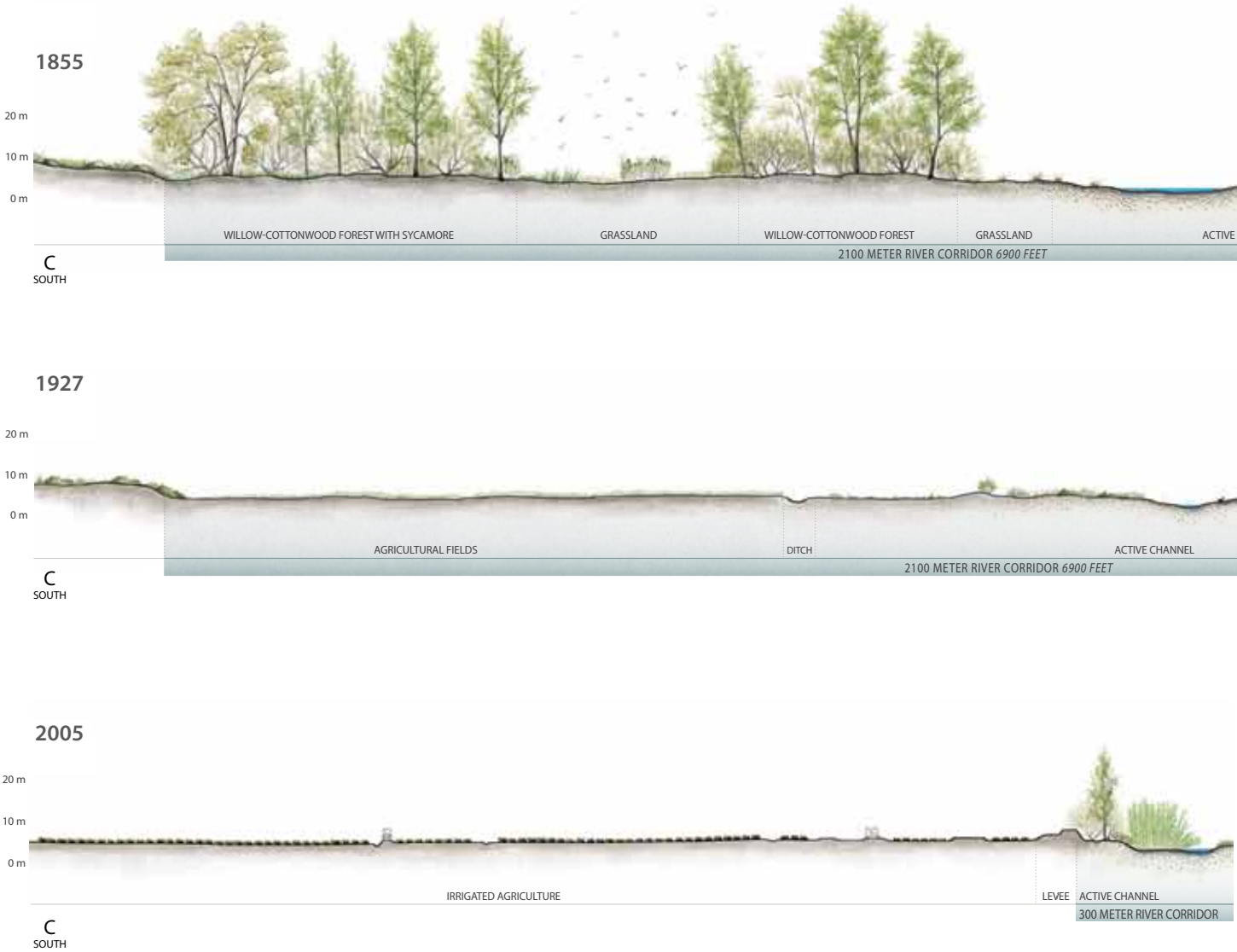
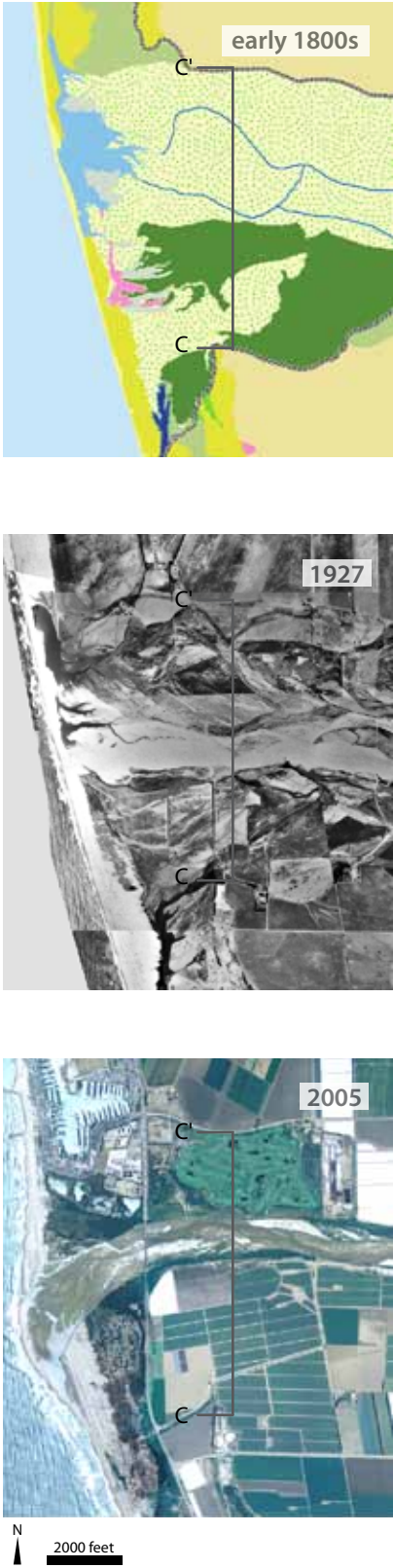
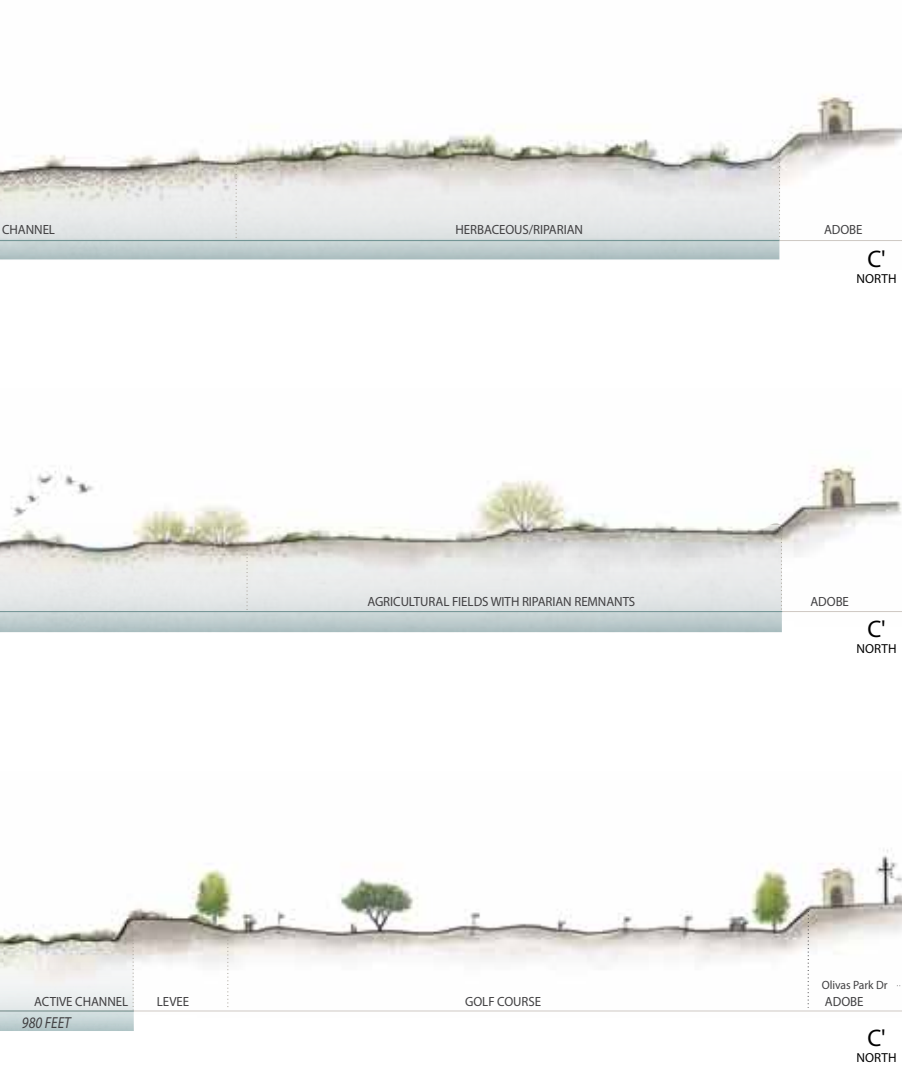


Fig. 3.47. Historical cross-sections at the Santa Clara River mouth, 1855-2005. This time series shows the Santa Clara River at its mouth, about 3.5 miles downstream from the Highway 101 bridge. A large willow-cottonwood forest and wetland complex dominated the left bank (south side) of the river from above the bridge all the way to the river mouth, a distance of over four miles. Very little of this once-expansive forest remains today. The earliest cross-section is derived from GLO notes and the mid-19th century T-sheet drawn for the river mouth by the U.S. Coast Survey. Cross-sections are drawn with 5x vertical exaggeration. (Hancock 1854; Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration; Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2005; Stillwater Sciences and URS Corporation 2007. Cross-sections produced by Jen Natali)



CONCEPTUALIZING THE SANTA CLARA RIVER

Part of the challenge of developing viable restoration and conservation strategies for highly fragmented rivers is simply gaining enough perspective to think about them accurately (Montgomery 2008). Forming a clear vision of the processes at play in these systems is an instrumental part of developing restoration plans with a high likelihood of success and public acceptance (Palmer et al. 2005, Hanley et al. 2009, Greiner 2010). The historical record for the Santa Clara River provides some of the perspective necessary for thinking about its future.

From historical data, we can see that the river was neither a continuously perennial stream uniformly lined with riparian forest, nor simply a dry, scrubby wash with little established vegetation. Instead, its hydrology and vegetation were more heterogeneous than either endpoint, though it embodied aspects of both. Some seemingly barren reaches of today’s river—where one might question whether two centuries of water diversions and deforestation had completely altered the river’s character—are in fact remnants of historically summer-dry, scrub and riverwash-dominated reaches. Conversely, reaches with rising groundwater supported much more lush riparian and wetland vegetation than one might expect to find in semi-arid Southern California, in close proximity to drier portions of the river.

Remarkably, and despite large-scale changes to the landscape, upon close examination many of these patterns are still expressed today. Geologic controls still influence hydrology in places like the Sespe and Piru narrows, creating nodes of high groundwater across the length of the river. These areas may still be conducive to the recovery of certain groundwater-dependent riparian and aquatic habitats.

In addition to documenting historical patterns, it is also instructive to think about historical riverine dynamics. While we often focus on the episodic, variable nature of Southern California streams in this study, we found that overall ecological and hydrologic patterns along the river were historically quite stable, persisting across major flood events. More historically stable forest and bottomland habitats have been largely eliminated, leaving only the mostly sandy active channel in many places. The legacy of this transformation from a broad, topographically complex channel with the capacity to accomodate large flows to a narrower, more confined channel is a more homogeneous river with increased sensitivity to episodic events and reduced potential for the establishment of diverse and persistent floodplain habitats, particularly in the lower reaches.

SUMMARY OF FINDINGS

The following findings represent some of the significant conclusions drawn from our research and analysis. Taken together with an understanding of modern conditions, these findings can support scientists and managers working to identify restoration opportunities in the Santa Clara River valley.

- 1. **The historical (early 1800s) Santa Clara River valley supported a diverse array of natural habitats**, from the willow groves and wetlands of Saticoy Springs to the sycamores and oaks

found on alluvial fans near Santa Paula and Fillmore. However, the valley floor was dominated by grassland and coastal sage scrub, with trees occurring singly or in stands and along creeks and rivers. Valley oaks were not documented in the Ventura County portion of the valley.

- 2. **Most substantial freshwater wetland complexes occurred within the river corridor of the Santa Clara River, not on the valley floor.** A rich array of aquatic habitats were found within the river corridor, including ponds, sloughs, and freshwater marshes in perennial reaches, and a suite of saline and brackish aquatic habitats associated with the estuary at the river mouth.
- 3. **Prior to modification, most small tributaries did not connect to the Santa Clara River.** With few exceptions, intermittent small creeks commonly sank into their alluvial fans before reaching the Santa Clara River, a characteristic common to many intermittent tributaries across California. Rather than maintaining defined channels all the way to the river, these creeks were connected hydrologically to the river through subsurface flow and poorly defined, transitory surface channels. Most of these creeks have now been connected to the Santa Clara River through constructed channels, increasing valley drainage density (that is, stream length per unit area).
- 4. **From the late 19th to the early 20th century, the position of the Santa Clara River corridor remained relatively laterally stable.** Inter-annual variability in the relative vegetation cover of the active channel and bottomlands is evident in the historical record, with widespread changes occurring after each major flood. However, our findings support the overall lateral stability of the river even through the St. Francis Dam break in 1928.
- 5. **In the relatively recent geologic past, the lower Santa Clara River shifted its outlet from near Point Hueneme to its present location.** While the date of this shift is not clear, it may have occurred in the past 200-500 years based on edaphic, ecological, and ethnographic evidence. This shift is reflected in historical alkalinity patterns on the Oxnard Plain (see page 177).
- 6. **The Santa Clara River was an interrupted perennial stream**, with alternating perennial and intermittent (summer dry) reaches. Only two intermittent reaches were clearly documented on the river, near Saticoy and Piru (though additional intermittent reaches may have been present). The location of perennial reaches was informed by a variety of factors, including artesian influence, tributary inputs, valley narrowing, and geologic constraints. Many of these factors continue to affect surface flow patterns today.
- 7. **The Santa Clara River supported a diverse mix of riparian species**, including trees such as sycamore, live oak, willow, cottonwood, box elder, and alder; scrub species such as scalebroom, buckwheat, mulefat, golden-aster, sagebrush, black sage, and cactus; and understory species such as wild grape and wild blackberry.
- 8. **Dense, persistent riparian forest and in-channel wetlands occurred in discrete patches along the Santa Clara River.** Rather than a continuous corridor, willow-cottonwood riparian forest was found at a few notable locations along the river, corresponding with areas of

rising or perched groundwater. Other reaches supported a different matrix of non-vegetated riverwash, willow scrub, mulefat, and alluvial scrub. This longitudinal heterogeneity tied to patterns in groundwater-surface water interactions suggests that different restoration targets are appropriate for different reaches. It suggests nodes for riparian forest restoration centered around former persistent wetland riparian areas, as well as a focus on maintaining the water resources (rising groundwater) that would support these habitats.

- 9. **Alluvial scrub was a likely component of the driest portions of the Santa Clara River.** While more research is needed, compiled data suggest that alluvial scrub is a more suitable riparian restoration target for drier reaches (notably the Piru reach) than riparian forest.
- 10. **Live oaks and sycamores occurred frequently on the Santa Clara River river outer banks.** Numerous live oaks and sycamores were documented on high banks on the edge of the river corridor. Live oaks and sycamores documented within the river corridor occurred largely in Santa Paula and Sespe creeks (likely on higher bars or islands) and as individuals within large areas of willow-cottonwood forest on the mainstem Santa Clara River.

Management Implications

- **Though the Santa Clara River has undergone substantial transformations over the past 250 years,** many of the underlying physical parameters and processes have remained intact, particularly in comparison to other Southern California rivers. These characteristics create an unusually rich array of management possibilities for the river regarding the conservation and restoration of ecological patterns and habitat value.
- **Maintaining the hydrologic heterogeneity of the Santa Clara River is an essential component of conserving ecological diversity.** Groundwater availability (and by extension, summer flow) is clearly a primary driver in the distribution and composition of riparian habitat. Disturbance from winter floods, via scour or sediment deposition, is also an important driver of riparian vegetation dynamics.
- **Riparian restoration targets should be assessed at a reach scale.** Different suites of species were supported historically in different reaches. Willow-cottonwood forest was not found continuously along the river, and is not an appropriate or feasible restoration target for the entire river. For

example, alluvial scrub may be a more appropriate target in the Piru reach, and conservation activities may support the preservation of this regionally rare habitat type.

- **Reaches with rising groundwater present unique opportunities for riparian forest restoration.** Many wetland species support functions are concentrated in areas with dense riparian forest and rising groundwater. Managers may choose to prioritize restoration of willow-cottonwood forest and in-channel wetlands in these places, if contemporary assessment shows restoration to be viable. This includes former floodplain surfaces on the south side of the river near its mouth, the region east of the Santa Paula Creek confluence, and the former Cienega (Fillmore fish hatchery) area.
- **Ecological values of intermittent reaches of the river should also be protected.** Conservation of historical aspects of these reaches should be considered in project design and water management.
- **Groundwater management is an essential component of maintaining the heterogeneity of the Santa Clara River riparian corridor.** To the extent feasible, managing surface and groundwater resources to mimic historical hydrologic patterns preserves the viability of riparian restoration at the reach scale.
- **The lateral extent of the river corridor has decreased dramatically in some reaches from the 19th century to the 21st.** Different land uses have encroached on the former river corridor, claiming many of the less frequently flooded bottomland surfaces. The river currently occupies only a small portion of its former area; almost 50% of its former area has been lost. What remains is largely the much more dynamic active river channel. The removal of many of these more stable portions of the river may have influenced our perception of the river system, emphasizing its dynamic nature rather than its overall stability. This suggests a possible conservation focus on reoccupation of former floodplain areas. Riparian and river restoration projects should consider this large portion of the valley formerly part of the river. If these floodplain surfaces are still accessible in high flows, they may provide ecosystem functions and resilience and help managers design restoration strategies with increased chances of success.

4 • VENTURA RIVER AND VALLEY



For the entire distance we closely followed the Ventura River, a clear, dashing mountain stream bordered by hundreds of splendid oaks whose branches frequently met over our heads. We crossed the stream many times, fording it in a few places, and passed many lovely sylvan glades—ideal spots for picnic or camp.

— THOMAS DOWLER MURPHY 1921, TRAVELING FROM VENTURA TO OJAI

Introduction

The Ventura River drains approximately 230 square miles, emptying into the Pacific Ocean just west of the city of Ventura. The headwaters rise in the western Transverse Ranges, some of the youngest and most tectonically active mountains in North America with uplift rates as high as 0.2 to 0.3 inches/year. The resulting steep slopes and the relatively weak exposed sedimentary layers lead to high sediment production, landslide potential, and erosion rates (Scott and Williams 1978, Warrick and Mertes 2009, Cluer 2010).

The Ventura River ranges from steeper slope, step-pool formations with large boulders in the headwaters, to lower slope distributary channels emptying into the Ventura River estuary at the coast. Unlike the Santa Clara River, the Ventura River valley is narrow, and in many places the river occupies much of the valley floor. Upland portions of the watershed are predominantly covered in chaparral scrub, while riparian species occupy the river and its tributary corridors.

The Ventura River watershed experiences a Mediterranean climate, with 90% of the rain falling in the wet season between November and April. However, inter-annual variability is high and cycles of wet years and dry years often span decades. This climatic variability suggests an extremely variable hydrologic regime, similar to the Santa Clara River. Steep slopes in the upper watershed offer shorter lag time for surface water paths to channels, leading to quick flash floods which spread out in the broader portions of the watershed. These floods, common on the Ventura River, provide scour and habitat complexity, as well as flushing sediment through the system. With expanded urbanization and agricultural uses in the lower part of the watershed, levees have been built to confine flooding through urban and agricultural lands, and increased urban runoff and groundwater pollution have impacted water quality.

Together, Matilija Dam (built in 1948) and Casitas Dam/Robles Diversion (1959) block about 37% of the Ventura River watershed. They have broad effects on sediment transport, impeding over half of all sediment delivery

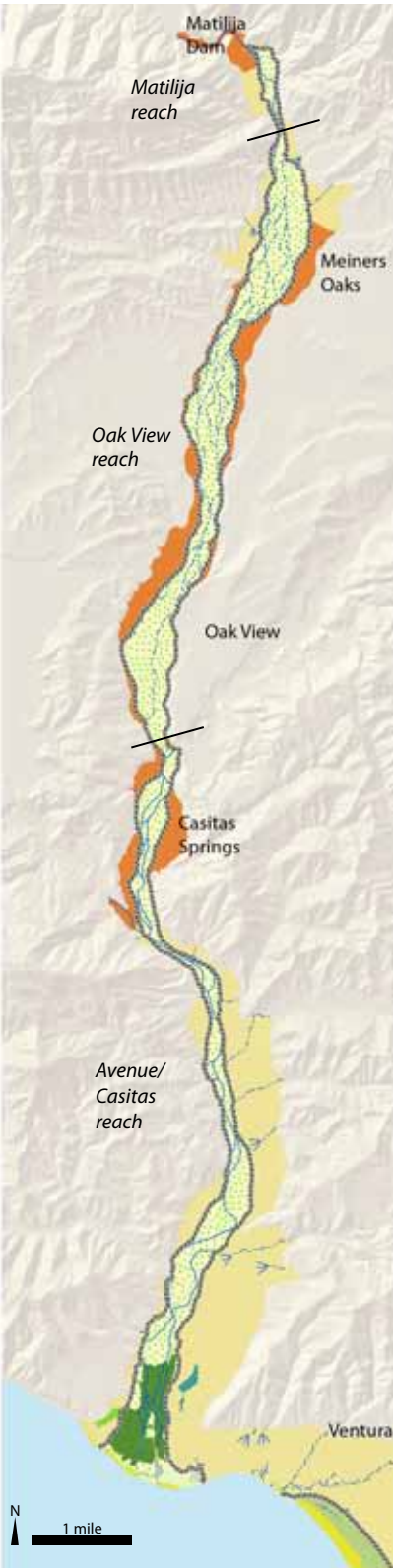


Fig. 4.2. Ventura River reach divisions. We divided the river into three reaches, based on hydrological and ecological characteristics: the uppermost Matilija Reach, the middle Oak View reach, and the lower Avenue/Casitas reach.

(Orme 2005). The Matilija Dam was originally built for flood control purposes; however, the reservoir has filled up with sediment almost completely. The dam is slated for removal, and studies have shown that it has altered flow regimes and geomorphic processes downstream, as well as acting as a barrier for migratory fish species in the watershed.

This chapter explores the historical characteristics of the Ventura River and valley prior to major urban and agricultural modifications. In particular, we focus on the pre-modification hydrology, morphology, and ecology of the river, describing each historical attribute at a reach scale. In contrast to the Santa Clara River, the Ventura River valley was lightly settled and traveled in the 19th century (with the exception of the canyon resorts of the upper Matilija canyon and the Ojai valley, both outside the purview of this report). As a result, there is much less documentation available concerning the historical character of the Ventura River.

Ventura River reach designations

We divided the Ventura River into three broadly defined reaches (fig. 4.2 and table 4.1). These reaches were defined based on the hydrology and ecological characteristics of the system. They are designed to provide meaningful units of analysis to facilitate reach-level understanding of channel dynamics and morphology.

Valley Floor Habitats

We mapped three types of habitats on the Ventura valley floor: grassland/coastal sage scrub, oaks and sycamores, and valley freshwater marsh (fig. 4.3). Grassland/coastal sage scrub was the most prevalent habitat type. In contrast to the Santa Clara River valley, which was dominated by grassland/coastal sage scrub, our mapping suggests that oaks and sycamores composed a relatively high proportion of the Ventura River valley floor. Only one freshwater marsh (17 acres) was mapped in the project area, occupying a depression to the east of the Ventura River and demarcating a former route of the river.

Broadly, grassland was most prevalent in the lower Ventura River valley, extending about six miles upvalley before transitioning to denser tree cover in the middle (Oak View) reach. Scrubland and oaks were documented north of Meiners Oaks. The following section describes these patterns and transitions in more detail.

Dryland Habitats

Unlike the Santa Clara River valley, the Ventura River valley was dominated by the natural corridor of the river. Early accounts of the river valley are filled with descriptions of its riparian vegetation, while very few sources explicitly document vegetation characteristics of the non-riparian valley floor. As a result, this section provides only coarse descriptions of regional

ecological patterns. While not mapped in detail, the Ventura River corridor contained much of the valley’s heterogeneity and is depicted in sources as a complex mix of oak, sycamore and scrubland (Norway 1877; Lippincott 1903). Descriptions of bottomland and other riparian characteristics are addressed in the Riparian Habitats section (see page 138).

In spite of these impediments, general patterns of valley floor vegetation do emerge. Historical sources, in particular early maps and GLO survey notes, suggest that scrub-dominated cover extended downstream of the narrow, wooded Matilija canyon to the vicinity of Meiners Oaks, where oaks again became more prominent. Below Foster Park, sources indicate that the valley was dominated by herbaceous cover all the way to the river mouth. These areas are described in detail below.

Downstream from the narrow canyon just below the present Matilija dam, the valley floor in the Matilija reach appears to have been dominated by scrub. In contrast to heavy timber described in reaches to the south, GLO surveyor Norway (1878a) noted, “dense brush” on the table land east of the Santa Ynez mountains. On another line a little more than a mile further south, the same surveyor distinguished between the “brushy table land” he just passed through and the “timbered bottom”—the bottomlands of the Ventura River (Norway 1877). As supporting evidence, relatively few trees are present along this reach in the historical aerials compared to timbered areas farther south.

South of Meiners Oaks, and extending to Foster Park, live oaks (and sycamores) became more numerous. For much of this reach (Oak View), the comparatively broad river corridor encompasses almost the entire narrow valley. Observations such as “timbered tableland” (Thompson 1868) and “valley mostly timber” (Norway 1877) are a clear contrast to the descriptions of scrub farther north. Dense tree cover is evident in the historical aerial photography and, in some places where oaks have been cleared for development, earlier GLO surveys note “heavy oak timber” (Norway 1877). Sycamores also appear to have dominated the tree cover in some places (fig. 4.4; Hare 1876). In the Foster Park area, at the southern extent of mapped woodland, a notable area of sycamores and oaks has served as a gathering place since before Mission times (see Riparian Habitats section for more information on Foster Park). As in the Santa Clara River valley, the historical record contains no descriptions of valley

Table 4.1. Upstream boundaries of Ventura River reaches.

	Avenue/Casitas reach	Oak View reach	Matilija reach
Upstream end of reach:	San Antonio Creek confluence	Near Cozy Ojai Road	Matilija dam



Coastal and Estuarine Habitats

- Ocean
- Beach
- Dune
- Tidal Lagoon (mostly open?)
- Tidal Lagoon (seasonally open)
- Tidal Flat
- Seasonally Tidal Marsh
- High Marsh Transition Zone

Palustrine and Terrestrial Habitat

- Valley Freshwater Marsh
- Willow Thicket
- Wet Meadow
- Oaks and Sycamores
- Grassland/Coastal Sage Scrub

Characteristic Riparian Habitat

- Willow-Cottonwood Forested Wetland
- Other In-Channel Riparian

Hydrology

- Intermittent or Ephemeral
- Perennial
- Distributary
- Outer River Bank
- Spring

Legend for **Fig. 4.3** (map on following page).

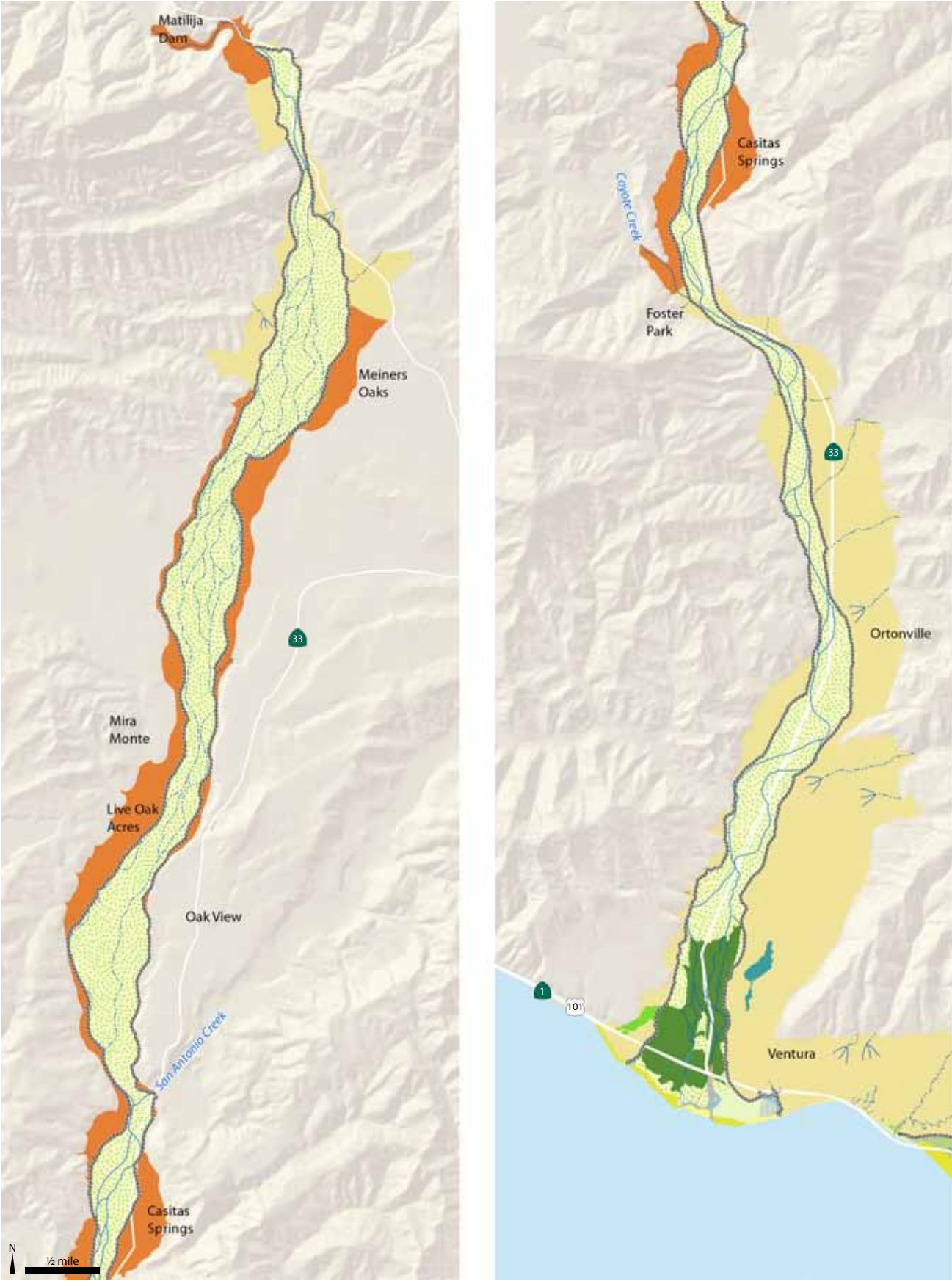


Fig. 4.3. Historical habitats of the Ventura River valley, early 1800s. The Ventura River corridor was broad, in places occupying a large proportion of the valley floor. Live oaks, sycamores, and scrub were prevalent in the upper valley, while grassland was more common in the lower valley.

oaks in the Ventura River valley by any of the region’s travelers, botanists, or residents, despite abundant references to the presence of live oaks by these observers (see page 57). (Ojai Valley, outside our project area, is a notable exception.)

Below Foster Park, historical evidence suggests relatively sparse tree cover in comparison to the wooded reach upstream. Vegetation characteristics changed notably in the Avenue area, where the Ventura River valley begins to open to the ocean. While mapped as the same general habitat type (grassland/coastal sage scrub) as the valley floor in the upper Ventura River reaches, the Avenue/Casitas area was likely more predominantly covered by grasses and forbs as opposed to scrub.

Explorer Crespi noted this distinction between the rich grasslands of the lower valley and the woodlands of the upper river valley in 1769:

At this spot where we stopped in the hollow [Ventura River valley] close to the shore, there is a great deal of very good grass-grown level soil trending north and south, very nearly a league’s worth [about 3 miles], it may be, of it, backward from the shore. Its width of smooth level soil must be about a quarter-league, and in some spots, where not so smooth, it may reach half a league, while the country opens out a great deal, further up to northward, with a great many hollows of naturally watered soil and a great amount of live-oak groves. (Crespi and Brown 2001)

The relatively early Leighton (1862) map corroborates Crespi’s description of largely herbaceous cover, depicting trees along the canyons while leaving table lands mostly bare of trees. Textual sources also describe a fertile, grassy region north of the river mouth; Brewer noted that the Avenue region was a “pretty valley, green, grassy, and rich” in 1861 (Brewer [1930]1974), and Thompson and West ([1883]1961) called it an area of “unsurpassed richness.” In 1856, a traveler to the Mission found the lower river valley “fine green country” with “plenty of grass” (Miller 1856, in Weber 1978). Roughly contemporary with many of these observations, the U.S. Coast Survey mapped the Ventura River mouth, also depicting herbaceous cover outside of the river corridor (Johnson 1855c; see fig. 4.20).

Overall, however, the habitat map may significantly underestimate historical oak woodland extent as a result of methods that default to grassland/coastal sage scrub in the absence of spatially explicit data. The descriptions and maps cited above suggest that, in contrast to the dominance of grass and scrub on the Santa Clara valley floor, oak and scrub may have been the dominant vegetation complex on the Ventura River valley floor above Foster Park.

Wetland Habitats

Only one freshwater wetland complex was documented on the Ventura River valley floor outside of the river corridor. (This does not include the lake at Figueroa Street on the coast, which is treated separately; see page



Fig. 4.4. Ventura River in the vicinity of present day Oak View, 1876. This late-1800s map depicts sycamores and oaks occupying the river corridor, as well as “scattering oak and sycamore” on the valley floor between the high bank and the scrub-covered mountains to the west. (Hare 1876, courtesy of the Ventura County Surveyor’s Office)

196. It also does not include Mirror Lake, a wetland feature formerly situated east of the Ventura River between Mira Monte and Oak View, just outside the project area.)

The complex, over 16 acres in extent, occurred in a topographical low spot east of the Ventura River along modern-day Olive Street for ½ mile between West Park Row Avenue to the south and Bell Avenue to the north. It marked a portion of a former route of the Ventura River. It was documented on the 1855 T-sheet, but had disappeared by the 1870 resurvey (Johnson 1855c, Greenwell and Forney 1870; see fig. 4.20). Further research may reveal other freshwater wetlands in the Ventura valley whose presence was unrecorded by the historical documents we uncovered.

Channel Morphology

The Ventura River dominates the majority of the Ventura River valley, with multiple braided channels transporting water and sediment across its broad floodplain. Active uplift, steep slopes, and unconsolidated marine sediments give the Ventura River an extremely high sediment load, one of the highest per unit area in the United States (U.S. Army Corps 2004, Greimann 2006). These same conditions produce coarse substrate and the river’s braided form, as channels shift location frequently (Keller and Capelli 1992).

In this section, we review the historical physical characteristics of the Ventura River, including lateral extent and stability, in-channel features, and changes in bed elevation. Since there are relatively few data available (especially in comparison to the Santa Clara River), these topics are only briefly reviewed below.

River Corridor Position and Stability

The Ventura River corridor (including the active channel, in addition to bottomland areas susceptible to flooding) was mapped using similar methods as for the Santa Clara River, with the earliest reliable source available for each section of the river used to map outer bank position in a GIS polygon layer (fig. 4.5). Historical aerials (from 1927 and 1945) were the primary sources used to complete the mapping, though a few earlier maps were also incorporated. This methodology is described in more detail in the Santa Clara River section (see page 63).

Since no contemporary mapping of the river corridor was available, we were unable to quantify changes in extent from this mapping to the present. However, contemporary aerial imagery reveals a few places where levees have limited river corridor extent (such as along the lower river west of Ventura), and where agriculture or development has encroached into the corridor (e.g., at Live Oak Acres and along Meyers Road near Meiners Oaks). In other reaches, such as near southern Oak View, the river corridor appears relatively unchanged.

The overflow area of Ventura River is well-defined and includes nearly all the valley floor between the mesas and low hills on each side.

— KELTON 1940

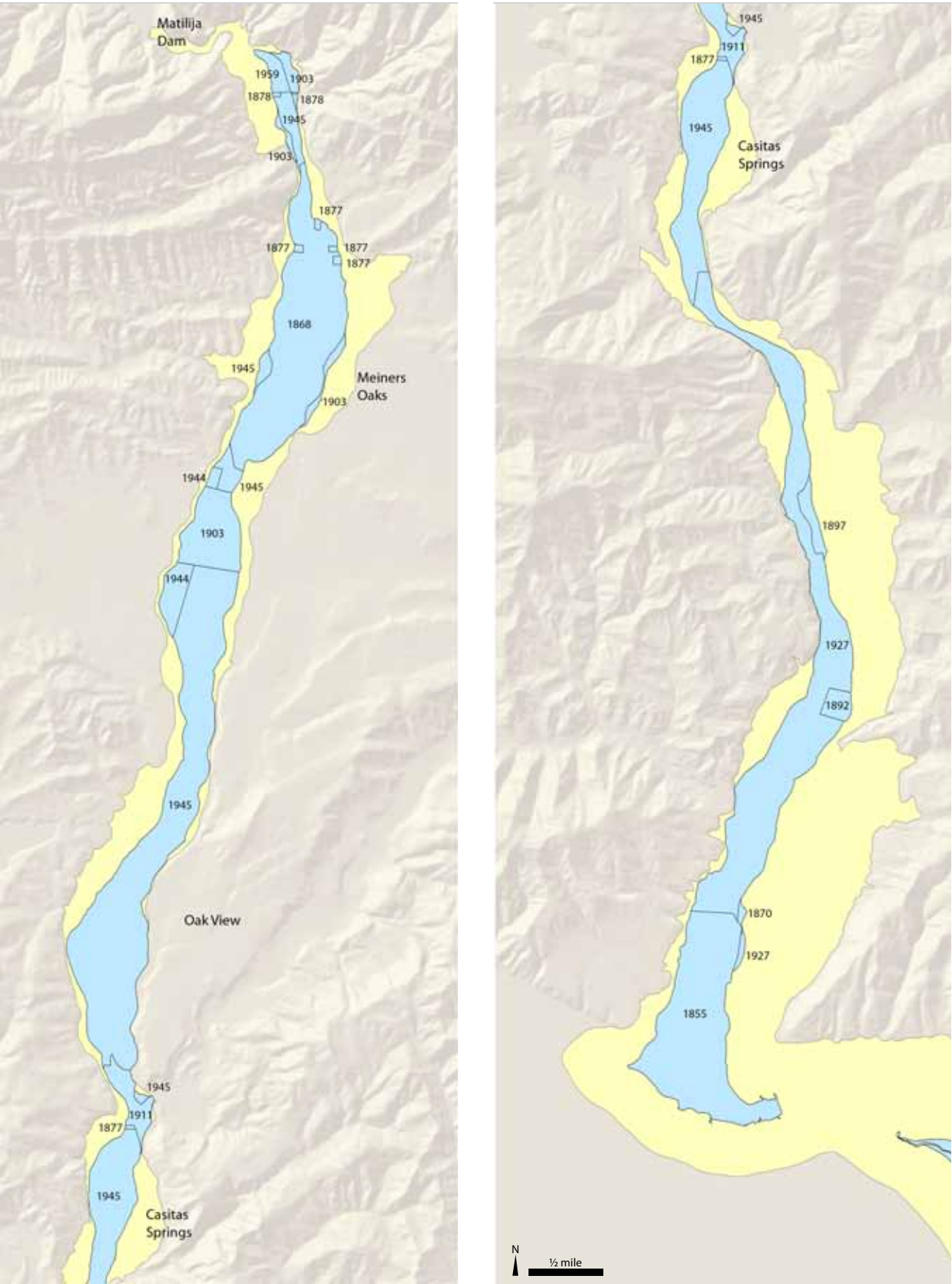


Fig. 4.5. Location of the Ventura River corridor by earliest available source, 1855-1959. We mapped the historical position of the outer bank using the earliest available data for each stretch of the river.

LARGE-SCALE CHANNEL CHANGE Within the river corridor, mainstem and tributary channel location changed frequently with flood events, as the river reoccupied old channels and formed new ones. In addition, historical sources indicate that a few major floods caused large-scale changes in the position of the Ventura River’s outlet to the ocean. Interviews with long-time Chumash residents indicate a series of significant changes in the location of the river mouth over about a 1.5 mile stretch of the shoreline, from the hills west of the river mouth to Figueroa Street in Ventura. These accounts describe that the mouth of the river used to be far to the west of its present location: “The V.[entura] river first had its mouth many years ago at the foot of hills west of V. river valley. This was long ago” (Harrington 1986b). (The informant also noted that a “tule patch” at this former river mouth was formerly used to store canoes.)

Accounts state that the river mouth then shifted about 1.5 miles east, to what is now Seaside Park east of the Ventura County Fairgrounds (Sheridan 1912, Harrington 1986a, Harrington 1986b). In the 19th century, a lake here marked the former outlet of the river (see page 196). A number of statements describe the character of this former river mouth:

The Ventura River used to empty into the ocean where the estero is now situated by the bathhouse west of the Ventura wharf, east of the present mouth of the river. The old Ventura canoe builders used to leave their canoes at that place (ancient mouth of the river)...They bent tule that was growing there on both sides over the canoe...and thus make a shade for the canoe. (Harrington 1986b)

...in 1825 the Ventura River had its channel where now is Ventura Avenue, and that it emptied to the sea where the slough is, just east of the old racetrack grounds. It followed a course through what are now the courthouse grounds. All the land beyond to the Taylor Hills was good farming land. (Sheridan 1912)

This lake and former river mouth were also the site of a Chumash village, Mitsqanaqan. One of ethnographer John P. Harrington’s informants recalled that Mitsqanaqan did not expand west of the lake because “it was said by the old Indians that the vicinity west of the lake was the mouth of the river and that the river was likely to shift its course” (Harrington 1986b).

In the early 19th century, accounts state that the river mouth shifted from the Seaside Park location westward, closer to its current location. The date at which this shift occurred is not clear: one source states that it occurred in 1810 (Harrington 1986b), while another source inferred that it occurred later, likely during the floods of 1825 (Sheridan 1912). Many smaller changes in the river outlet location have been documented since. One source describes the shift from near Seaside Park first to the west, then slightly back toward the east:

The mouth of the Ventura river used long ago to be at Mitsqanakan. Then it shifted to a place some distance west of its present mouth, where the little railroad bridge is west of the big railroad bridge. Then it shifted to its present location. (Harrington 1986a)

For the first time in 12 years, Seaside Park was yesterday under water... flood waters forced campers to pack their belongings...The tennis courts, the picnic grounds and the race tracks were all under water.

— VENTURA DAILY POST, 4/8/1926, IN MOORE 1936

Early maps of the river mouth, in particular the T-sheets of 1855 and 1870, document the position of the river mouth in the mid-19th century. While locations differ slightly, they are within about 500 feet of each other, in contrast to the earlier large-scale changes. A later map shows the river mouth in the same location as the 1855 T-sheet (Barry 1894).

Later channel changes due to flooding often mirrored the extent or location of these former mouths. During the 1867 floods, the river reoccupied its former outlet near Mitsqanaqan, and “all of what is now Seaside Park became a lake” (Sheridan, in Moore 1936). The river similarly reoccupied this course during the extreme floods of 1884; in addition, the *Ventura Signal* reported that to the west “the river formed a new channel on the Taylor Ranch, over near the mountain by cutting through the great body of land which of recent years has been cleared of its thick growth” (*Ventura Signal* 1884 and Sol Sheridan, in Moore 1936). In 1909, the *Ventura Free Press* reported that the “mouth of the river is at the extreme western point of the lake, a quarter of a mile further to the westward than it has ever been known to be...almost as far west as the big sandhills between the Taylor ranch pasture and the ocean” (*Ventura Free Press* 1909b). A February 1992 flood also reoccupied a former tributary channel (Keller and Capelli 1992, Capelli 1993).

Hydraulic Geometry and Channel Form

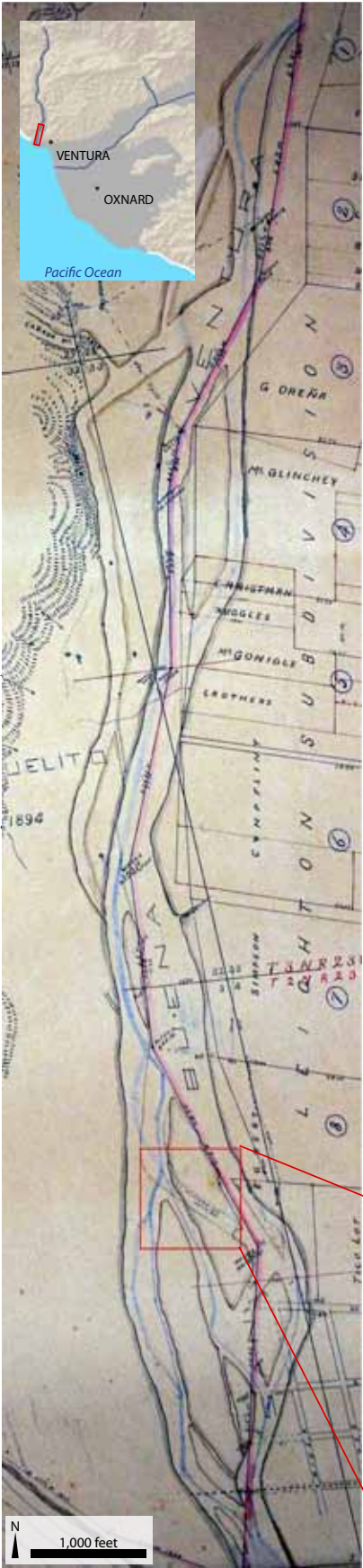
PATTERNS IN THE RIVER CORRIDOR A variety of different features were documented in the historical record within the outer banks of the Ventura River. In-channel characteristics such as bottomlands, islands and bars, substrate, mainstem channel patterns, and pool locations were all noted, and are described below.

Some reaches of the river were relatively narrow (e.g., in Matilija Canyon or below Foster Park); these areas were often characterized by a relatively narrow active channel flanked by dense mixed riparian forest. In other reaches, however, multiple mainstem channels surrounded by riverwash threaded around established vegetated bars and islands. A few early maps capture this complex in-channel pattern, depicting networks of washy, broad channels and islands (Barry 1894, Barry 1897, Waud 1903, Everett n.d.; fig. 4.6). The size and quantity of sediment entering the river helped form the multiple braided channels that would often shift location within the river corridor in a major flood. A 1940 flood control report stated that mainstem channels were “ill-defined” and “unstable” (Kelton 1940).

The most notable aspect of these maps is the presence of large, well defined islands; on these maps coarse depictions of the area of individual islands ranges from less than one to over 35 acres. Other sources also describe islands in the river: a *Ventura Free Press* article refers to “rocky islets” near the mouth, and an early soils map shows gravelly and bouldery islands west of Ojai (fig. 4.7). One long-time resident described camping in the

Within the flood plain of the Ventura River the main stream meanders widely, and the immense amount of debris carried by floods causes rapid and destructive shifts of the current. The stream channels generally are too ill-defined, limited in capacity, and unstable in character to give a definite indication of future flood stages.

— KELTON 1940



early 20th century on an island at the confluence of Coyote Creek and the Ventura River:

The parks became very popular. On what became known as the “Island,” between Coyote Creek and the Ventura River, many Ventura people established camps and spent the summer there. The same was allowed east of the river. Each summer we built a temporary dam in the river to make a swimming pool. (Percy 1957)

The likely location of this island is documented in early 20th century maps of the area (Everett 1908, Unknown ca. 1910e).

In addition to islands, the presence of bottomland surfaces similar to those documented on the Santa Clara River is consistently recorded on the Ventura River. GLO surveyors crossing the river note the “river bottom” or “bottom lands” as they enter the floodplain (Thompson 1868, Norway 1877, 1878a). In many places this land, slightly higher than the washy active channel, was used for pasture, or cleared and cultivated for annual crops such as alfalfa (Lippincott 1903).

One notable difference between the Santa Clara River and Ventura River was the size of substrate in the channel, a characteristic shaped by the Ventura River’s steeper channel gradient. Gravel, cobbles, and boulders were commonly found in all reaches of the Ventura River; in contrast the Santa Clara River was dominated by sand. (This is still the case today: intertidal cobble substrate, a notable and relatively rare feature along the California coast, is found at the Ventura River delta and supports a variety of marine plants and invertebrates; Ferren et al 1990, Capelli 2010.) At the river mouth in August 1769, Crespi wrote that the river “gave us some trouble on account of the stones and the large amount of water which ran above them” (Crespi and Bolton 1927). An article during the 1884 floods described a new channel at the river mouth “cut through a solid bed of boulders packed in sand” (*Ventura Signal* 1884, in Moore 1936), and a T-sheet resurvey noted “gravel and boulders” (Kelsh 1933a). Further upstream, an 1887 account describes the head of the intermittent reach, where “gravel spreads far over the desolate bottom” (Hassard 1887). Many historical landscape photographs of the

Fig. 4.6. Islands in the Ventura River channel, 1894. This 1894 map shows continuous islands, some over 20 acres in extent, stretching up the first three miles of the river from its mouth. The documented extent of islands extends at least another two miles upstream (Barry 1897). The detail at left shows channel change as a result of the 1884 floods as captured by the surveyor. (Barry 1894, courtesy of the Ventura County Surveyor’s Office)

river show coarse substrate on the river bed (fig. 4.8). While some of these photographs were taken after floods and thus may somewhat overemphasize the relative proportion of cobbles and boulders to finer substrate, they still reveal an overall trend toward coarse bed material.

Favorite childhood swimming holes were recalled by long-time residents along the Ventura River mainstem (another feature not well represented on the Santa Clara River, at least by the historical record). J.H. Morrison, who was born in 1887 and grew up on the lower Ventura River, described his favorite swimming holes in the 1890s:

The shallow mill pond [from the Rose Flour Mill] furnished a fine swimming-hole which we small boys shared with Mrs. Orton’s ducks until we graduated to Big Rock, Mays, Dumond’s or any one of several deep pools along the river. (Morrison 1959)

Additional swimming holes on the lower Ventura River (below Foster Park) were described by current Ventura residents as part of the Lower Ventura River Parkway vision plan (606 Studio 2008).

INCISION/CHANGES IN BED LEVEL Only fragmentary evidence was uncovered regarding historical trends in bed elevation on the Ventura River. As for the Santa Clara River, there may be additional elevational data (such as cross-sections, surveys for bridge construction, and as-builts) available to study incision rates over time. Obtaining and analyzing these data, though outside the scope of this study, would futher the discussion about historical changes in bed level.

Before the construction of Matilija Dam in 1947, high sediment loads and large, episodic flood events created cyclical changes in bed level, as elevation increased with sediment delivery and deposition only to be scoured out during large floods. This dynamic was captured by descriptions of large floods of the late 19th and early 20th centuries. A 1909 flood was reported to “have washed out the bed of the entire stream to an unparalleled depth below the old bed” near the river mouth (*Ventura Free Press* 1909b). The *Ventura Free Press* (1885) reported that flooding in 1885 did not extend as far as the flooding of 1884, “owing to the deepening and widening of channels by previous floods.” A similar process contributed to the minor effects of the 1916 floods following the heavy floods of 1914, since “the flood of 1914 had divested an exceptionally wide channel of all brush and trees and at the same time had deepened the same course so that the waters [of 1916] met with a minimum of diverting resistance” (Moore 1936). Scouring during the flooding of 1914 was so extensive that as late as 1937, it was reported that “the high waters in 1914 cut the channel so deep that since that time it has given you no trouble” (Moore 1937). One witness quantified this incision at Foster Park, testifying that a channel eight to nine feet below the “ordinary stream bed” was created during the 1914 floods (Moore 1937). General trends were also described in the same document:



Fig. 4.7. Islands in the Ventura River, 1917. The 1917 soil map shows islands surrounded by riverwash (Rv) over a three mile stretch west of the Ojai Valley. The islands are composed of coarse Yolo gravelly and bouldery fine sandy loam (Yg), a soil type documented to support live oaks and sycamores on alluvial fans in the Santa Clara River valley. (Nelson 1917)

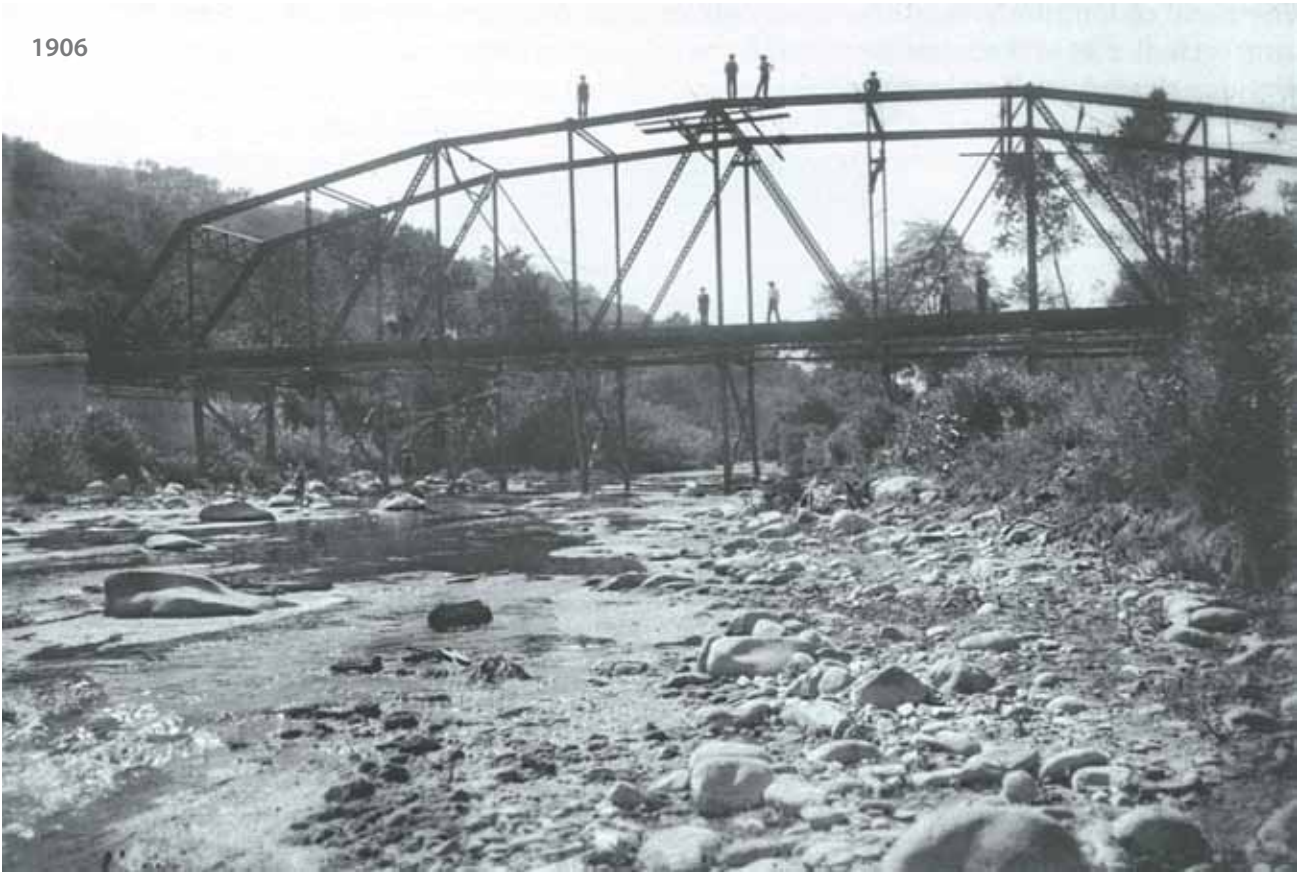


Fig. 4.8. These images of the Ventura River at Foster Park (top, ca. 1906) and at Main Street in Ventura (bottom, 1916) show the abundant cobbles and boulders characteristic of the river bed even nearly at the estuary. (Unknown ca. 1906, courtesy of Craig Held; Unknown 1916, courtesy of the Museum of Ventura County)

Chairman Cruse: “Generally speaking is the Ventura River a scouring river or a flooding river, that is to say, do floods scour the river bed, or is the river bed spread out over large areas?”

Mr. Ryan: “I notice the elevation at Casitas Pass has been lowered and I believe in all these California rivers they are, and I know there is a deposit in the center of the Ventura River at the lower end which is filled up, and in the main channel down several miles they are inclined to scour, that is what we found last year.” (Moore 1937)

Dry Season Flow

Unlike the Santa Clara River, there is little early (pre-1900), reach-specific evidence for summer flow conditions on the Ventura River. Early explorers only described conditions at the river mouth, while other observers made comments about the river’s water supply that provide only a general picture of early conditions. In August 1769, Crespi noted an “abundance of water” and a stony river bed near the ocean (Crespi and Bolton 1927). Mission Father Señán (1817) also described an “abundance of water from the San Buenaventura River.” One eager writer described the river as “a clear brawling stream singing down in the summer months by way of a succession of pools and rapids where the trout lie hidden” (Unknown ca. 1909).

Other early generalizations on flow conditions emphasize the aridity of the region and the lack of water in the river. One article asserts that the Santa Clara and Ventura rivers “sink during the summer, before they reach the ocean” (*Daily Alta California* 1864). Holmes and Mesmer (1901c) also describe both rivers as “dry in their lower reaches,” retaining only a “small summer supply for irrigation.” Though these statements do not reflect average conditions as described by more reliable sources on the lower Ventura (or Santa Clara) River, they do illustrate the general presence of dry reaches on the river.

Both descriptions of the Ventura River—as an abundant source of water, and as an arid stream—have some element of truth. Documentation of flow conditions on the Ventura River consistently depicts three reaches with distinct summer flow regimes within the study area. These reaches are depicted on the historical topographic quad for the river (USGS 1903c; fig. 4.9). The first perennial reach extends from beyond the northern edge of the study area (Matilija Hot Springs) downstream to around the Cozy Dell Canyon (Matilija reach). Below this, the Ventura River valley begins to open up into the head of the Ojai Valley, and the river is intermittent until below



Fig. 4.9. Intermittent and perennial reaches on the Ventura River, 1903. The early USGS topographic quadrangle depicts summer flow conditions on the Ventura River. A solid line indicates perennial flow, while a dashed line signals an intermittent reach. The quad shows the river as about half perennial and half intermittent. (USGS 1903c, courtesy of the Los Angeles Central Library)

Oak View and the river’s confluence with San Antonio Creek (Oak View reach). Last, perennial flow is shown from just above the San Antonio Creek confluence downstream to the ocean (Avenue/Casitas reach). However, the precise extent and location of summer water would have fluctuated in response to annual variations in rainfall and runoff. During wet years or series of wet years, reaches with perennial flow would have extended both spatially and temporally, while during dry years intermittent reaches may have been more extensive and would have lost surface flow earlier in the season.

This representation of Ventura River summer flow is supported by numerous additional early sources. Early photographs from the Matilija Hot Springs area show shallow riffles running over a cobble and boulder-strewn river (see fig. 4.10). Ditches brought water downstream from the perennial Matilija reach to irrigate bottomland alfalfa and orange orchards located in the intermittent reach of the river below (Waud 1903, Lippincott 1903). A GLO surveyor noted water in the river in late September 1878, south of the current intersection of Camino Cielo and Rice Road (Norway 1878a).

Shortly after leaving the confined lower reaches of Matilija Canyon, the river spread out into the broad alluvial plains of the Ojai and Santa Ana valleys. This marked a transition between the lush, perennial Matilija Canyon and the scrubby, drier upper Ventura River, as one traveler observed in early June, 1887:

...we found ourselves at the mouth of...the Matilija Cañon...A rapid brook runs down the canon, shrinking into the deserted bed of what must once have been a broad river, and here and there the gravel spreads far over the desolate bottom. But soon after entering the ravine, the eye is relieved by patches of wood and verdure which at short intervals break in upon the sand. (Hassard 1887)

Storke (1891) also noted that in comparison to the upper Ventura River, the river “flows more tranquilly when it reaches the table-like lands of the Ojai and Santa Ana ranchos” (the intermittent reach) until it “gathers volume from the water of the San Antonio and Coyote creeks” (the beginning of the lower perennial reach).

Below its confluence with perennial San Antonio Creek, the Ventura River flowed year-round once more. About 500 feet below its confluence with San Antonio Creek in August 1877, GLO surveyor Norway (1877) noted that the Ventura River had substantial water present—16 feet wide. (This was one of the driest years on record, so the presence of summer water is particularly meaningful; see fig. 2.10.) The river around the Coyote Creek confluence was a popular area for summer camping and swimming trips (Percy 1957). In “Autumn Days in Ventura,” the author described the river below the San Antonio Creek confluence in early fall:

Before we had reached the wooded cañon of the San Antonio creek, a full moon gave a magical unreality to our surroundings. The stately trees were roofed with wild grapevines from root to crown. They were sentinel

towers along the path, and the argent flash of water here and there among them was the blazoned shield of many a silent guard! A dozen times or more we forded the rushing stream. (Eames 1890)

Steady summer flow continued further downstream toward the town of Ventura. (One possible exception is a short reach, less than a mile long, around Casitas Springs, which is mapped on the historical quad as perennial but appears to be scrubby and sparsely vegetated in 1940s aerial imagery.) At Casitas (Foster Park), shallow water flowed over the river’s gravel/boulder bottom. One man who grew up on the lower river around the turn of the century described abundant water in swimming holes and other pools along the river when he was young (Morrison 1959). Near the river mouth in mid-August 1769, Crespí described the river as a “very large stream or river where there is a vast amount of fresh water” (Crespí and Brown 2001), though Roberts (1886) noted that the river was often “shallow and easily forded.” An alternate version of Crespí’s manuscript provides additional detail about summer (August) flow near the ocean:

They have informed me that this is a river that is split into two branches; that there is not a great deal of water running where we saw it; that the other branch, which is running to the westwards, must have a bed with about eight or ten yards’ width of running water that came up to the hocks of the mounts when they went into it to drink. (Crespí and Brown 2001)

The San Buenaventura Mission stone aqueduct brought water from around the San Antonio Creek confluence to Ventura for domestic and irrigation purposes until it was destroyed during the floods of 1861-62 (Triem 1985). This may indicate more abundant or reliable water up near the San Antonio confluence, rather than further down toward the Mission.

Similar patterns are noted in the mid-20th century, though many accounts indicate an extension in the length of the intermittent reach. A 1937 report described the river as “absolutely dry during at least six months of the year” between Kennedy Canyon and the Coyote Creek confluence (Moore 1937). While this is slightly longer than the intermittent reach as depicted on the 1903 USGS map, it demonstrates that these reaches were largely still preserved into the late 1930s. Cooper (1967) noted more extreme conditions, describing the Ventura River as “dry most of the time,” and long-time residents’ fond recollections of formerly abundant flow also indicate drier conditions by the late 1950s than were historically present in the river:

That was in the days when the Ventura River and Coyote Creek flowed water all year. (Percy 1957)

...it is hoped that any who read this will be convinced that at one time there was water and plenty of it, in the Ventura River. (Morrison 1959)

Residents in the 1970s confirmed the presence of the Oak View summer-dry reach, stating that the reach often had “little or no surface water in the river-bed during the summer” (Ventura County Fish and

God has provided this Mission with an abundance of water from the San Buenaventura River and the streams that flow into it.

— FRAY JOSÉ SEÑÁN 1817

[T]he Ventura River...is the southernmost stream of California not muddy and alkaline at its mouth.

— GILL 1881

Game Commission 1973). However, the same report also noted that impoundments, diversions, and wells had contributed to the drying of reaches which had historically maintained surface flow during the summer. Anthropogenic changes in the stream hydrograph, in addition to climatic conditions (see pages 44-45), may have exacerbated the aridity of this intermittent reach beyond earlier conditions. These observations are consistent with the development of major water infrastructure on the river, such as Matilija dam (completed in 1948) and the Los Robles diversion dam and Lake Casitas (completed in 1959). The trend would have been compounded by a mid-century period of low rainfall (see fig. 2.10).

Riparian Habitats and Ecology

In contrast to the Santa Clara River, visitors to the Ventura River commented consistently on the abundance of trees found along the river. In a letter written in 1770, Juan Crespí described that along the Ventura River “there are large groves of willows, cottonwoods, and alders, plenty of oaks for firewood, and plenty of stone for building” (Crespí and Bolton 1927). A 1921 booster article boasted the Ventura River was “bordered by hundreds of splendid oaks whose branches frequently met over our heads” and had “many lovely sylvan glades—ideal spots for picnic or camp” (Murphy 1921).

Portions of the Ventura River were characterized by the presence of large stands of live oaks and sycamores in addition to the ubiquitous scrub—not just on the outer bank (as was largely the case on the Santa Clara River), but also on established islands within the river corridor. This, along with extensive sections of dense willow-cottonwood forest along some portions of the river, formed a riparian corridor that in many ways contrasted with patterns documented along the Santa Clara River.

The outer river banks, bottomlands, and active channel of the Ventura River exhibited distinct vegetation patterns (for definition of terms see page 61). While lone sycamores and live oaks on the outer bank of the Santa Clara River were often notable features in the sparsely forested valley, many of the riparian trees on the Ventura River merged into the surrounding upland live oaks and sycamores. Bottomland areas on the Ventura River were colonized by dense mixed riparian and willow-cottonwood forest in many portions of perennial reaches, while oaks, sycamores and alluvial/willow scrub composed bottomland vegetation in the intermittent reach. The active channel itself formed a largely non-vegetated matrix of scrub, boulders, cobbles, gravel, and sand, similar to the Santa Clara River active channel though with coarser substrate. In many portions of the river, well developed islands above the active channel supported vegetation similar to that found on bottomland surfaces.

As on the Santa Clara River, riparian vegetation varied both laterally and longitudinally, as expected for a semi-arid stream (see page 85). Riparian habitats along the Ventura River were broadly divided into three reaches,

reflecting shifts in hydrology (summer flow, depth to groundwater) and variations in geomorphology (surface elevation, flood frequency). Directly below the present-day Matilija Dam, a short (about two mile) perennial reach was presumably flanked by mixed riparian forest in Matilija canyon, which transitioned to scrubbier cover as the canyon opened up somewhat below the Camino Cielo Road crossing (Matilija reach). As the canyon opened onto the broad flats at the head of the Ojai Valley and the river sank into its bed, riparian vegetation transitioned to a mix of sycamores, live oaks, and scrub (Oak View reach). Beginning at the confluence of San Antonio Creek with the Ventura River, a second perennial reach stretched eight miles to the ocean, and was characterized primarily by mixed riparian forest with patches of scrub and a large, persistent area of willow-cottonwood forest and in-channel wetlands at the mouth of the river (Avenue/Casitas reach). These coarse reach-scale differences in riparian habitat are described in detail below.

Of course, the morphologic complexity created by islands, side channels, and bottomlands would have created many small-scale variations in vegetation distribution, character, and density along the length of the river complicating—and presumably sometimes contradicting—the broad patterns discussed above. In particular, there may have been additional persistent wetland riparian areas historically present on the river but not documented, and at the sub-reach level there were likely short intermittent stretches along the perennial reaches of the river (or vice versa). The descriptions below do not preclude these finer-scale patterns.

In addition, though described patterns appear consistent between 19th century accounts and 20th century photographs, the Ventura River was a dynamic system, and the proportion and distribution of scrub and trees would have shifted from year to year, perhaps changing dramatically during major flood events. This was recalled in relation to the flooding of 1825, when “trees and villages were washed away” around Ortonville (Jones 1938, in Freeman 1968). It was also documented for the 1914 flood:

If you go up the river now [1937], every tree in that river bed is 23 years of age, just exactly. There wasn't a tree left in the entire river bottom following the flood of 1914 from Foster Park in the main channel clear up to Live Oak Acres. There is a heavy growth of willow, sycamore, cottonwood and alder trees. An alder tree is a very short lived tree so the alder trees suddenly die; when they get 8 or 10 inches in diameter, they all fall and become debris in the channel. (Hollingsworth, in Moore 1937)

Matilija Reach

Extending downstream of the present-day Matilija Dam through the Matilija Canyon and down to the head of the Ojai Valley, the uppermost portion of this reach was confined (in contrast to the more broad, braided pattern at the downstream end of the reach). In the narrow canyon, the riverbed was “a mass of fallen rock and boulders” (Roberts 1886), without the broad bottomlands found elsewhere along the Ventura River. Another

account describes seeing, upon entering Matilija Canyon, “patches of wood and verdure which at short intervals break in upon the sand” (Hassard 1887). A number of sandbar willows (*Salix exigua*) were recorded in Matilija Canyon just upstream of the study area (Bracelin 1932). Early images of the canyon corroborate these descriptions of the confined portion of the river (fig. 4.10).

Less is known about the character of downstream portion of the Matilija reach, after the river exits the most confined portion of the canyon. Historical aerials (Ventura County 1945) show prevalent scrub in the broader channel.

Oak View Reach

For six miles along the Ventura River—from the top of the Ojai Valley near Meiners Oaks, past Oak View and Live Oak Acres, to the confluence of the river with San Antonio Creek above Casitas Springs—the river corridor supported abundant scrub, in addition to substantial areas of live oaks and sycamores colonizing islands and other bottomland surfaces within the river’s banks. Riparian patterns in this intermittent reach were notably different from those found on the Santa Clara River mainstem, where substantial in-channel tree cover was not documented (apart from the persistent wetland areas).

The presence of scrub and trees (overwhelmingly live oaks and sycamores) in this reach is described by a number of narrative and textual accounts. The upper portion of the reach, at the transition to a broad, washy river from Matilija Canyon, was especially commented upon (fig. 4.11). Sheridan (1886) described that the “river rushes out across a broad sycamore dotted flat” from the canyon, and Roberts (1886) described the river here as “overgrown with brush, sycamores, and oaks.” The early presence of oaks and sycamores is corroborated by GLO survey notes, which describe a “timbered bottom” and “bottom land with heavy oak & sycamore timber” (Norway 1877). The few GLO bearing trees documented in this reach also generally support this description (two live oaks 10 and 48 inches in diameter, and one sycamore 20 inches in diameter; Norway 1877).

Early maps of the reach also show a mixture of scrubland, oaks, and sycamore. An 1876 map marks “oak and sycamore” near Live Oak Acres toward the bottom of the intermittent reach (Hare 1876). Upstream near Meiners Oaks, a map along two miles of the river shows a combination of oaks, scrub, and grasses present in the river corridor between patches of cultivation, labeling bottomlands “oaks and brush,” “oaks, brush & grasses,” “oaks (12” to 18” diam),” and simply “brush” (Lippincott 1903; fig. 4.12). Aerial images from the 1940s also show oaks and scrub.

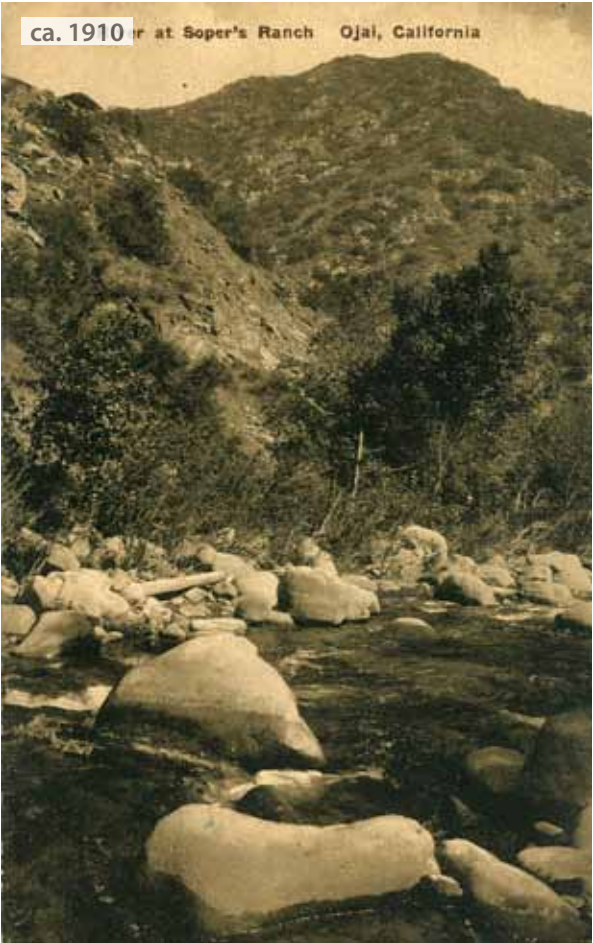
Species data provide additional details on scrub composition in the Oak View reach in the mid-20th century. Chaparral whitethorn (*Ceanothus leucodermis*) was collected in a “wash” of the Ventura River below Meiners

Leave riverwash, enter bottom land with heavy oak & sycamore timber...

— NORWAY 1877, BETWEEN OAK VIEW AND CASITAS SPRINGS



Fig. 4.10. Two views of the upper Ventura River, ca. 1910. These two postcards, both dating from the first years of the 20th century, show the boulder-filled channel of the river in lower Matilija Canyon. The photograph at top was taken at Matilija Hot Springs, just below Matilija dam. The photograph at right was taken less than a half mile downstream. Note the narrow fringe of mulefat, willow scrub, and trees (likely alder, cottonwood, and sycamore). (Unknown ca. 1910b, d)



Oaks (Hoffmann 1932b), and slender woolly buckwheat (*Eriogonum gracile*) and chaparral yucca (*Hesperoyucca whipplei*) were collected in the river near Oak View (Pollard 1963a, 1969). Mulefat was also documented (*Baccharis salicifolia*; Pollard 1944). These records imply the presence of alluvial scrub; it is likely that a mixture of willow and alluvial scrub was present through this reach (fig. 4.13).

Avenue/Casitas Reach

Below Oak View and near its confluence with San Antonio Creek the Ventura River became perennial again, with an accompanying shift in vegetation. This reach was characterized by a matrix of often dense mixed riparian forest, riverwash, and scrub. (One possible exception is a short one mile reach at Casitas Springs, which looks much more like the intermittent reach described above on the 1945 aerial imagery.)

Strongly supporting the concept of dense riparian forest in this reach, an 1840s *diseño* of the Cañada Larga ranch shows a continuous riparian corridor stretching the three miles from near Foster Park to Gosnell Hill/Cañada de San Joaquin (fig. 4.14). The riparian corridor is shown of variable width, including a short reach of oaks south of Cañada Larga and a lot of other trees (interpreted as willow-cottonwood forest). This map is supported by



Fig. 4.11. “Looking west across Ventura River, mouth of Matilija Canyon,” February 1930. This photograph, part of the Wieslander Vegetation Type Mapping Project of the late 1920s and early 1930s, shows low scrub flanking riverwash along a shallow, broad channel in the intermittent reach of the river. It was taken approximately one mile below the mouth of Matilija canyon, looking west toward the site of the current Robles Diversion Dam (Capelli pers. comm.). (Clar 1930, courtesy of the Marian Koshland Bioscience and Natural Resources Library, UC Berkeley)

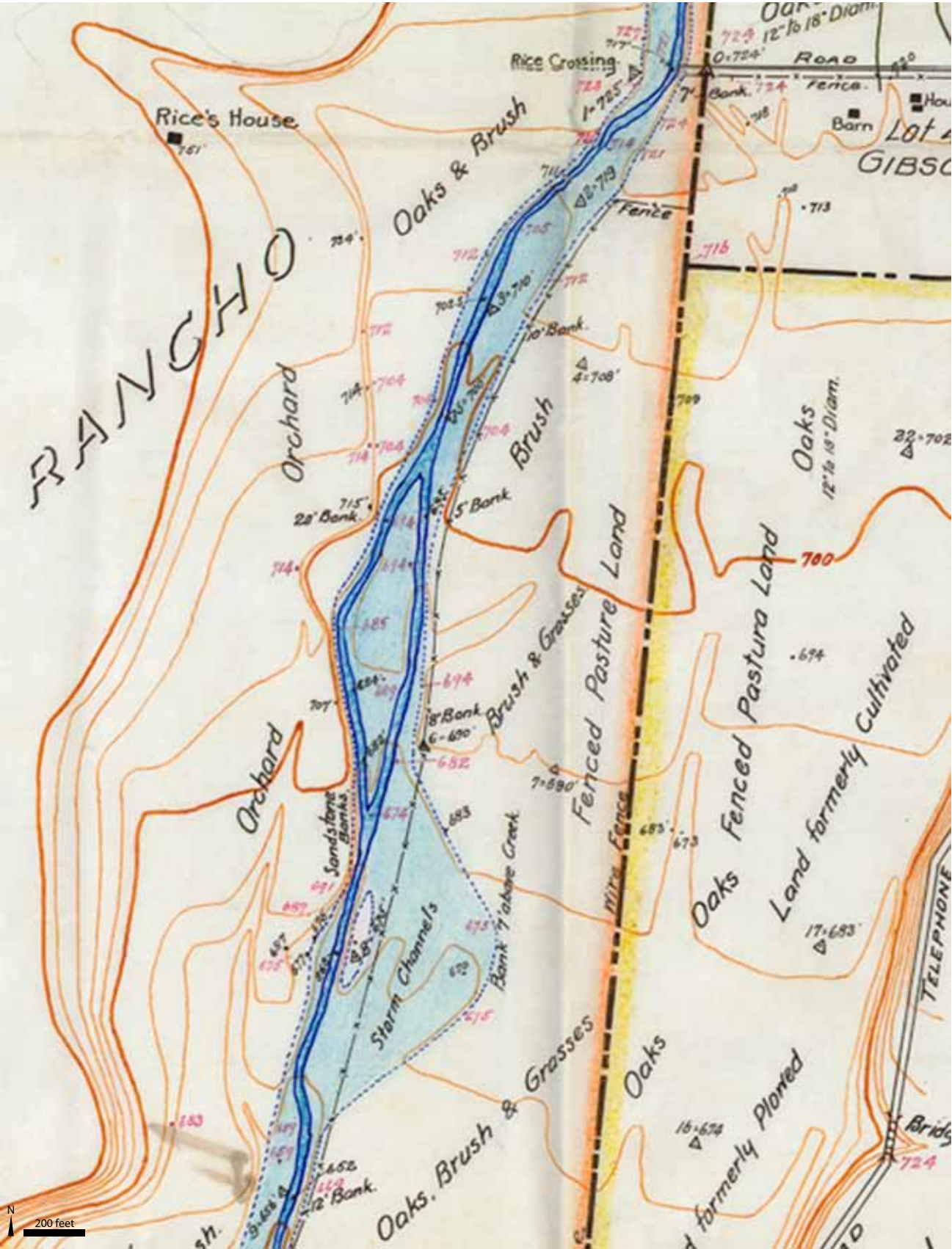


Figure 4.12. Vegetation in the Ventura River, 1903. This map of the river in the intermittent reach near Meiners Oaks shows local-scale variation of riparian vegetation, including oaks, sycamore, and brush, within its outer banks. It is evident from this map that many portions of the bottomland had already been cleared or fenced for pasture. (Lippincott 1903, courtesy of the Museum of Ventura County)



Fig. 4.13. Ventura River at Live Oak Acres. The oblique aerial photograph (top), taken in June 1938, shows characteristic riparian patterns in the Oak View reach. Sparsely vegetated riverwash composes the active channel, flanked by dense scrub on bottomlands. Further away from the active channel, more mature live oaks colonized higher river surfaces. Seven years later, the aerial photograph of the same place in 1945 (left) shows similar patterns of riverwash, scrub, and trees. (Spence Air Photos 1938, courtesy of the Benjamin and Gladys Thomas Air Photo Archives, UCLA Department of Geography; Ventura County 1945, courtesy of UCSB Map and Imagery Library)



Fig. 4.14. Dense riparian corridor along the Ventura River, ca. 1840. An early depiction of the Ventura River for three miles below Foster Park shows continuous riparian forest flanking the river, of variable—and in many places, substantial—width. A small area of oaks is shown along one portion of the river (below the “I”); the small check marks that line the river are interpreted as mixed riparian forest. (U.S. District Court ca. 1840b, courtesy of The Bancroft Library, UC Berkeley)

FOSTER PARK

Within the lower perennial reach of the Ventura River, Foster Park was particularly noted and admired for its riparian trees. The park, created in 1908, is the site of many of the historical data describing the Ventura River, including photographs, specimen records, and textual descriptions. According to one historian, the Foster Park area had been used by both Chumash and Mission fathers (Sheridan 1926). Images of this area show thick stands of trees and scrub growing over cobbles along the river, similar to today (figs. 4.15, 4.16).

Between 1932 and 1972, many plant specimens were collected at Foster Park. While most of these records are too late to be considered unambiguously historically relevant, they do provide a general sense of the wetland character of the reach. Species archived from this location indicate the presence of a diverse willow woodland with three species of willow (*Salix exigua*, *S. lucida*, and *S. laevigata*), along with mulefat (Pollard 1946, 1960, 1968, 1972). Obligate wetland species are also recorded, including stream orchid (*Epipactis gigantea*; Canterbury 1939), seep monkey flower (*Mimulus guttatus*, Pollard 1964), least duckweed (*Lemna minuta*, recorded in a “pool in willow thicket”; Pollard 1962, 1965), and water

speedwell (*Veronica anagallis-aquatica*, Broughton 1967), indicating presence of surface water through large portions of the year. These plants are described as being in a “willow thicket” or in “shaded pools under willows.” Other records document the presence of an alluvial scrub community in portions of the floodplain (e.g., *Eastern Mojave buckwheat/Eriogonum fasciculatum* var. *foliolosum*; Pollard 1963a).

The diversity of species present in the Foster Park area is further illustrated by a number of ornithological records, which note both the bird collected and the nature of the locality where the bird was found. Records from the early 20th century describe many Allen’s hummingbirds (*Selasphorus allenii*) in addition to black-headed grosbeak (*Pheucticus melanocephalus*), yellow-breasted chat (*Icteria virens longicauda*), and warbling vireo (*Vireo gilvus*) (Canfield 1919, 1920; Canfield and King 1919, King and Huey 1919, Huey 1920). Many of these species had nest sites recorded in “thickets” of wild rose, wild grape, or blackberry. One hummingbird was found in a blackberry thicket “completely shaded by grove of tall cottonwoods,” while another was found on “an elder bush in dense willow woods” (Canfield 1920, Huey 1920).



Fig. 4.15. Ventura River at Foster Park looking north from the bridge, July 2008. Cottonwoods and willows flank the river, and willows, mulefat, and *Arundo* colonize coarse bars and islands.



Figure 4.16. Three images of riparian vegetation near Foster Park/Casitas, ca. 1890–1914. Top: “On the Ventura River 6 miles up the Avenue (the ford),” ca. 1890. Middle: “Looking up Ventura River from the Bridge,” ca. 1914. Bottom: “Casitas – View of Ventura River Crossing,” ca. 1914. These images show three versions of the riparian corridor in the vicinity of Foster Park, including sycamore, live oak, willow, cottonwood, and alder. (Fletcher ca. 1890, courtesy of the California State Library; Unknown ca. 1914a and 1914b, courtesy of The Bancroft Library, UC Berkeley)

...the good Padres gathered their neophytes under the trees of the present Foster Park, and called them to their daily prayers and their daily tasks beneath the whispering leaves of the sturdy sycamores and live oaks.

— SHERIDAN 1926



Fig. 4.17. A section of riparian corridor 1.5 miles south of Foster Park. Broad, dense riparian forest present in 1927 (left) and 1945 (middle) has been converted to agriculture by 2009 (right). (Fairchild Aerial Surveys 1927, courtesy of Whittier College; Ventura County 1945, courtesy of UC Santa Barbara Map and Imagery Library; USDA 2009)

aerial imagery from 100 years later, which still shows many stretches of dense mixed riparian corridor (fig. 4.17). Photographs of this reach show a corridor of dense trees and scrub, particularly in the Foster Park area (see spread, pages 146-147).

A variety of species were documented within the mixed riparian forest. Bottomland trees in this reach included willows, sycamores, alders, box elders, cottonwoods, oaks, and walnuts, in addition to wild grapes and blackberries. A traveler in fall 1890 described “stately trees...roofed with wild grapevines” (Eames 1890), and a newspaper account from 1874 waxed poetic on the beauty of this stretch of the Ventura River:

Our way for miles was through a shaded canyon, down which coursed a clear stream, bordered by willows and sycamores, whose light-green foliage contrasted well with the dark green of the wild walnut, by which they were thickly interspersed. Wild grape vines trailed in the greatest profusion over every place that offered a support for their clinging tendrils... (*Ventura Signal* 1874b)

This is corroborated by a 20th century specimen of wild grape (*Vitis girdiana*) collected in a “poplar [cottonwood] grove” at the Ventura River-San Antonio Creek confluence (Pollard 1969).

Seven sycamores from eight inches to three feet diameter were used as bearing trees by early surveyors, in addition to a cottonwood tree (30 inches in diameter) and live oaks (20-24 inches in diameter) (Barry 1897, Unknown ca. 1910c). Some sycamores (up to 24 inches in diameter) were found within the channel, suggesting relative stability of islands or other bottomland surfaces (fig. 4.18). In 1937, the channel south of the Casitas bridge was “heavily wooded with cottonwood trees and other growths

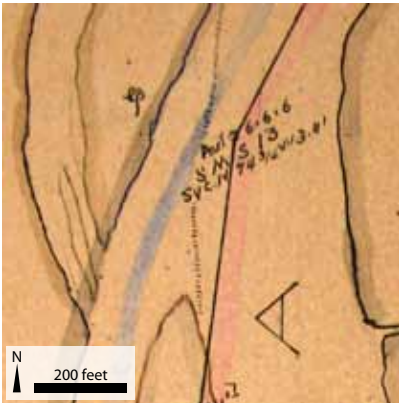


Fig. 4.18. Sycamore on island in the Ventura River, 1894. West of lower Ventura Avenue (and just above the persistent wetland riparian area at the river mouth), this small depiction shows a 24 inch diameter sycamore above the active channel of the river. (Barry 1894, courtesy of the Ventura County Surveyor’s Office)

STEELHEAD ON THE VENTURA RIVER

The historical habitats of the Ventura River undoubtedly supported a wide variety of aquatic and terrestrial wildlife species, including some that currently have special status designations or are considered locally extirpated. This aspect of the region’s historical ecology is not covered in the report (see box on the Santa Clara River, page 101, for more information).

However, given the regional importance of the Ventura River’s historical steelhead and trout fishery, it must at least be noted here. Prior to the protracted drought of the late 1940s and the construction of Matilija Dam in 1948, the Ventura River system supported one of the most consistent, abundant runs of the federally endangered Southern California steelhead in the region (Ventura County Fish and Game Commission 1973, Capelli 1974,

Capelli 2004, Boughton et al. 2006, Titus et al. 2010). Up to that time, the river supported an important recreational steelhead and trout fishery. In addition to the mainstem river, the estuary would have been important for rearing steelhead and providing habitat for other native fishes.

Numerous early accounts describe large quantities of steelhead and trout in the river. One of the Ventureño Chumash residents interviewed by John P. Harrington recalled in 1913 that formerly “the salmon were very numerous in the Ventura river,” while traveler Alfred Robinson wrote that around 1829 “salmon of excellent quality are sometimes taken in the river” (Robinson [1846]1947, Harrington 1986b). Chase (1913) noted that “from May to October the breakfast tables of Ventura need never go troutless.”

of that character” (Moore 1937). Additionally, the presence of scrub is documented by much later plant collections, in which two varieties of buckwheat (*Eriogonum fasciculatum* var. *foliolosum* and *E. cinereum*) were documented near Ortonville (Pollard 1961).

River Mouth

We mapped one persistent wetland riparian area on the Ventura River, at the river mouth. This area supported dense willow-cottonwood riparian forest, valley freshwater marsh, and tidal lagoons and marshes. It could be considered a subset of the broader Avenue/Casitas reach designation, highlighting a large area whose persistence is well documented by early sources. Like similar persistent wetland riparian areas on the Santa Clara River, it is large (over 200 acres), broad, and is documented to have persisted over time. Since portions of this grove were adjacent to the city of Ventura and visible to travelers passing through Ventura on their way up- or downcoast, there are multiple descriptions characterizing it. It is mentioned by explorer Crespi, who described in 1769 that “a great many trees are to be seen on this river bed, willows, cottonwoods, and live oaks (sycamores). There are vast numbers of rose bushes at this hollow” and six months later, in 1770: “a vast amount of willow trees, cottonwoods, and a few sycamores and live oaks” (Crespi and Brown 2001). Over 70 years later, GLO surveyor Norris (1853) noted a “willow swamp” in the area. Many other 19th and early 20th century accounts also refer to the willows at the river mouth, describing a river with “willow-fringed banks” (Darmoor 1873) and “willows festooned by wild grape vines and clematis” (Francis and Hobson 1912) that “creeps

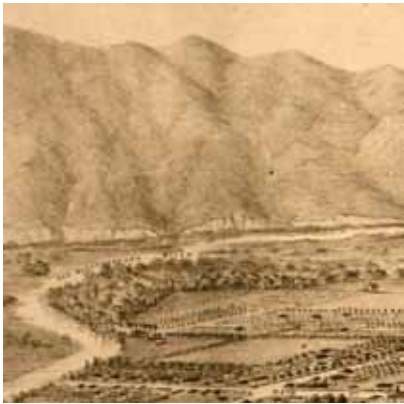


Fig. 4.19. Willows on the Ventura River, 1877 (above). A subset of the forest depicted on the T-sheets is shown in this bird's-eye view lithograph. The view is looking northwest across the river and Main Street in the city of Ventura, drawn seven years after the T-sheet re-survey. It further confirms the presence of trees, although the area appears reduced from the initial T-sheet depictions. (Glover 1877, courtesy of the California Historical Society)

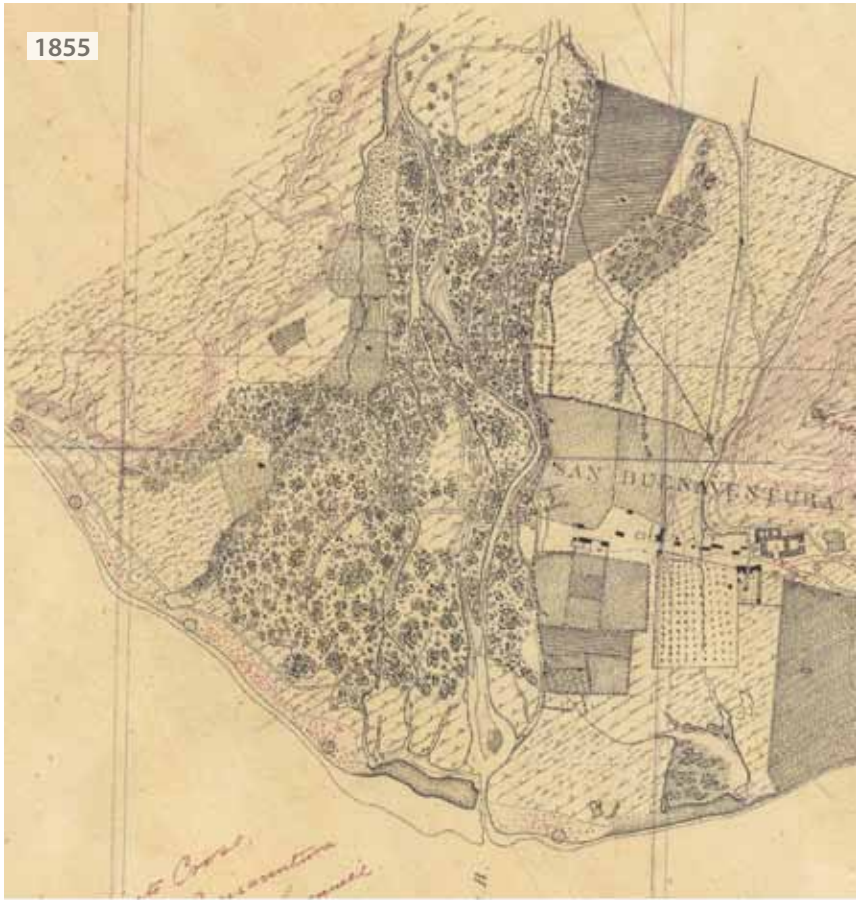


Fig. 4.20. Riparian forest at the mouth of the Ventura River, 1855 and 1870. While the initial survey of the Ventura River mouth by the U.S. Coast Survey (top right) provides evidence of the extent of willow-cottonwood forest at the mouth of the river, the re-survey 15 years later (bottom right) shows that, although trees have been scoured near the main channel, the feature transcended the floods of 1861-2. Dense trees near the mouth of the river taper towards the northern edge of the map. (The freshwater wetland marking a former river route can be seen on the earlier map just north of the nascent city of San Buenaventura; it was almost completely gone by 1870.) (Johnson 1855c, Greenwell and Forney 1870; courtesy of NOAA)

lazily out from the grove of alders and willows” (Holder 1906). Early maps also show willows in the area (Leighton 1862, Everett n.d.).

The most persuasive evidence, however, comes from an early T-sheet and resurvey depicting vegetation at the river mouth (Johnson 1855c, Greenwell and Forney 1870; figs. 4.19, 4.20). Since these maps bracket the huge floods of 1861-2, they offer significant evidence of the feature’s resilience over time. For a detailed discussion of more recent ecological characteristics of the Ventura River mouth and estuary, see Ferren et al. (1990).

Riverine transformation and synthesis

The Ventura River historically exhibited a diverse suite of ecological, hydrologic, and geomorphic characteristics. This section synthesizes the patterns documented in this chapter to provide a more integrative, visual understanding of riverine properties both longitudinally and through time (fig. 4.22). We also provide a summary of our findings and the implications of our research for management strategies in the watershed today.

We focus here on three sample reaches chosen to illustrate these concepts in cross-section: an upstream reach at Meiners Oaks (fig. 4.23), an intermediate reach at Casitas (fig. 4.24), and a lower reach near the river mouth (fig. 4.25). The transects and accompanying plan form representations illustrate the historical hydrology, morphology, and ecology of the river in these three very different locations in the 19th and early 20th centuries (1853-1903). We also produced cross-sections presenting conditions in these reaches during the mid-20th century (1927-1945) and early 21st century (2005) to depict the impacts of changing land use over this time. Taken together, these reaches represent a broad variability in vegetation and flow characteristics along the river.

We used a variety of historical sources to develop these cross-sections. Our own historical mapping, General Land Office survey notes, a U.S. Coast Survey T-sheet, and a county surveyor’s map formed the backbone of our historical transects, and aerial imagery (from 1927, 1945, and 2005) were used to interpret land use changes, vegetation, and channel features on the intermediate and modern cross sections.

In the absence of historical elevational data, we used modern (2005) LiDAR data as the starting point for historical elevations and valley width, making adjustments as needed for the historical renderings (e.g., removing anachronistic road cuts and levees). As a result, the following cross-sections necessarily focus more on changes in floodplain extent and character than on changes in bed elevation.

While these cross sections are only a snapshot of patterns at narrow locations and points in time within the watershed, we believe they offer representative glimpses of temporal and spatial change in three different parts of the Ventura River. Bear in mind that they are purely conceptual in nature, and are not intended to represent exact landscape patterns (e.g., tree density or marsh extent).



Fig. 4.21. Looking over the Ventura River from the Main Street bridge near its mouth, February 2011.

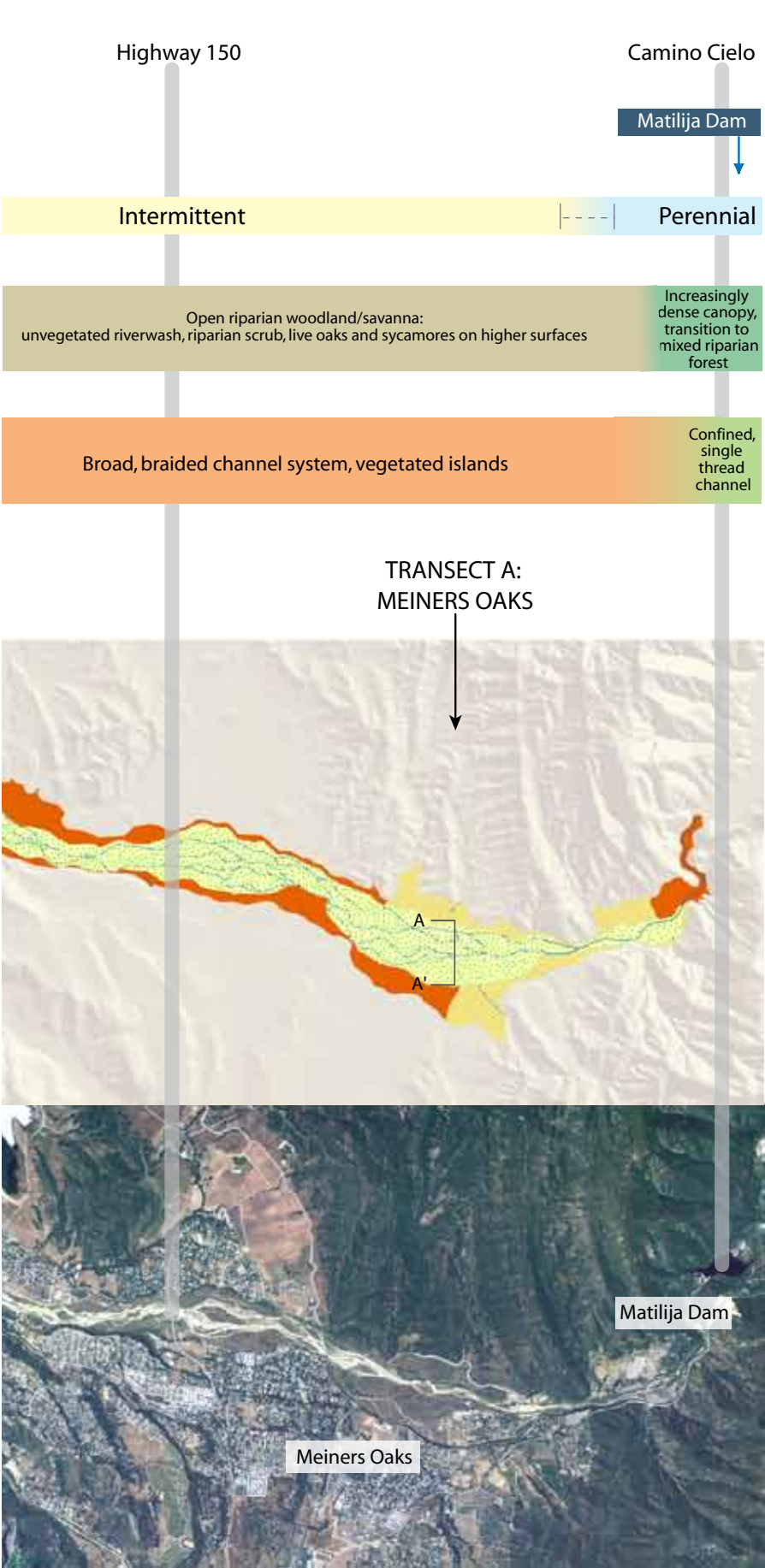
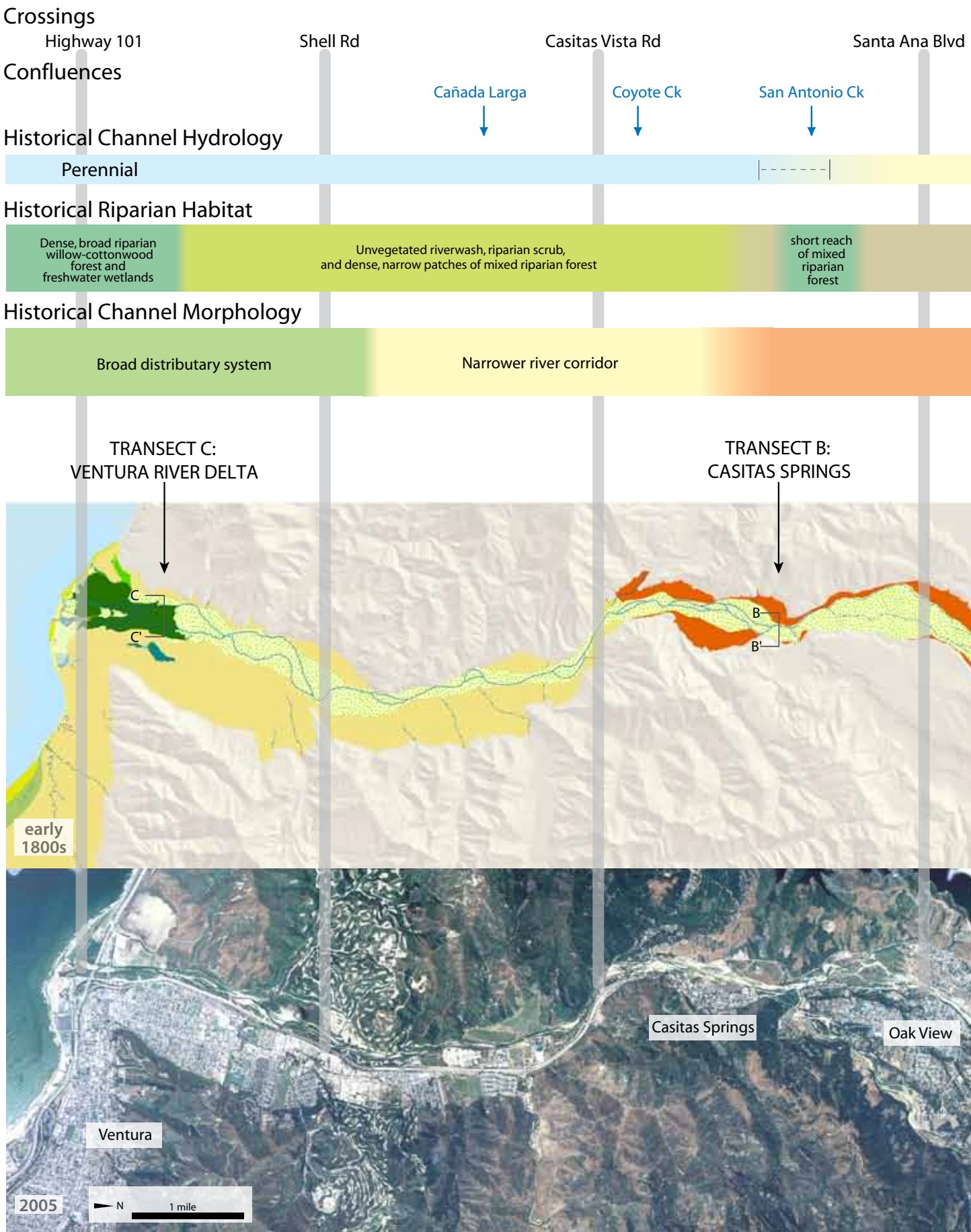
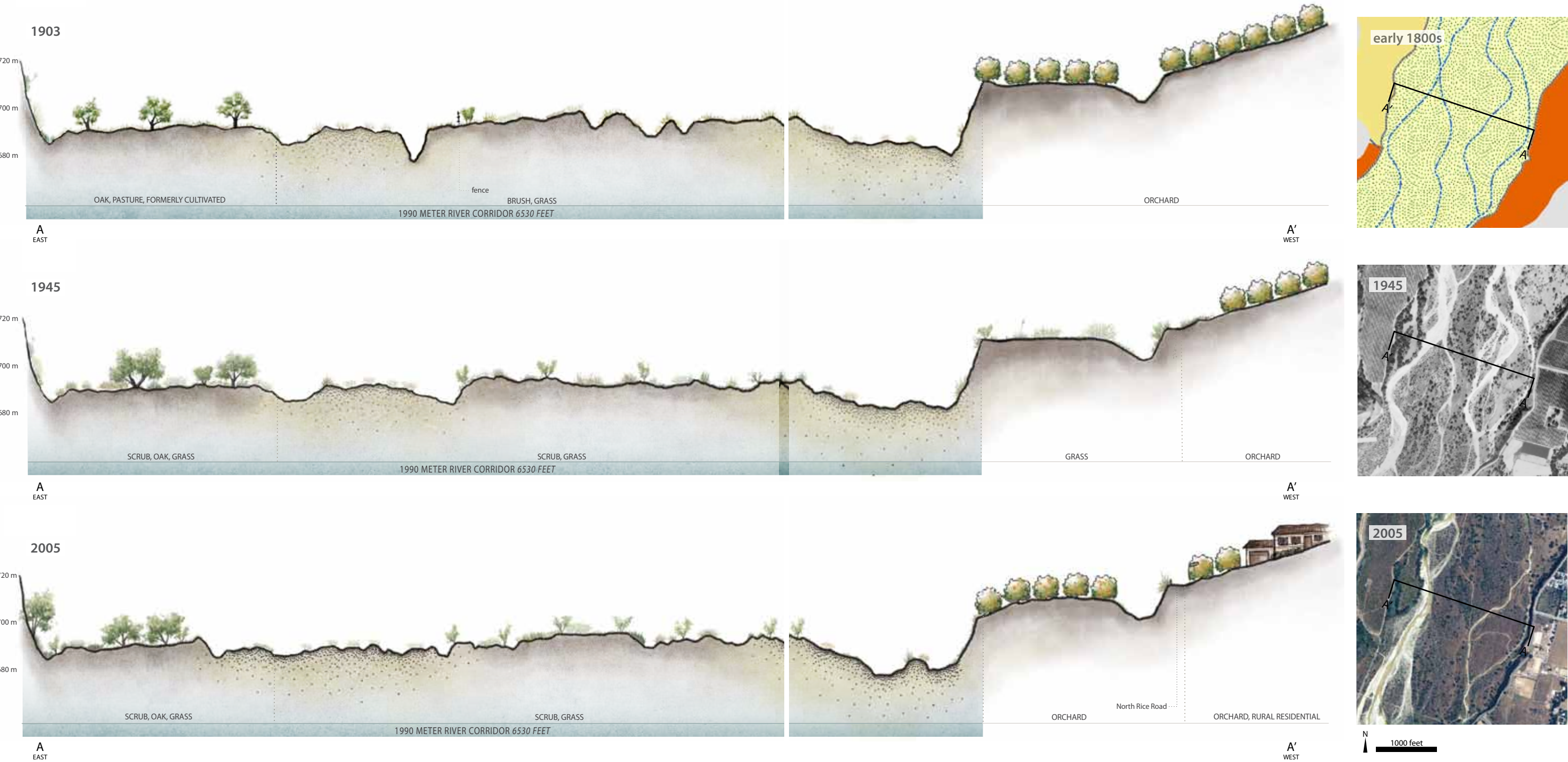


Figure 4.22. Historical characteristics of the Ventura River by reach. This diagram shows how fundamental attributes of the Ventura River varied by reach. The close relationships evident in this diagram between riverine hydrology, ecology, and morphology indicate the interrelated nature of these characteristics. Transitions between reaches were gradual, with variable locations through time. The locations of the three transects (following pages) are also indicated here.

MEINERS OAKS REACH

This reach is located near the town of Meiners Oaks, downstream from where the river exits its canyon and spreads out across the upper Ventura River valley. The area was historically characterized by a broad, braided channel with intermittent flow. Two maps from the turn of the century (1903) record the detailed vegetation (oaks, scrub, and grasses), topography, and braided channel patterns for this reach. At this time there were already multiple early uses of the river; the surveyors recorded orchards and cattle fences crossing the stream and describe in-channel areas as lands formerly used for grazing and cultivation.

By 1945, some of the orchards had been moved away from the river, though the overall character appears largely unchanged in the historical aerial. The same is true in 2005. This area is now part of the Ventura River/Rancho El Nido Preserve.



CASITAS REACH

This cross section is located between the present day towns of Oak View and Casitas Springs immediately downstream of the confluence with San Antonio Creek. The toes of two hills narrow the valley here, pinching the river slightly and narrowing the river corridor.

On August 3 and 4, 1877, surveyor W.H. Norway walked this transect; his survey forms the basis of the earliest cross section. Norway described the active channel as “riverwash” 460 feet wide, with a low-flow channel 16 feet wide carrying summer water toward the ocean. (This is especially notable given that 1877 was a severe drought year in the region.) On the eastern side of the river between the active channel and the hills, he noted “heavy oak & sycamore timber” on the “bottomland” surface. He also documented early modifications, including the wagon road connecting Ventura and Ojai and paralleling the river on the western side, and a fence separating agricultural fields from the river on the west bank.

Surprisingly, aerial photos from 1945 show evidently little change in riparian composition and river corridor extent from the snapshot provided by Norway in the late 1870s. The wagon road route remained, replaced by a branch line of the Southern Pacific Railroad. Broad, dense riparian forest still characterized the eastern bank. The most severe modifications occurred in the second half of the 20th century, when a levee on the west bank was constructed and the wagon road remnant transformed into several highways, including Highway 33 and the Ojai Valley Trail Road. Significant riparian forest (willows near the channel, and oaks and sycamores on the eastern floodplain) remains, though it is bisected by the Ojai Valley Trail and Highway 33.

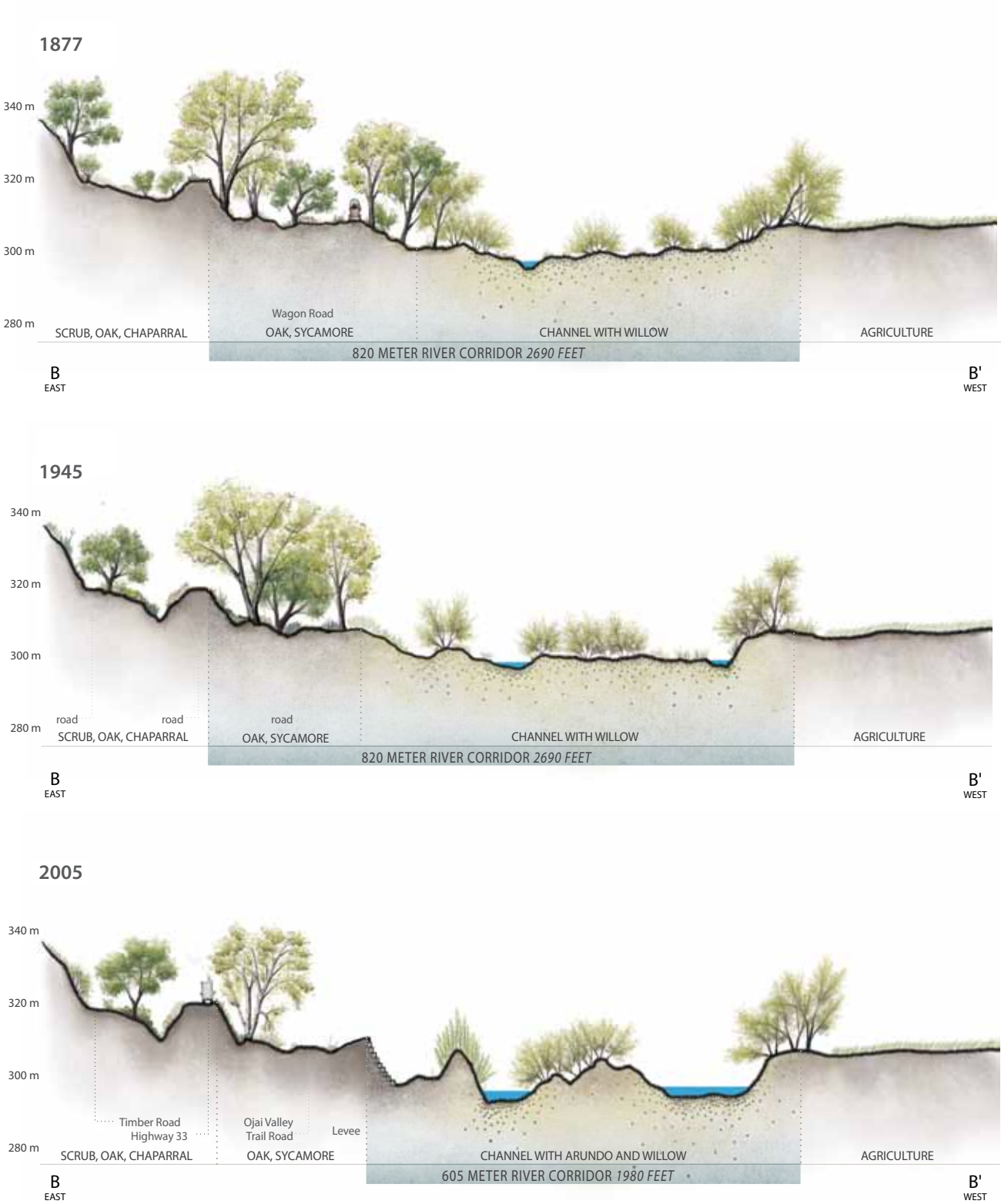
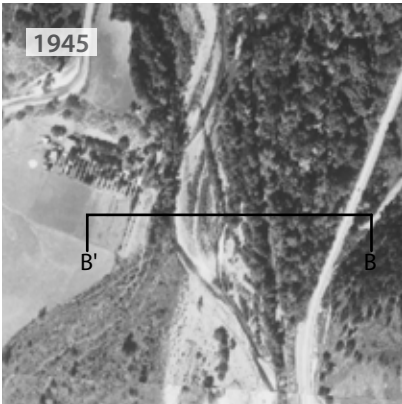
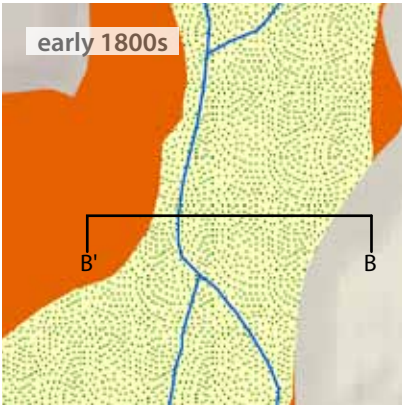
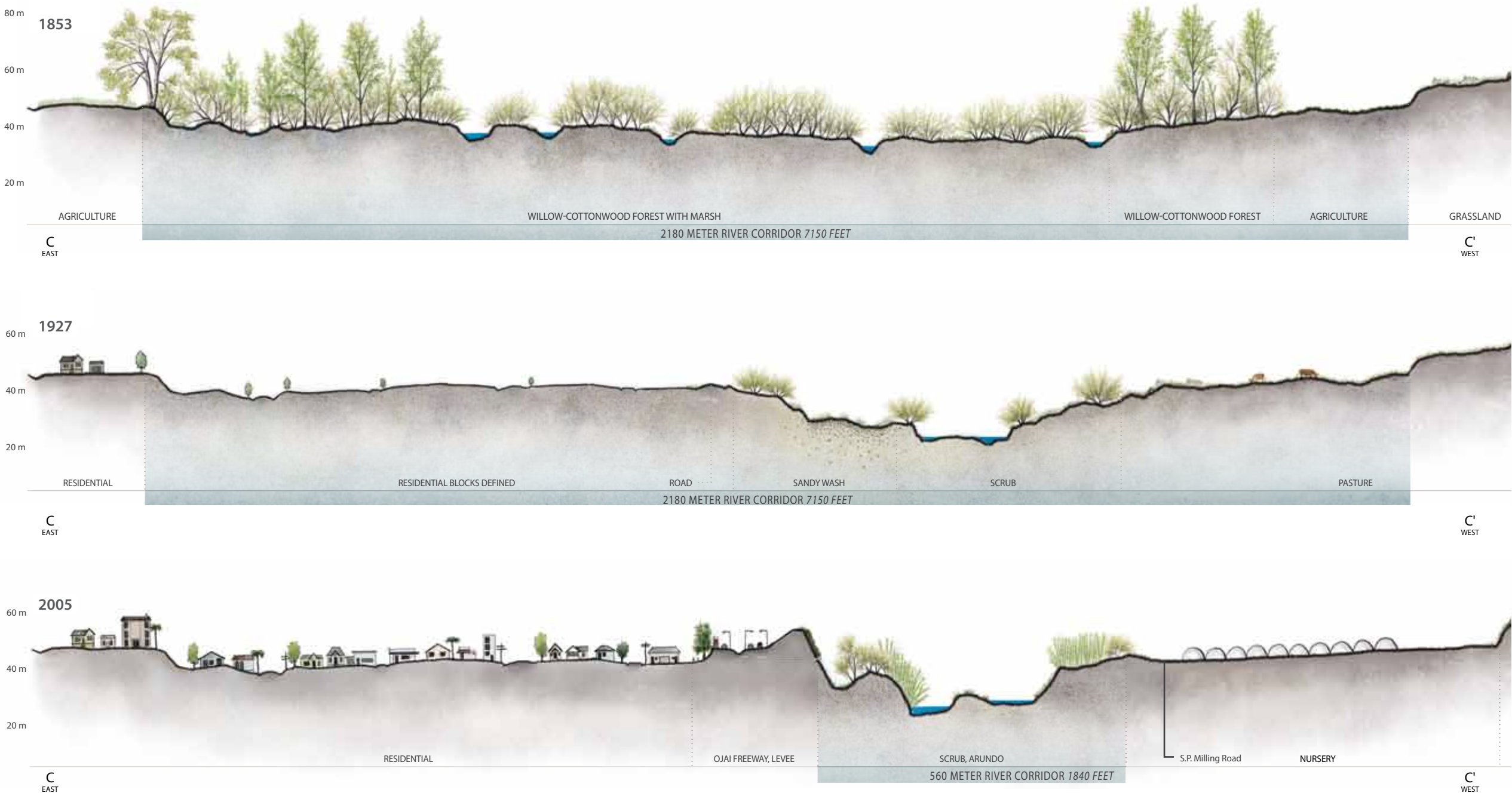


Fig. 4.24. Historical cross-sections at Casitas, 1877-2005. This series of cross-sections shows the Ventura River south of the San Antonio Creek confluence. The transect is in a reach with perennial flow, a relatively narrow river corridor (in comparison to other reaches of the river), and historically abundant live oak and sycamore. Like the Meiners Oaks reach to the north, this reach has retained many of its historical characteristics. Cross-sections are drawn with 5x vertical exaggeration. (Norway 1877; USDA 1945, courtesy of the UC Santa Barbara Map and Imagery Library; USDA 2005. Cross-sections produced by Jen Natali)

VENTURA RIVER DELTA

This cross section captures the dramatic changes over time at the mouth of the Ventura River, about ½ mile upstream of the current Highway 101 crossing. The T-sheet for this area, surveyed in summer 1855, depicts a broad (over 1.2 miles wide) river corridor dominated by interconnecting distributary channels and dense riparian forest. This is corroborated by a GLO survey conducted two years earlier in October 1853, when surveyor Robert Norris noted crossing four channels in the midst of what he termed a “willow swamp.” Grassland and some early cultivation bounded the river in the “first rate land in bottom.” The 1870 T-sheet resurvey confirms the continued presence of the riparian forest and marsh through the later 19th century (Greenwell and Forney 1870).

Between 1860 and 1930 the population of the city of San Buenaventura increased more than 18-fold, from around 600 residents to over 11,000. (From 1920 to 1930 alone the population of the city almost tripled; California State Department of Finance 2003.) Riparian forest area had severely decreased by 1927, and residential housing blocks encroached into the floodplain and filled the east side of the valley. The 1927 aerial imagery shows residential blocks arranged in a grid, but no visible houses in the



river corridor. This may be a snapshot of a post-flood period of rebuilding, or it may be the beginning of a rapid urbanization of the lower watershed. By 2005, the city of Ventura had expanded fully into the floodplain of the river, fortified by a levee and bounded by the Ojai Freeway. *Arundo donax* has established on both sides of the narrowed river corridor; it was described as “well established for many miles along the river” as early as 1945 (Henry Pollard, in Ferren et al. 1990). Industrial agriculture and nurseries have replaced pasture on the west bank of the river.

Fig. 4.25. Historical cross-sections at the Ventura River mouth, 1853-2005. This time series shows the Ventura River at its mouth, about ½ mile upstream from the Highway 101 bridge. The area was dominated by broad willow-cottonwood forest and shallow, multi-thread distributary channels. By the early 20th century, the floodplain had been converted into a much narrower, leveed channel to make way for northward expansion from the town of Ventura. The earliest cross-section is derived from GLO notes and the mid-19th century T-sheet drawn of the river mouth by the U.S. Coast Survey. Cross-sections are drawn with 5x vertical exaggeration. (Norris 1853, Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration; Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2005. Cross-sections produced by Jen Natali)



SUMMARY OF FINDINGS

The following findings represent some of the significant conclusions drawn from our research and analysis. Combined with an understanding of modern conditions, these findings can support scientists and managers working to identify restoration opportunities in the Ventura River valley. Further comparison with contemporary Ventura River corridor mapping may help identify and quantify changes over time.

1. **The historical Ventura River valley supported a diverse array of natural habitats**, including valley freshwater marsh, grassland, coastal sage scrub, oaks, and sycamores. While we were unable to map the valley floor in detail, our data indicate a broad transition from grassland in the lower valley (Avenue area) to predominantly oaks, sycamores, and scrub above Foster Park to Matilija Dam. As in the Santa Clara River valley, valley oaks were not documented anywhere in the valley. Only one wetland feature was documented on the valley floor within the study area (not including Mirror Lake).
2. **Most substantial freshwater wetland complexes occurred within the Ventura River corridor**. Aquatic habitats such as ponds, sloughs, and freshwater marshes were likely found in many perennial reaches, and a suite of saline and brackish aquatic habitats was associated with the estuary at the river mouth.
3. **The Ventura River supported a broad range of riparian species**, including trees such as sycamore, live oak, willow, cottonwood, box elder, alder, and walnut; understory species such as wild grape, wild rose, and wild blackberry; and mulefat and alluvial scrub species.
4. **Unlike on the Santa Clara River, live oaks and sycamores were common within the river corridor of the Ventura River**. While on the Santa Clara River live oaks and sycamores were almost exclusively found bordering the river’s high (outer) bank, both trees were common on benches, bars, and islands in the Ventura River channel, particularly in the intermittent Oak View reach.
5. **The Ventura River mouth has shifted location numerous times over the past several hundred years**, from the hills west of the river mouth to Figueroa Street in Ventura. Many of these former river mouth areas are still susceptible to flooding. A brackish lagoon, formerly at the site of what is now the Derby Club across from Seaside Park, marked the route of one of these former river mouths.
6. **The Ventura River was generally perennial for much of its length**. The uppermost reach (below the present-day location of Matilija Dam) consistently supported year-round surface water, as did the lower half of the river (below the San Antonio Creek confluence). In contrast, the middle reach, through the western Ojai Valley and downstream of Oak View, was typically dry during the summer. The precise extent and location of summer water fluctuated in response to annual variations in rainfall and runoff.

Management Implications

- **Restoration of historical riparian habitats that have been degraded or eliminated should be considered**. Despite extensive modification, the Ventura River has retained significant habitat features, such as willow-cottonwood riparian forest remnants on the Ventura River delta and alluvial scrub in the intermittent reach near Oak View. Preservation of remnants such as these, which could serve as nodes for river restoration, is an important component of maintaining the ecological diversity of the river.
- **Riparian restoration goals should be reach-specific**. Each of the three reaches of the Ventura River we examined were characterized by different patterns of flow and riparian vegetation, providing valuable information on potential restoration targets that may be realistic for a given reach.
- **Maintaining the hydrologic heterogeneity of the Ventura River is an essential component of conserving ecological diversity**. Groundwater availability (and by extension, summer flow) is clearly a primary driver in the distribution and composition of riparian habitat.



Fig. 4.26. Ventura River at the Rancho El Nido Preserve, February 2011.

5 • OXNARD PLAIN AND CALLEGUAS CREEK



In time we went down a long, steep hill [Conejo Grade], then across a wide valley that supported a rank growth of vegetation, and came to a Mission called San Buena Ventura (good luck).

— MANLY 1894

Introduction

At first glance the Oxnard Plain appears to be an unvarying, homogeneous plain with relatively little ecological variation between expanding cities and intensive agriculture. These changes in land use mask its underlying complexity, however. In recent times the plain exhibited a complex mosaic of habitats and channels, remnants of which are still evident today.

What is now called the Oxnard Plain was known by many other names before the town of Oxnard was founded in 1898. Many early travelers did not refer to it by name, instead considering it to be the westernmost portion of the Santa Clara River valley and referring to it only as “the plain” (Crespí 1769, in Crespí and Brown 2001; Bryant 1848; Geological Survey of California 1865; Brewer [1930]1974). Those that did name the plain called it the Saticoy Plain (Hilgard 1884; the Santa Clara River was also sometimes called the Saticoy River) or the Hueneme Plain (Diller 1915).

The Oxnard Plain is a remarkably flat (under 1% slope), broad, surface, with 111 square miles sloping very gently from the hills to the coastline. With further examination, the plain reveals subtle variations in topography, soils, and hydrology that supported diverse natural habitats (fig. 5.2). We discuss these overarching factors broadly below.

First, variations in the concentration of soil salts, from both tidal flows and seasonal evaporation, created patterns of saline tidal and alkaline upland habitats that covered a large portion (43%) of the plain. The extent of alkali influence stretched far inland, following topographic lows to the west of the Camarillo Hills and near the Calleguas Creek/Revolon Slough drainages (see fig. 5.10).

Second, prominent springs related to geologic contacts, topographic depressions, and artesian conditions created zones of freshwater influence on the plain. Since relatively few watercourses traversed the Oxnard Plain, these were important sources for early settlers. On the eastern plain, lakes, wetlands, and springs in foothill valleys east of Calleguas and Conejo creeks provided a dominant freshwater influence (in addition to the creek itself). On the western portion of the plain, the presence of artesian water,

Fig. 5.1. Simomo (Spring Hill), looking west across the Oxnard Plain (opposite page). This picture, taken in 1932 as part of ethnographer J. P. Harrington's research on the Chumash, shows the edge of a small hill at what was formerly a Chumash village site. The site was well known for its flowing springs. It is now on the Broome Ranch. Note prickly pear cactus (*Opuntia* sp.) on hill in foreground. (Harrington 1932, Courtesy of the Smithsonian Institution)

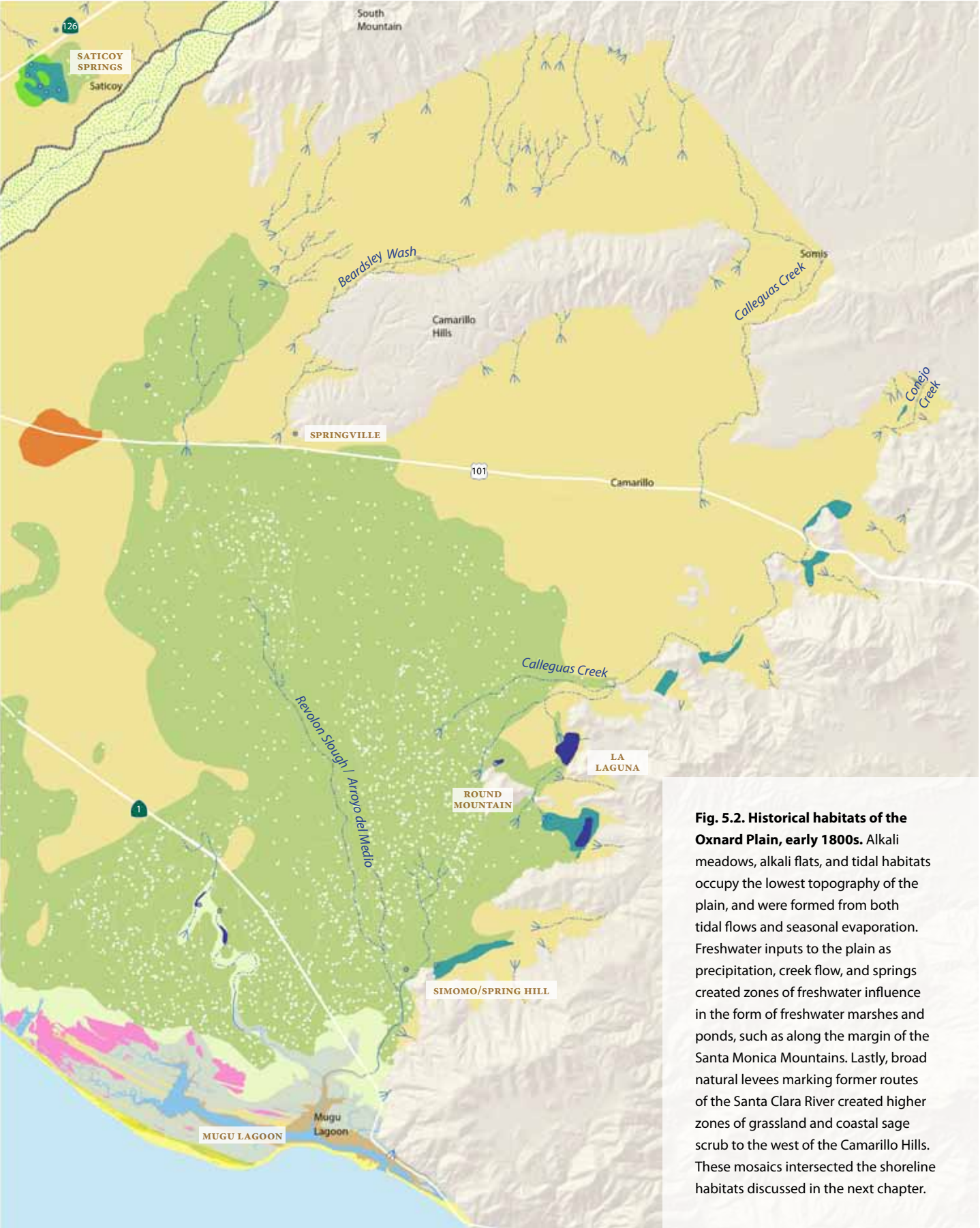


Fig. 5.2. Historical habitats of the Oxnard Plain, early 1800s. Alkali meadows, alkali flats, and tidal habitats occupy the lowest topography of the plain, and were formed from both tidal flows and seasonal evaporation. Freshwater inputs to the plain as precipitation, creek flow, and springs created zones of freshwater influence in the form of freshwater marshes and ponds, such as along the margin of the Santa Monica Mountains. Lastly, broad natural levees marking former routes of the Santa Clara River created higher zones of grassland and coastal sage scrub to the west of the Camarillo Hills. These mosaics intersected the shoreline habitats discussed in the next chapter.

along with surface water accumulations in topographic depressions, was an important source of fresh water for 19th century farmers and settlers on the plain.

Much of the Oxnard Plain was subject to artesian conditions, even well into the 20th century (fig. 5.3; Schuyler 1900, Lippincott ca. 1930; see page 38). Long-time residents recalled that “in the old days the water level was right at the surface” on the central Oxnard Plain, an aspect of the plain’s hydrology that manifested as springs, ponds and marshes, and later in the successful development of artesian wells (Bloom 1959). Even in areas outside the artesian zone, abundant water was recorded just below the surface in many places; a GLO surveyor recorded that in March 1874 in the area around the Camarillo Hills there was “no running water but there is a

Fig. 5.3. Extent of artesian conditions, 1900 (in purple) and ca.1930 (in yellow). Though both are somewhat coarse delineations, they do suggest some shrinking of the artesian zone in the first quarter of the 20th century. (Schuyler 1900 and Lippincott ca. 1930, courtesy of the Water Resources Collections and Archives)



plenty by digging” (Craven 1874a). Surveyor George Tolman (1873) made a similar observation in May 1873 regarding the same region, noting that there was “no running water, but good water to be had by digging from 30 to 60 feet.”

Third, the distribution of coarse sediment on the plain reveals aspects of its history, and helped shape its ecology. In particular, lobes of coarse sediment trace former routes of the Santa Clara River across the plain in recent geological time, marking paths of the river to the Mugu Lagoon area and (more recently) to just south of Point Hueneme. This legacy of the Santa Clara River created higher, well drained former natural levees on younger soils that supported a variety of non-alkaline dryland habitats, including grassland, coastal sage scrub, and a few sycamores. In addition, sediment deposited on the eastern plain during floods (as overbank flow and in portions of Calleguas Creek with no well defined channel) shaped the character of the eastern plain.

Few towns were established on the Oxnard Plain prior to the development of the Southern Pacific railroad around the turn of the 20th century; the early settlement patterns that predate the railroad reflect the ecological and hydrologic patterns of the plain described above. Hueneme was formally established in 1870, but an American settlement at the site dates at least to the 1850s (Johnson 1855b). The community was within the Oxnard Plain artesian zone, and was situated at the mouth of the submarine canyon used for shipping agricultural products. (Chumash occupation of the region at Point Hueneme, meaning “sleeping place,” dates even earlier; the site was used by native residents of the Channel Islands as an overnight rest stop during mainland trading expeditions; Applegate 1974.) Springville, a predecessor of Camarillo located at the western edge of the Camarillo Hills, was a farming community situated near a spring whose name clearly identifies the town’s reason for being. Oxnard began as a company town for the sugar beet processing factory, which was built in 1897 to process the beets grown on the region’s extensive alkali meadows. The city of Oxnard itself, however, was built on the non-alkaline, higher (and therefore less likely to flood) alluvium which marked a former route of the Santa Clara River.

Calleguas Creek and other watercourses

The former scarcity of defined channels on the plain, especially in the western half, is striking. Very few substantial watercourses traversed the western plain. On the eastern Oxnard Plain, creeks flowing off the Santa Monica mountains generally did not connect directly into Calleguas Creek, instead spreading out shortly after exiting their canyons onto the valley floor. Defined creeks and sloughs (including Calleguas Creek, Conejo Creek, and Revolon Slough) gave the plain a drainage density of only 1.7 miles of creek per square mile, a figure which has been greatly increased today (fig. 5.4). Instead, water traveled to the ocean through shallow, undefined surface sloughs and swales and through subsurface flow.

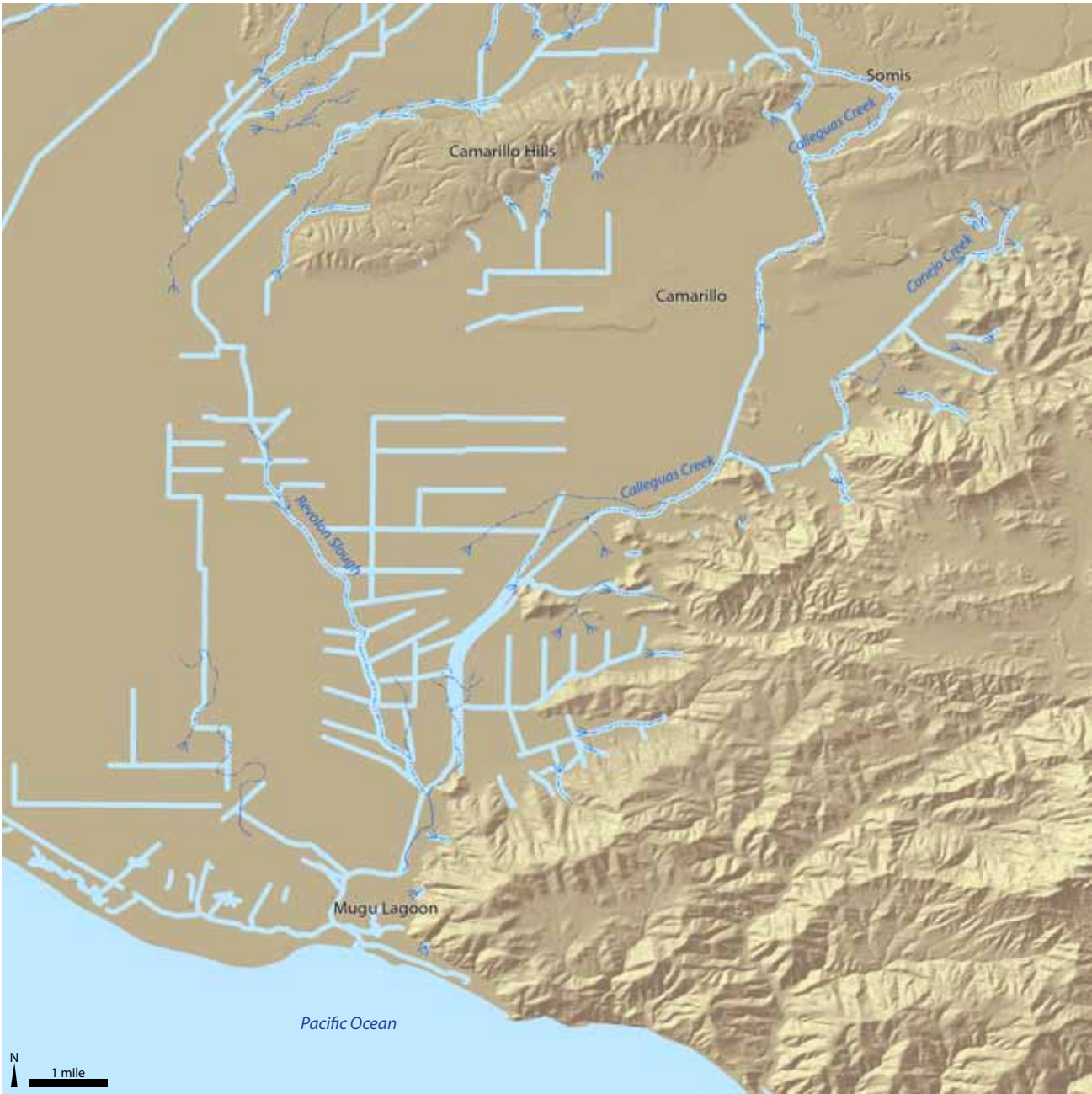


Fig. 5.4. Historical and modern drainage network of the eastern Oxnard Plain, early 1800s and 2005. The creation of new channels, such as drainage and irrigation ditches, has greatly increased the hydrologic connectivity of the eastern plain. Notably, Calleguas Creek now connects to Mugu Lagoon, and Beardsley Wash has been connected to Revolon Slough.

Calleguas Creek

Calleguas Creek drains a watershed of 343 square miles in the eastern portion of the county. Watercourses within the study area that currently drain into Calleguas Creek include Revolon Slough, Conejo Creek, and Arroyo Las Posas (the upstream continuation of Calleguas Creek). As late as the early 1900s, Calleguas Creek was known by many other names (e.g., Arroyo Simi or Guadalupe Creek), though it was most commonly referred to as Calleguas or Las Posas Creek (Norway 1860, Bard 1870a, *Ventura Signal* 1871a, Thompson and West [1883]1961, Holmes and Mesmer 1901b). Calleguas Creek enters the study area near Somis and currently has an outlet to the ocean through Mugu Lagoon.

Calleguas Creek did not maintain a defined channel from Somis to Mugu Lagoon across the Oxnard Plain prior to channelization in the late 19th and early 20th centuries. Though this has been widely recognized by researchers and managers in the watershed, little concrete evidence has emerged defining the date of early channelization efforts. The date most often suggested is 1884, though no direct evidence is cited (Steffen 1982, Onuf 1987, Swanson 1994, USACE 2000). Calleguas Creek Watershed Management Plan (Unknown 2004) states that Calleguas Creek was connected to Conejo Creek by 1889, though again no citation is given.

In addition to ambiguity surrounding the date of early modifications, no consensus has emerged regarding the location of the original terminus of the creek. The Calleguas Creek Watershed Management Plan states that no channel existed in the mid-1800s as far north as Camarillo, but provides no reference. One report (CH2MHill 2010) says it never reaches the ocean, but does not specify location of distributary.

Our findings are largely consistent with these statements. Unfortunately, we were also unable to find direct evidence of the timing of 19th century channelization projects. Attempts to pin down the precise date of channelization are complicated by contradictions in early maps: for example, some maps drawn at a coarse scale show a generalized, meandering channel through this area (Norway 1860, Hare 1875), while others show conflicting depictions of the creek despite similar survey dates (such as the soils map and geological maps surveyed in the same year; Holmes and Mesmer 1901b, USGS 1904). In addition, early ditching efforts were undoubtedly repeatedly washed out during floods, compounding the mapping confusion.

However, historical maps and textual evidence clearly support the early discontinuous nature of the creek, and its subsequent channelization (fig. 5.5). These sources indicate that Calleguas Creek maintained a defined channel to around the Highway 101 crossing, then emerged again (possibly more associated with the Conejo Creek drainage) at the current confluence of Calleguas and Conejo creeks. The creek maintained a defined channel for a short distance (approximately 2.5 miles) before terminating in a lagoon and distributary channels north of Round Mountain and CSU Channel Islands (see page 186). GLO surveyors crossing the creek recorded widths of approximately 165-230 feet at a point along the creek north of Highway 101 (east of the intersection of Highway 34 and Las Posas Road in Camarillo; Tolman 1873), and about 20-30 feet for the southern articulation of the



Fig. 5.5. Prior to channelization, Calleguas Creek maintained a defined channel only above Highway 101 (a) and for a few miles above CSU Channel Islands (labeled here at (b)). Note also the freshwater wetlands, ponds, and springs along the foothills on the eastern edge of the Oxnard Plain.

Coastal and Estuarine Habitats

- Tidal Lagoon (mostly open?)
- Tidal Flat
- Tidal Marsh
- High Marsh Transition Zone

Palustrine and Terrestrial Habitat

- Perennial Freshwater Pond
- Valley Freshwater Marsh
- Alkali Meadow
- Alkali Meadow/Flat
- Grassland/Coastal Sage Scrub

Hydrology

- Intermittent or Ephemeral
- Perennial
- Distributary
- Outer River Bank
- Spring

creek near CSU Channel Islands and northeast of the Camrosa storage ponds (Terrell 1861a).

Below Highway 101, Calleguas Creek spread into a broad, sandy wash with no defined channel until the Conejo Creek confluence. Norway (1860) described the “wash of Las Posas [Calleguas] Creek” near present-day Highway 101, though the wash was so diffuse that surveyor Henry Hancock, traveling east across the plain in June 1854 and crossing the modern alignment of Calleguas Creek near Calleguas Road (¾ mile south of Highway 101), did not mention the creek, instead noting only that there he crossed a mile-long transect of dense chaparral near where the creek runs today (Hancock 1854). An early soils map and aerial photography of this area also support the absence of a defined channel; as late as 1927 patterns of multiple routes of overflow are still visible (Nelson et al. 1917, Fairchild Aerial Surveys 1927; fig. 5.6).

South of Round Mountain, Calleguas Creek was seasonally connected to Mugu Lagoon through subsurface flow, overland flow during floods, and multiple discontinuous sloughs, swales and wetlands draining into Revolon Slough. Lugo (1855) described the connection between the lake at the terminus of Calleguas Creek and Mugu Lagoon: “In the dry season of the year, it [the lake] is very small, in the rainy season it extends down to the beach where it has an outlet” (Lugo 1855). This description is corroborated by early surveyors, who described what is now Calleguas Creek near Laguna Road only as “overflowed ground” (Terrell 1861a, Thompson 1867). The distributary channel network below the creek’s terminus is also captured by an early GLO survey, which crossed one of these shallow swales six feet wide and described it using the Southern term “bayou,” implying a marsh channel with slow-moving water (Washington 1853). Other overflow channels are visible on early aerial photography (Fairchild Aerial Surveys 1927, USDA 1938).

While some early maps show Calleguas Creek having a defined channel connecting it to Mugu Lagoon (e.g., Bard 1870b, Reed ca. 1871), a literal interpretation of these maps is not supported by other textual, aerial, and cartographic evidence. Rather, these maps were likely depicting the hydrologic connection between the creek and the lagoon, which would have been connected though swales and overland flow during wet weather. Other, more detailed maps show Calleguas Creek terminating before reaching Mugu Lagoon (e.g., Terrell 1861a, Holmes and Mesmer 1901b). Two maps produced in the early 1900s (1917 and 1919) even differ on the location of Calleguas Creek south of Round Mountain, unusual for such relatively late sources and suggesting the absence of a distinct, defined channel even then (Nelson et al. 1917, Petit 1919).

The lack of a defined channel meant that during major floods, water (and sediment) would spread out over large areas of the Oxnard Plain. This was recognized by early farmers, who could often use the fertile sediment to their advantage. During much of the year, however, it appears that

[Arroyo Las Posas] drains a large territory, most of which lies within the survey, but it has no well-defined channel and carries water only during very wet periods. It empties into the ocean through Calleguas Creek, near Mugu Point, and because of its choked channel sometimes causes damage to part of the Oxnard Plains by overflow.

— NELSON ET AL. 1920



Fig. 5.6. Calleguas Creek south of Highway 101, 1927-2005. In 1927 (top left), a dense network of ephemeral distributary channels **a** is visible to the east of the clearly engineered channel of Calleguas Creek **b**, separated by low hills. By 1938 (top right), these channels are no longer visible; the land may have been graded. Agricultural farms occupy the area in 2005 (bottom left). (Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 1938, courtesy of Ventura County; USDA 2005)

Calleguas Creek was dry. Descriptions of Calleguas Creek from the first half of the 20th century describe the creek as almost always dry (Holmes and Mesmer 1901c, Nelson et al. 1920, Gregor 1952). However, there is little information on the hydrologic characteristics of Calleguas Creek before major land and water use modifications (e.g., widespread drilling of artesian wells) occurred. When surveyor Terrell (1861a) crossed Calleguas Creek east of the Camarillo Hills in January 1861, he noted that it was “a dry creek”; surveyor Tolman (1873) noted the same on Calleguas Creek north of Round Mountain in April 1873. These quotes imply that portions of the creek may have even been ephemeral, with flow only after storms. The lack of water in Calleguas Creek was vehemently asserted in a letter written to the *Pacific Rural Press* from a county resident in 1877. In response to the

The silt loam on the Calleguas Ranch receives a fresh coating every year by the floods from Arroyo Santa Rosa [Conejo Creek].

— HOLMES AND MESMER 1901C

WERE THERE BARRANCAS IN VENTURA COUNTY BEFORE THERE WERE CATTLE?

On our way we came to several of those large, deep ravines, commonly called in this country 'barancas [sic],' and of which the timid have a special dread. The first two are bridged, and also the fourth one; but the third, the deepest, widest and most dangerous of all, is graded.

— VENTURA SIGNAL 1871A

Ventura County has numerous barrancas, particularly north of the Camarillo hills, in Ventura, and between Ventura and Santa Paula. Barrancas, also identified as ravines, gullies, or dry creeks, are channels characterized by steep banks and deep beds. They are often formed during severe storms, when water induces erosion and gully incision. Since barranca formation induced by flooding can be exacerbated by land uses such as deforestation and grazing, the question arises as to whether the barrancas in Ventura County predate the Mission era, particularly with respect to the introduction of grazing sheep and cattle.

Early explorers on the Portolá expedition (1769) do reference features that were likely barrancas. Costansó recorded “a road broken by streams and gullies” (*zanjones* in the original Spanish) between Santa Paula and Sespe creeks (Costansó and Browning 1992). On the same expedition, Crespi described traveling through a “dry creek bed” with its bed “a bit deep down” between Saticoy and Ventura; the Chumash they encountered led the party through the channel as a means of travel (Crespi and Brown 2001).

Historical records point to many deep barrancas present in the 1850s. While these documents do not predate land use impacts, they do predate the substantial flooding of 1861-2 as well as intensive regional agricultural development. In Ventura, Sanjon Barranca and Prince Barranca were both documented on the 1855 T-sheet (Johnson 1855c) and recorded by GLO surveys as “dry gulch” and “dry bed of creek” as early as 1853. To the south, Arundell Barranca and Harmon Barranca were also partially captured by the early T-sheet; Arundell Barranca was recorded as a “deep gulch” (Hancock 1854) and “dry gulch...about 25 feet deep” (Norris 1853) by early GLO surveys. Hancock (1853) also recorded numerous barrancas north of the Camarillo hills, including one 80 feet deep.

The formation of new barrancas is documented by a few historical sources. Mission friar Señán wrote that near Saticoy, a new barranca had formed—“mui [sic] ancho, hondo, y acantilado” (very wide, deep, and steep)—since the “año de los temblores,” the earthquakes of 1812 (Señán and Vitoria 1822). He noted that the barranca had formed from a previously much smaller stream. The *Ventura Free Press* noted new barrancas formed as a result of the flooding of 1914, and implied barranca formation in earlier 19th century floods:

New barrancas in hills. On the crest of the hill back of R.E. Brakey's home there appeared today several breaks in the soil indicating that nature had started some new barrancas; the land has slipped in several places and in years to come future cloudbursts will keep up their erosive work until there will be some topography that does not exist at this time. Our children's children will then say, doubtless, that this or that ravine started one night in January, 1914, in just about the same way as we say that something or other took place in 1884, 1875, or 1867. Verily every day makes a little history or a few changes on the map. (*Ventura Free Press* 1914)

In addition, the 1862 floods were said to have caused gully formation on San Diego County hillslopes; it is likely that similar formation of new features and incision of existing ones also occurred in Ventura County during these floods (Engstrom 1996).

While data are inconclusive, it is likely that at least some barrancas predate heavy grazing impacts, while others would have been formed during subsequent flood events and would have been influenced by these land use changes. Certainly their form was altered during the 20th century: many of the barrancas that today run off South Mountain or the Camarillo Hills and connect into Beardsley Wash and Calleguas Creek, for example, historically ended shortly after leaving their canyons.

Rural Press' assertions that Calleguas Creek and the Santa Clara River dried up due to deforestation, he wrote that “Los [sic] Posas creek rises in a big spring, and there is not a particle of evidence that it has ever averaged a greater flow per annum than it does now” (Bristol 1877).

There are a few recorded instances of wells dug in the dry bed of Calleguas Creek east of Somis and elsewhere on the Las Posas rancho in the 1870s and 1890s, suggesting ample subsurface flow (*Ventura Free Press* 1878c, Schuyler 1890). One traveler made a point to visit the wells sunk in the bed of Arroyo Las Posas in the fall of 1890:

After a delectable lunch, we rode down to the bed of the creek to see the artesian wells. There are several of them within a few rods of each other. (Eames 1890)

Some mention is also made of use of surface water to irrigate in the early spring (*Ventura Free Press* 1877).

Very few data were found addressing riparian characteristics along Calleguas Creek. Almost no trees are recorded by GLO surveyors in the area, with the exception of a cluster of three sycamore trees in the bed of Conejo Creek at the Calleguas Creek confluence (Terrell 1861a).

Conejo Creek

Conejo Creek lost definition only about a mile after entering Pleasant Valley and the Oxnard Plain. Like Calleguas Creek, it also reformed a channel further downslope, less than ½ mile south of the Highway 101 crossing. The mouth of this lower channel connected to the historical head of lower Calleguas Creek, suggesting that lower Calleguas Creek may have had a greater historical connection to Conejo Creek than upper Calleguas.

Revolon Slough

Revolon Slough, also known as Arroyo del Medio (“creek of the middle”; Norway 1860), was one of the few natural drainages on the Oxnard Plain between Calleguas Creek and the Santa Clara River. Revolon Slough had its source just below the modern intersection of East Fifth Street and Pleasant Valley Road east of Oxnard (Norway 1860, USGS 1904), and drained into the sloughs above Mugu Lagoon (fig. 5.7).

Revolon Slough was notable as a former course of the Santa Clara River (see page 71) and as the predominant watercourse draining the central Oxnard Plain. While the slough ran through the heart of the region's alkali meadows, the natural levees to either side of the slough were not affected by alkalinity, created what Holmes and Mesmer (1901c) called “an oasis in the broad alkali flat.” Farmers took advantage of the slough to drain and flush strongly alkaline lands. Over time, an extensive drainage network was created, connecting Calleguas Creek and (much later) Beardsley Wash into Revolon Slough and providing a direct outlet to the ocean through Mugu Lagoon where there was formerly none. These modifications drastically increased the drainage density of the central Oxnard Plain (see fig. 5.4).

In the spring of 1877, while looking at vast fields of barley perishing before his eyes, Mr. Peter Rice... selected a spot in the then dry bed of the Calleguas Creek and commenced sinking an artesian well. At a depth of about 80 feet a fine flow of water was struck.”

— VENTURA FREE PRESS 1878C

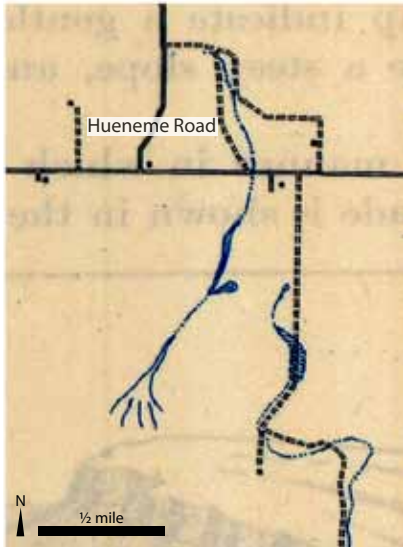


Fig. 5.7. Channels west of Revolon Slough, 1904. Disconnected sloughs west of Revolon Slough carried water from the central Oxnard Plain into Mugu Lagoon. Broader ponded areas are shown within the channel on this early USGS quad. Highway 1 now runs to the north of this complex. A willow thicket currently occupies an undeveloped segment of the meanders at lower right. (USGS 1904, courtesy of California State University Northridge Map Library)

Oxnard Plain habitats

The suite of habitats on the Oxnard Plain varied considerably from those historically found elsewhere in the study area. The majority of non-riverine wetland habitats in study area occurred on the Oxnard Plain and along the shoreline, mostly as seasonally inundated alkali meadow, extensive swaths of which covered most of the eastern (and portions of the western) plain.

Unfortunately, the habitats that dominated the Oxnard Plain are not well documented in the historical record. Many early travelers heading north from Los Angeles came down the Santa Clara River valley before heading to the city of Ventura and up the coast. Those that did cross the Oxnard Plain, such as botanist William Brewer or gold-seeker William Manly, often devoted no more than a sentence or two to the twelve mile journey across the plain, stopping only to elaborate once they reached the Santa Clara River or Ventura city. As a result, evidence for habitats on the plain is fragmentary, and often from a later date than in other regions of the county.

This section describes patterns of dryland and wetland habitat distribution on the Oxnard Plain. For descriptions of shoreline habitats, see the Ventura County Shoreline chapter (page 190).

Dryland Habitats

Though low-lying alkali meadow lands dominated much of the Oxnard Plain, higher, better-drained dryland habitats predominated on the northeastern plain (around the Camarillo Hills) and in broad fingers stretching south from the Santa Clara River, including El Rio and much of present-day Oxnard (see fig. 5.2). These coarser, higher deposits south of the river were built up by the Santa Clara River itself, and mark former courses of the river from a time when its outlet was near Mugu Lagoon or, more recently, Point Hueneme.

Early travelers crossing the Oxnard Plain were struck by the lack of trees across such an extensive area. Explorer Juan Crespi recorded in 1769 that “no trees are to be seen nearby” in the Saticoy area (Crespi and Brown 2001). Seven years later explorer Juan Bautista de Anza and his party, traveling down the Conejo Grade and across the Oxnard Plain, were forced to travel across the entire plain before camping at the Santa Clara River; they noted that it was “impossible to halt before this for lack of firewood” (Bolton et al. 1930). One hundred years later, this deficit was still a prominent aspect of the plain. One newspaper article reported that timber would be taken from the Ventura River to supply residents of “the timberless portion of the lower Santa Clara Valley” (as the Oxnard Plain was considered; *Daily Alta California* 1868). Another article from the same paper and year, describing a trip across the Oxnard Plain west toward the Santa Clara River, provided more detail on the lack of timber on the plain:

Third day journeyed southwesterly ten miles, and struck the sea; thence fifteen more northerly to near the mouth of the Santa Clara, and up the

lower bottom of that stream to camping ground in the enclosure of Mr. Pierpont. The route all the way lay over the Colonia...No spring, nor running water throughout the day’s drive, nor any trees until reaching the vicinity of the Santa Clara, where a considerable body of willow, cotton-wood and some sycamore is growing. (*Daily Alta California* 1868)

These general impressions are corroborated by an 1873 GLO survey, which recorded no timber in the Camarillo area (Tolman 1873).

While the general lack of trees on the plain was clearly documented, unfortunately the actual vegetation of the Oxnard Plain was not well captured by historical sources. The sources that do address the type of vegetation on the plain describe grassy areas interspersed with scrub and, occasionally, sycamores and live oaks.

Many accounts refer in various ways to the grassy nature of the Oxnard Plain. Crespi provides the earliest description of the plain in 1769; upon rounding the end of South Mountain and viewing the plain for the first time, he described it as “a large extent...of very grass-grown flat land, widest in extent from east to west” (Crespi and Brown 2001). William Brewer, traveling across the entire plain as chief botanist of the Geological Survey of California in March 1861, also described “a fine grassy plain, with here and there a gentle green knoll” (Brewer [1930]1974). (GLO surveyor Henry Hancock (1853) also noted these knolls, recording “low sand hills covered with vegetation.”) William Manly (who sometime in the winter of 1849-50 also traversed the plain from the Conejo Grade westward) described it as “a wide valley that supported a rank growth of vegetation” (Manly 1894). These general quotes are corroborated by more site-specific descriptions of “good pasturage” (Hancock 1854), “rich prairie” (Washington 1853), “alternating...belts of grass and mustard” (Hancock 1854), and “finest meadow grass and wild oat” (*Daily Alta California* 1865). It is worth noting, however, that it is unclear whether these early observations recording “grass” were referring to the alkali meadow (much of which would have also appeared “grassy”) or dryland areas. In addition, non-native mustard (*Hirschfeldia incana/Brassica nigra*) and wild oats (*Avena* spp.) had already colonized large portions of the plain (Hancock 1854).

A few sources note areas of scrub, or timber. South of the Camarillo hills (east of the present location of Camarillo), GLO surveyors recorded a large area of scrub, describing “worthless shrubbery,” “scattering chaparral,” “open chaparral,” “chamisal,” and “wild sage” (Hancock 1854; fig. 5.8). Terrell (1861a,b) noted prickly pear cactus (*Opuntia* spp.) on both the eastern and western sides of the plain. The occurrence of trees was even more sparsely mentioned. Costansó, an engineer on the Portolá expedition of 1769, described a “spacious plain, covered with grass and with some trees, extending to the south and west as far as the sea” (Costansó and Browning 1992). GLO surveys record an area a little under a mile wide of “scattering timber” (presumably sycamores and/or live oaks) along what

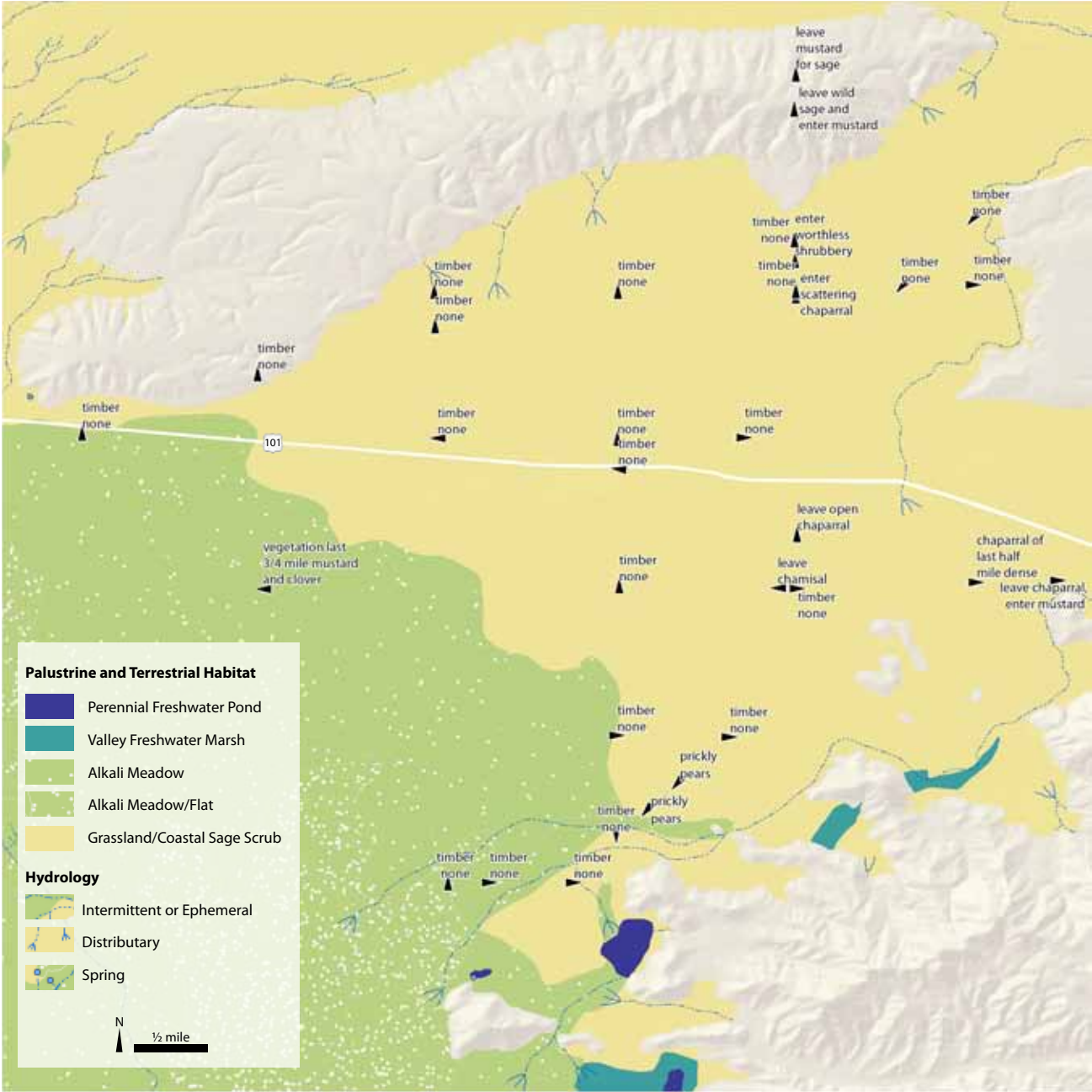


Fig. 5.8. Early evidence for historical vegetation near Camarillo, 1853-1873. General Land Office surveyors noted large areas covered in scrub, while noting no bearing trees. These quotes provide a glimpse into the variation in land cover represented by the grassland/coastal sage scrub habitat class. (The arrows represent direction of travel.) (Hancock 1854, Terrell 1861a, Tolman 1873; courtesy of the Bureau of Land Management)

is now Highway 101 just east of El Rio (Terrell 1861b, Thompson 1867). In the same area, a “grove” (species unspecified) and a few individual sycamore trees were recorded (Stow 1878 in tree layer, Power 1891). In general, however, few trees were found on the plain: the GLO survey notes only record one bearing tree on the plain, a live oak in the scattered timber mentioned above (Hancock 1854). (The only other bearing trees noted on the plain were one sycamore in the bed of Conejo Creek, and two sycamores on the edge of the valley just north of the Conejo Grade.)

On the eastern side of the Oxnard Plain near Camarillo, one sycamore in particular was recognized as an important feature: the Palo Alto (fig. 5.9). The Palo Alto, or tall tree, was the name of a lone sycamore near Camarillo.



Fig. 5.9. Lone sycamore tree on the Oxnard Plain near Camarillo, ca. 1840. This was one of the few large trees on the eastern Oxnard Plain. It was used as a lookout in the 19th century by ranchers looking for their lost cattle. By the early 20th century, it had been cut down. (U.S. District Court ca. 1840e, courtesy of The Bancroft Library, UC Berkeley)

According to one of John P. Harrington’s informants, 19th century ranchers who had lost cattle would “climb this tree to see the cattle they were looking for,” though it had been cut down by the early 20th century (Harrington 1913e). The tree was so well known that it was a key descriptor of the Mission’s area holdings upon their sale in the 1840s: “...the Laguna Hueneme [the lagoon southeast of Hueneme], Palo Alto, the cultivated fields of Santa Paula, [and] the Mission Cañon [Ventura River valley]” (Weber 1978).

The late date, spatial resolution, and sparseness of the historical record preclude drawing conclusions about the nature of vegetation on the plain prior to the establishment of the Mission. The lack of early documentation is compounded by early impacts to the original vegetation of the plain from grazing, suppression of Chumash burning, and the arrival of non-native species such as wild oats and mustard (see page 18). As a result, the data presented here for the most part characterize the Oxnard Plain after substantial modifications; it is not clear which portions of this characterization are relevant to pre-Mission conditions.

Alkali Meadows and Alkali Flats

With the exception of the far eastern plain and slightly higher ground created by old paths of the Santa Clara River, the majority of the Oxnard Plain consisted of salt-affected, seasonally wet or flooded lowlands that could be considered alkali meadows, flats, or alkaline grasslands (fig. 5.10).

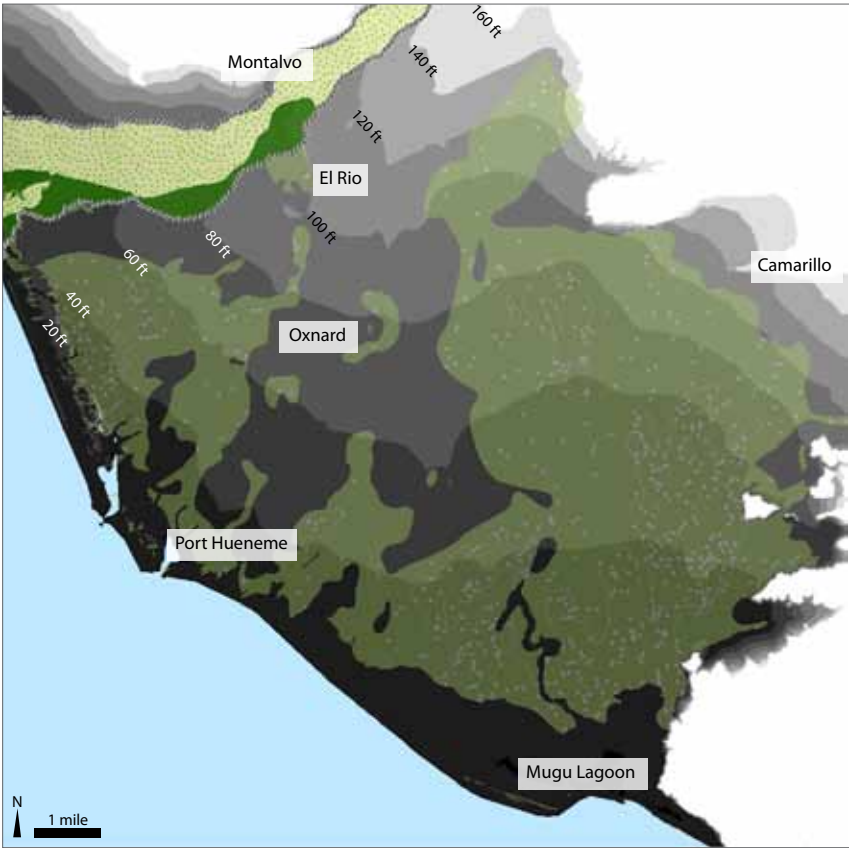


Fig. 5.10. This contour map shows the topography of the Oxnard Plain, with an overlay of mapped historical extent of alkali meadow and alkali meadow/flat. While the entire plain is extremely flat, these contours show lower elevations extending further inland west of the Camarillo Hills, matching the furthest inland extent of alkali meadow, and reflecting the spatial extent of the Santa Clara River’s alluvial fan.

We identified 30,240 acres of the Oxnard Plain with significantly salt-affected soils, approximately 43% of the entire area of the plain. These areas were found almost exclusively on the Oxnard Plain, with a small area also present at Saticoy.

Unlike other seasonally flooded alkaline areas in California (e.g., Soap Lake in the San Francisco Bay Area’s Santa Clara Valley; Grossinger et al. 2008), the vast alkali meadows of the Oxnard Plain were not produced by clay surface soils with limited drainage. Rather, a high water table coupled with subsurface salts, limited subdrainage, and few surface drainages in the central Oxnard Plain created seasonally wet, alkaline conditions. As a result, salts were able to be flushed with successful drainage and irrigation.

Alkali conditions were comprehensively documented by the 1901 and 1917 soils surveys (Holmes and Mesmer 1901a,c; Nelson et al. 1917), which distinguished these areas because of their limited agricultural use. Indicators used by the soil surveys include salt-tolerant plants, surface salt deposits, and areas bare of vegetation—all of which are also indicative of alkali meadow character. These maps were instrumental in our reconstruction of alkali meadow and flat distribution on the plain.

The presence of certain crops (e.g., alfalfa, sugar beets, and asparagus) and poor crop growth were also clues to the presence of alkali, since few crops were able to withstand even relatively low amounts of soil alkalinity. The development of Oxnard as a national center for beet processing affirms the strong alkali influence on the local landscape since beets, while less valuable than other contemporary crops, were one of the few products that be could be successfully grown in alkaline areas (Gregor 1953). Before the sugar factory was established by Pacific Beet Sugar Company in Oxnard in 1898, the main crops grown on the plain were beans (especially lima beans, grown since 1875) and barley (since the 1860s; Gregor 1953). However, the salt-affected soils were often not well adapted to growing barley, often producing “indifferent crops of barley... quite often the barley hay contained such a great amount of salt that stock would not eat it” (Holmes and Mesmer 1901c).

While sugar beets created a profitable industry on much of the previously unfarmable plain, even sugar beets were not salt-adapted enough to successfully grow in some areas: “a great deal of this land is too alkaline even to raise beets, and it will have to be reclaimed before it can produce any useful crop” (Holmes and Mesmer 1901c). These were the most strongly alkaline areas (over 1% alkali), where “alkali weeds and salt grass alone are able to subsist, but do not afford much pasturage” (fig. 5.11; see page 180).

Early descriptions of the Oxnard Plain reinforce this interpretation of the plain as a largely treeless, alkaline lowland. In 1769, Crespi described it as a “large plain of very low, very grass-grown land” and “almost entirely level and very grass-grown soil” (Crespi and Brown 2001). Upon entering the plain near Saticoy, he noted that “no trees are to be seen nearby” except

Descending the ridge, we saw the surveyors of the new railroad working near the base of sandstone cliffs. Turning down a dusty road we passed a salt grass flat, on whose upper border there huddled a singular collection of buildings... This gentleman liked the looks of these bright stretches of salt grass...

— NINETTA EAMES, FALL 1890,
EASTERN OXNARD PLAIN

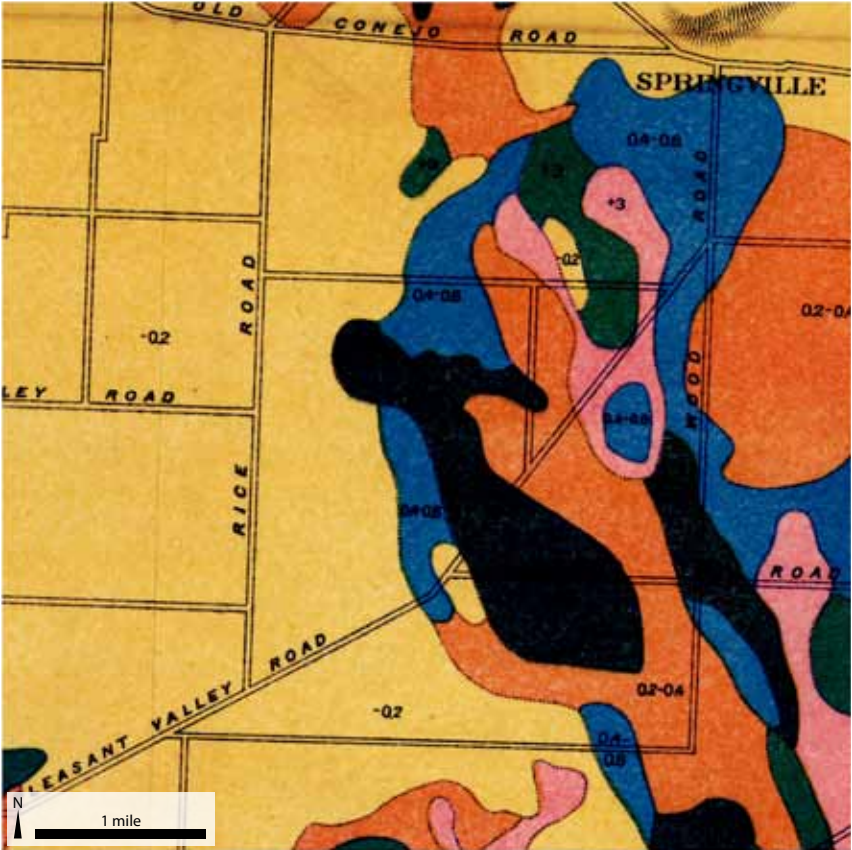


Fig. 5.11. Alkali concentrations on the Oxnard Plain, 1901. Various concentrations of alkali in the first 6 feet of the soil column were measured in the soil near the historical head of Revolon Slough (east of Oxnard and southwest of the Camarillo Hills). Concentrations of less than 0.2% were not considered to be affected by alkali, while concentrations of 0.2%-1% were mapped as alkali meadow. The most strongly alkaline areas, with concentrations over 1%, were described in the soils report as unfarmable areas where “alkali weeds and salt grass alone are able to subsist,” and were mapped as alkali meadow/flat. (Holmes and Mesmer 1901a, courtesy of The Bancroft Library, UC Berkeley)

riparian vegetation along the Santa Clara River near the shore. Brewer ([1930]1974) described the plain in early spring 1861 as “a fine grassy plain, with here and there a gentle green knoll, with a few dry creeks or alkaline ponds.” Notably, no bearing trees were recorded by surveyors in areas mapped as alkaline.

In a few areas, early General Land Office surveyors explicitly note salts present in such high concentrations that it was attributed to tide overflow, though the area was 3.5 miles from the upper extent of tidal influence at Point Mugu (Washington 1853). Some of these areas may represent places flooded by perched conditions along the shoreline (see page 232). In other areas, however, surveyors crossing the alkali meadow do not directly comment on the alkalinity, suggesting that many of these areas were likely well vegetated, possibly with a mix of alkaline and non-alkaline species. It is possible that portions of what we have designated alkali meadow, while chemically alkaline in subsurface soils, did not maintain an ecological expression in the form of saltgrass and other salt-tolerant species.

Alkali meadows are recognized today as a relatively rare native grassland type (Holstein 2000, CNDDDB 2010). The characteristic vegetation was salt grass (*Distichlis spicata*; Holmes and Mesmer 1901c), though other salt-tolerant species such as alkalki goldfields (*Lasthenia ferrisiae*), salt marsh birds beak (*Cordylanthus maritimus* ssp. *maritimus*), spreading alkali weed (*Cressa truxillensis*), shaggyfruit pepperweed (*Lepidium lasiocarpum*), and

DISTINGUISHING ALKALI MEADOWS FROM ALKALI FLATS

In California, early soil surveyors generally attempted to distinguish and map different degrees of alkaline impact to local soils. While their intent was to determine the potential agricultural productivity of the land, their mapping also provides valuable ecological information. Surveys consistently recognize alkali effects on crop selection and productivity at >0.2% total salinity (in the top six feet of soil; e.g., Holmes and Mesmer 1901a,c; Carpenter and Cosby 1939), mapping these areas as alkali affected. On the least strongly-affected alkaline land (0.2-0.6%), beets, barley, and often alfalfa were grown. On more salt-affected land (0.6-1%), “salt grass and plants native to the alkali plains thrive and afford pasturage” (Holmes and Mesmer 1901c). We translate these areas, which typically display a significant proportion of salt-tolerant vegetation and some bare spots, as alkali meadow.

In addition, the early surveys consistently attempt to distinguish areas with more severe alkalinity levels

that effectively preclude agricultural use other than sparse pasture. The associated alkalinity level for these extreme effects varies substantially among regions due to other soil conditions, for example from >0.4% in the Modesto-Turlock area (Sweet et al. 1908) to >1% on the Oxnard Plain (Holmes and Mesmer 1901a,c; Nelson et al. 1917). These higher alkalinity levels, which affect agricultural vegetation, also appear to have ecological significance. Holmes and Mesmer (1901c) describe that on the Oxnard Plain in areas with 1-3% alkali “alkali weeds and salt grass alone are able to subsist, but do not afford much pasturage,” indicating sparse alkali vegetation with substantial bare ground (fig. 5.12). We translate these areas of extreme alkalinity, described as having a greater proportion of bare areas or alkali flats, as alkali meadow/flat. We use this habitat type to note the probable presence of significant seasonally wet hyperhaline flats, as well as other potential ecological differences from the surrounding alkali meadows.



Fig. 5.12. “Alkali flat in the Delta portion of the Ventura area,” ca. 1901. This turn of the century photograph of the Oxnard Plain shows what the soil survey terms “alkali flat,” a region with >1% alkalinity. Some alkali vegetation is shown among substantial bare, cracked ground. (Holmes and Mesmer 1901c)

hairy gumweed (*Grindelia hirsutula*) may have also been present. A GLO surveyor noted “salt weed and salt grass” (Hancock 1854) in an alkali area near Revolon Slough, referring to *Distichlis* and possibly *Cressa truxillensis*. Early botanical specimens found near Oxnard are salt-tolerant species: Davy (1901) recorded saltmarsh bird’s beak (*Cordylanthus maritimus subsp. maritimus*) and Condit (1908) reported spreading alkaliweed (*Cressa truxillensis*) on alkaline soils near Oxnard.

Much of the alkaline-affected area falls within the extent of artesian conditions, as mapped by Schuyler (1900) and Lippincott (ca. 1930), suggesting a high degree of soil moisture. The widespread presence of saltgrass—a strong indicator of near-surface groundwater (Le Bihan 1944)—also reinforces the seasonally wet character of these areas. This is supported in at least one location by GLO surveyors, who described the alkali meadow northwest of Round Mountain as “overflowed ground” in January 1861 and September 1867; it is not clear whether they meant that the land was flooded at the time of survey, or that the land was seasonally flooded (Terrell 1861a, Thompson 1867).

We would expect these alkali flat areas to have an extremely high proportion of salt-tolerant vegetation, but with potentially reduced diversity. For example, Mann et al. (1911) note in the Woodland region of northern California that gumplant (*Grindelia camporum*) and tarweed (*Centromadia pungens*) are limited to the more moderate alkalinity levels. At the tidal marsh margin, these areas can probably be considered equivalent to the “high marsh transition zone” (e.g., Ferren et al. 2007) with a component of euryhaline flats.

Perennial Wetlands

Wetlands occurred in three major places on the Oxnard Plain: tidal wetlands along the coast, freshwater wetlands in side valleys along the eastern side of the valley between Calleguas Creek and the hills, and in patches around Oxnard south of the Santa Clara River. In this section, we discuss the freshwater wetlands of the plain (see page 205 for treatment of coastal wetlands).

In total, we mapped 440 acres of freshwater wetlands and ponds on the Oxnard Plain. Since many features mapped as freshwater wetlands were at the alkali margins, some likely also had brackish components as part of the transition between alkali meadow and non-alkaline areas.

OXNARD AREA WETLANDS Within the alkali meadow, a mosaic of freshwater and brackish ponds, sloughs, and marshes existed in old stream and slough courses and other very low or poorly drained areas. Early travelers on the Oxnard Plain noted alkaline surface water, as did later residents: the Geological Survey of California (1865) remarked that “all the water seen on the plain was alkaline, except that of the Santa Clara River” while Thompson and West ([1883]1961) wrote that “[t]he surface water on the Colonia Rancho [which includes most of the Oxnard Plain] is generally

This alkaline land is poorly drained, water being in most places not more than 10 feet below the surface and at certain seasons of the year much nearer.

— HOLMES AND MESMER 1901C

unfit for household use.” While these are undoubtedly overgeneralizations, they do reflect the general alkaline character of the plain. Brewer (1930) also observed alkaline ponds in the spring of 1861.

However, not all surface water on the Oxnard Plain was brackish. Some freshwater areas existed within the alkaline matrix, often fed by springs or created by pools of rainwater that collected in low areas. Haydock (1971) recalled that waterfowl (geese and ducks) would overwinter in freshwater areas in swales:

The swales scattered over the valley where winter rains collected the fresh water had great attraction for them, especially for the ducks. One of these pools was in the southwest part of the Hill Ranch and covered several acres. A swale on the west side of the boulevard started about three quarters of a mile north of town [Oxnard] and ran through what is now the heart of town down to this pool. In front of the Harvey home just north of town was a smaller pool. Tules were usually to be found in these pools. Ducks frequented these pools at night, and many remained through the day if undisturbed.

The first pool mentioned above by Haydock (located on the southwest part of the Hill Ranch) was also mentioned by Bloom (1959) as a “four or five acre lake...that some years lasted all summer” and that attracted flocks of hundreds of geese. The lake is still visible in oblique aerial photography from circa 1950 as a mottled, darker area (fig. 5.13).

Also of note was Ponom or Ponomo, a pond and marsh north of Oxnard (the second, smaller pool mentioned by Haydock). The pond was noted as early as the 1840s (fig. 5.14), and was described as a “pond of fresh water” (Bard 1869) and a “tule pond” (Bloom 1959). Ponom was also a significant Chumash site, noted by Harrington’s informants as a place with “a ciénega, tular and some sauces” (marsh, tules, and willows; Harrington 1913b). The name “ponom” was reported to mean “hay que cuidar” (one must be careful), because “they had fear that sometime the river of Santa Clara could change its course back to Point Mugu” (Harrington 1986a).

Undoubtedly, there were additional, less well documented wetlands historically present on the plain. In particular, one early map shows a large “sienega [sic]” south of the Santa Clara River on the plain, but without enough precision to map (U.S. District Court ca. 1840e; see fig. 5.14). Another large area that may have been a large wetland or wet meadow was shown on a later map south of the river with a somewhat characteristic wetland symbol, but more information is needed to resolve nature of this feature (Power 1891).

CALLEGUAS WETLANDS In contrast to the rest of the Oxnard Plain, the region immediately surrounding Calleguas and Conejo creeks had a more developed drainage network and contained many more freshwater wetland features. Along the eastern edge of the Oxnard Plain, a high groundwater table coupled with extremely low, flat terrain and a contact between alluvium and Conejo Volcanics extrusions gave rise to a series



Fig. 5.13. Though it appears to be dry at the time of the photo, this dark, oblong, kidney-shaped outline—now in the middle of the city of Oxnard, northeast of the intersection of South Ventura and West Wooley roads—marks the location of the former pool on Hill Ranch. It is still discernible on this ca. 1950 oblique aerial photograph. (Spence Air Photos ca. 1950, courtesy of the Benjamin and Gladys Thomas Air Photo Archives, Spence and Fairchild Collections, UCLA Department of Geography)

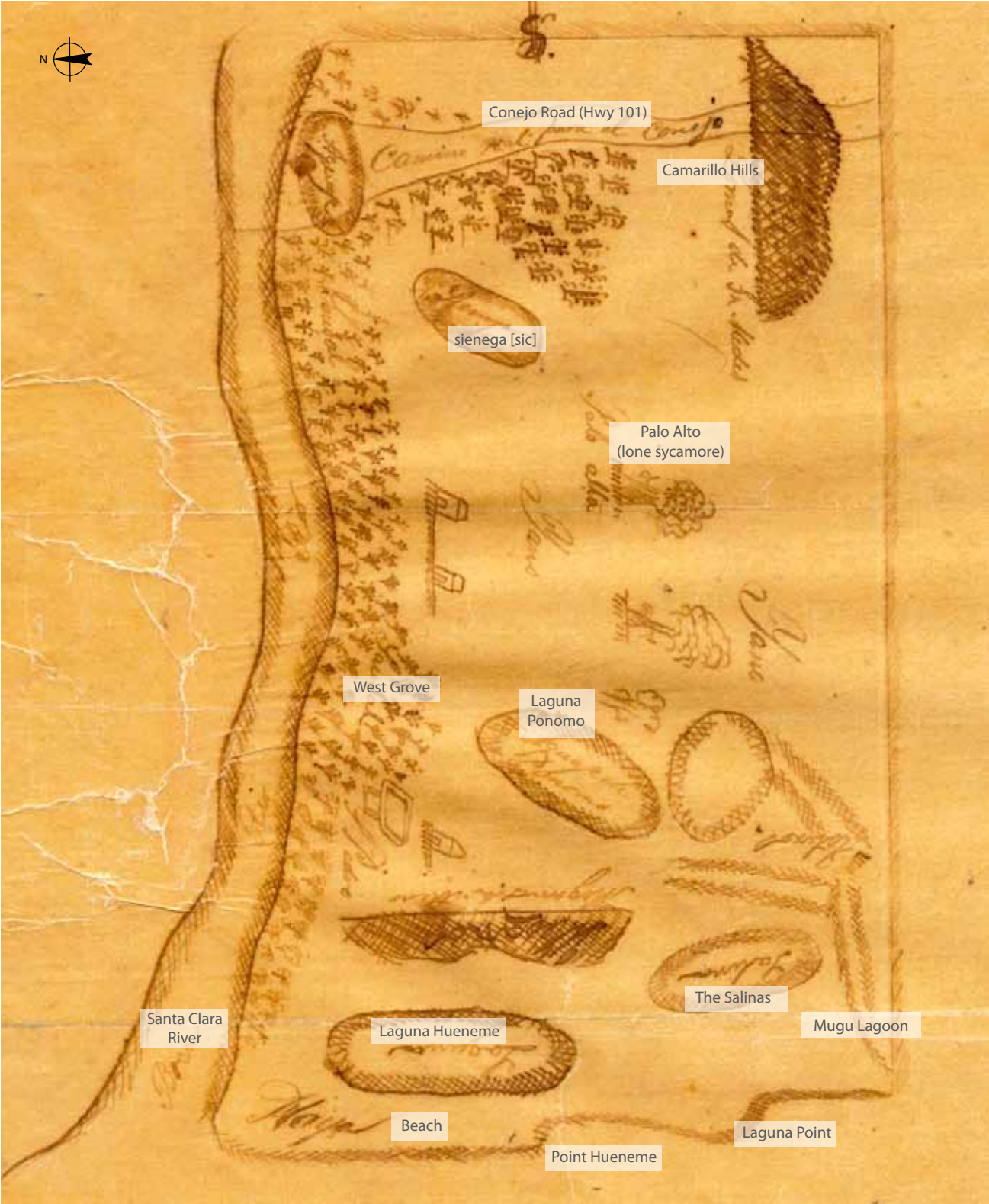


Fig. 5.14. Landmarks of the Oxnard Plain, ca. 1840. This remarkable *diseño* compresses what the cartographer perceived to be the most important features of the deltaic Oxnard Plain into one compact, rectangular drawing. While the distances are inaccurate, the relative position of features drawn on the plain is broadly correct. We were ultimately able to map some of these features, though others—such as the *ciénega* (wetland) south of Highway 101—remain mysterious. Laguna Ponomo is here shown just east of Laguna Hueneme, though later depositions record that the pond is “about five miles due north of the laguna called Hueneme” (Bard 1869). (U.S. District Court ca. 1840e, courtesy of The Bancroft Library, UC Berkeley)

of groundwater-fed seeps, springs, lakes, and marshes along substantial portions of the small foothill valleys of the Calleguas watershed (see fig. 5.5). Many of these springs occurred at the contact between alluvial loams of the valley floor and the older, largely volcanic upland bedrock, and some are likely associated with regional faulting (Tan et al. 2004) and possible impoundment behind alluvial deposits from Calleguas and Conejo creeks. We estimate that this area had about 400 acres of wetlands. Many of these areas served as major cultural landmarks in an otherwise relatively dry, alkaline area, and influenced the location of Chumash and early Spanish/Mexican and American settlements in the area.

Significant areas with springs in this region included Round Mountain (also known as Sat’wiwa or Sierrita de la Laguna; Terrell 1861a, Thompson 1867, Harrington 1913a), the small hill immediately to the north of Mugu Lagoon (not named, but near a village and spring historically called Simo’mo or Big Springs; Bowers 1879 in Benson 1997; Lugo 1855), and the southwestern point of the Camarillo Hills (near the historical location of Springville). Each of these three hills served as landmarks and places of settlement throughout the historical record. The springs at Simo’mo, for example, served as the site of the Chumash village of the same name, while the springs at Round Mountain formed a freshwater lake that gave Guadaluasca Rancho its alternate name (La Laguna, Thompson 1869) and was the site of the grantee’s home (by “the watering place called Guadaluasca”; Lugo 1855). The spring at the nose of the Camarillo Hills was called Las Posas (“the watering holes” or “pools”), and helped name both the American settlement of Springville and the Mexican Rancho, Las Posas:

It [Las Posas Rancho] has only one spring stream of water that of Las Posas which although very abundant is so deep that some labor is necessary to get its water out. Consequently it cannot be hoped that it will serve for irrigation and is only useful as a watering place for cattle. (Carrillo 1833)

Early inhabitants of the Calleguas Creek area used these springs and lakes as water sources for domestic water, crop irrigation, and cattle. The lake at Round Mountain was described as a primary source of water on Guadaluasca Rancho by the grantee (Yorba 1837), and wet foothill valleys on Las Posas Rancho were also used as watering places for cattle (Tico 1834).

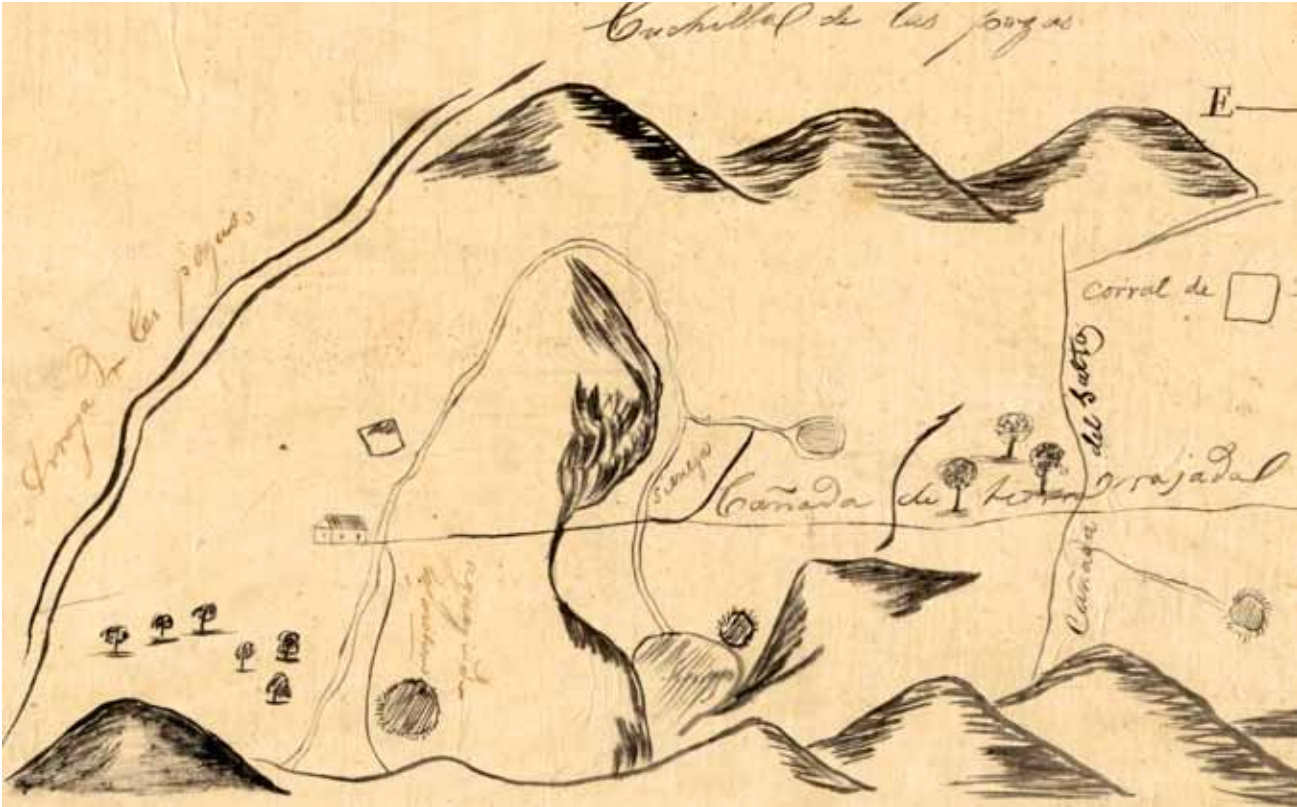
Ponds and wetlands were found in nearly every pocket valley between Mugu Lagoon and Pleasant Valley. Many occurred at the mouths of distributaries, along Conejo Creek, or coincident with springs. On Las Posas Rancho, some of these low valleys were “dependant [sic] on the seasons,” presumably referring to variable utility due to seasonal flooding and the summer dry season (Tico 1834).

This pattern is confirmed by an early *diseño* of Calleguas Rancho (roughly the Pleasant Valley area; U.S. District Court ca. 1840a; fig. 5.15). The map shows a series of wetlands (*sienegas* [sic]) and springs up against the hills east of Calleguas Creek (Arroyo de las Posas). While the *diseño*

A considerable portion of this rancho [Calleguas] has living springs upon it...

— THOMPSON AND WEST [1883]1961

Fig. 5.15. While this ca. 1840s *diseño* is very schematic, it provides a generalized picture of the landscape of springs and wetlands present between Calleguas Creek (“Arroyo de las Pozas”) and the Santa Monica Mountains. It depicts springs (shown as dark circles with small radiating lines) flowing into small creeks and wetlands (labeled “sienega” [sic]). One wetland shown is up against the base of the hills, while the other is just upstream of the confluence of two creeks. (U.S. District Court ca. 1840a, courtesy of The Bancroft Library, UC Berkeley)



is roughly drawn, it does depict the same pattern shown on our habitat map, suggesting that these wetlands and springs were persistent, historical features.

One notable feature was the freshwater lake at the terminus of Calleguas Creek (fig. 5.16). South of the lake, Calleguas Creek ceased to have a defined channel, instead connecting to Mugu Lagoon through a series of swales and wetlands. Guadaluasca Rancho, on which the lake was located, was alternatively known as the Laguna Rancho: “The old Californians familiarly call the ‘Guadaluasca’ the ‘Laguna’ (Thompson 1873, in Thompson 1869). In addition to flow from Calleguas Creek, two springs in the area—one called Guadaluasca—formed the lake (Lugo 1855). The lake was described as the “only considerable watering place” on the

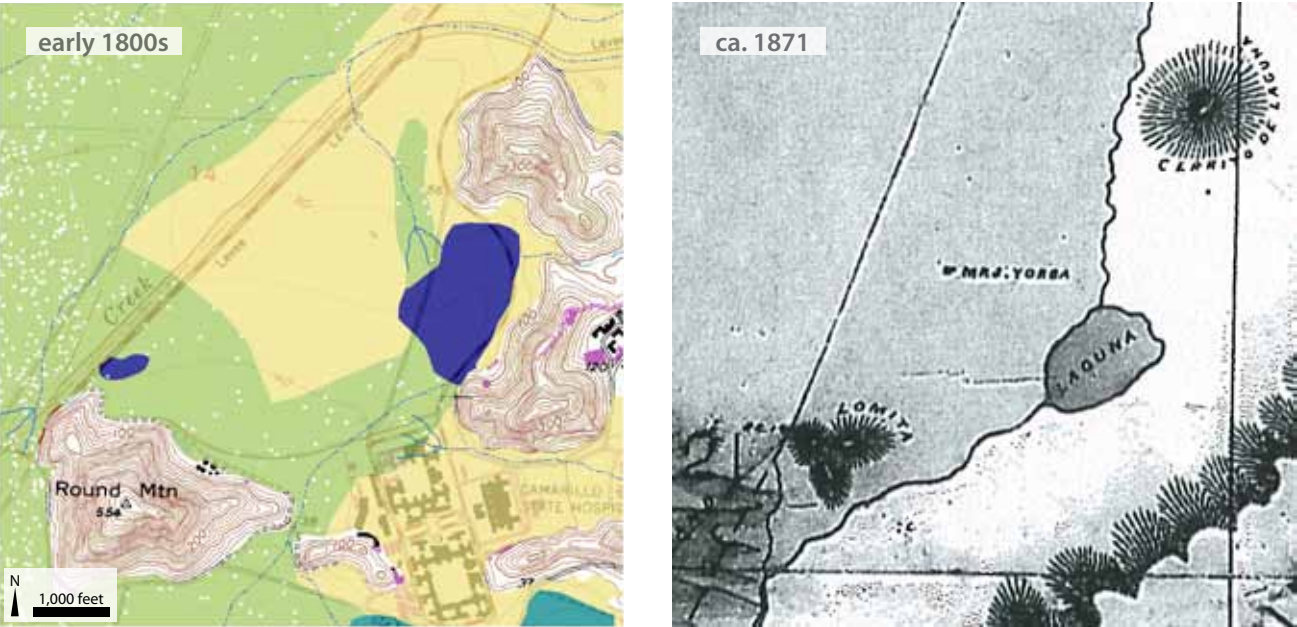


Fig. 5.16. The Laguna. Historically one of the most prominent features on the Oxnard Plain, this lake was the namesake for the Guadaluasca or Laguna Rancho. It was located at the terminus of Calleguas Creek; below the laguna series of shallow sloughs and overflow connected the creek to Mugu Lagoon. Historical mapping of the lagoon is shown at left; an early map of the lake is at right. (Reed ca. 1871, courtesy of The Bancroft Library, UC Berkeley)

Guadaluasca Rancho (Yorba 1837). During the wet season, overflow from the lake ran toward Mugu Lagoon both to the west and to the east of Round Mountain.

Likely as a legacy of this ecological history, some of these former wetland valleys, which were presumably relatively unattractive for development, are now parks and other public uses. Portions of the Camarillo Springs Golf Course and the area upslope of the Camrosa Water District storage ponds, for example, are located on areas mapped as former wetlands. Previous studies have recognized some wetland restoration potential in these areas (David Magney Environmental Consulting 2000), which constitute the greatest concentration of documented freshwater wetlands in the study area.

Palustrine and Terrestrial Habitat

- Perennial Freshwater Pond
- Valley Freshwater Marsh
- Alkali Meadow
- Alkali Meadow/Flat
- Grassland/Coastal Sage Scrub

Hydrology

- Intermittent or Ephemeral
- Distributary

SUMMARY OF FINDINGS

The following findings represent some of the significant conclusions drawn from our research and analysis. Combined with an understanding of modern conditions, these findings can support scientists and managers working to identify restoration opportunities on the Oxnard Plain and in the lower Calleguas Creek watershed.

- 1. **The Oxnard Plain supported a diverse array of habitats**, from the freshwater wetlands and lakes of the lower Calleguas watershed to the alkali meadows and flats, grassland, coastal sage scrub, and chaparral of the broader plain. Just under half of the plain supported alkali meadows and alkali flats, with the remainder mostly covered by grassland and coastal sage scrub.
- 2. **The distribution of these habitats reflected underlying physical processes and characteristics**. Topography, soils, geology, and groundwater availability were primary factors in determining historical habitat distribution.
- 3. **Few trees were found on the Oxnard Plain**. Only a small number of trees were documented on the plain by 19th century observers, mostly sycamores (and one live oak) on the sand and sandy loam soils marking the former route of the Santa Clara River to Point Hueneme.
- 4. **Few streams traversed the Oxnard Plain, particularly in its western portion**. The plain was notable for its extremely low drainage density (only 1.7 miles of creek per square mile). The few creeks and barrancas that did cross the plain were almost exclusively discontinuous, sinking into coarse alluvium or spreading into and across seasonally wet alkaline areas. Large sloughs such as Revolon Slough (a former channel of the Santa Clara River) formed the backbone of drainage for the central plain.
- 5. **Calleguas Creek did not maintain a defined channel across the Oxnard Plain**, instead spreading into a broad wash around present-day Highway 101 before re-emerging downslope near Conejo Creek. The creek terminated in a lake and distributary system near the current location of CSU Channel Islands. Calleguas Creek was hydrologically connected to Mugu Lagoon through shallow sloughs and sheet flow during floods.
- 6. **Calleguas and Conejo creeks were intermittent on the Oxnard Plain**. Though sources describe readily available water located below the surface in both creek beds, they are consistently described as dry for much of the year.
- 7. **Sources document a concentration of perennial freshwater wetlands, ponds, and lakes along the eastern margin of the Oxnard Plain**, particularly east of Conejo and Calleguas creeks. The majority of these wetlands occurred near the base of small alluvial valleys of creeks tributary to Calleguas and Conejo creeks, near contacts between alluvial deposits and the Conejo Volcanics of the western Santa Monica Mountains.

Management Considerations

- **Former wetland locations in the Calleguas Creek watershed offer a number of potentially viable sites that should be considered for restoration**. Many of these sites, still located on agricultural land, may be appropriate locations for future wetland restoration projects.

- **Some of these former wetland locations have already been identified through previous research as potential floodplain restoration sites**. The large freshwater lake at the historical distributary of Calleguas Creek for which the Guadaluca/Laguna Rancho was named coincides with one of the sites identified for potential restoration in the Calleguas Creek Watershed Restoration Plan (David Magney Environmental Consulting 2000), which also includes Calleguas Creek and floodplain north of CSU Channel Islands and the Camrosa Water District facilities. In addition, Magney’s conceptual wetland restoration design for Calleguas Creek at Camarillo Regional Park may have the potential to incorporate historical wetland habitat behind the Camrosa Water District storage ponds (fig. 5.17). Similar opportunities may exist at the site on Conejo Creek at Winding Brook Farm, where additional freshwater wetlands were documented. Future restoration activities at these sites could take advantage of the unique historical and hydrologic aspects of this area in designing floodplain characteristics.
- **Drainage density of the Oxnard Plain has greatly increased** with the construction of artificial drainage networks, creating more direct conduits between ocean and upland. This expansion of the drainage network has implications for contemporary distribution and residence time of water and sediment on the plain and should be considered in creek restoration projects, particularly in constructed reaches not historically present. For example, the historical form of Calleguas Creek helps explain current sedimentation issues downslope of Lewis Road.
- **Physical factors such as topography, soils, geology, and groundwater availability are still primary factors affecting contemporary habitat distribution**. An understanding of how these drivers contributed to historical habitat patterns is an essential component of the success of restoration projects.



Fig. 5.17. Camrosa Water District storage ponds, 2008. The area behind these storage ponds, formerly the site of a freshwater marsh complex, may be a potential location for wetland habitat restoration.

6 • VENTURA COUNTY SHORELINE



*Where the plain meets the eastern mountain
is the Laguna Mugu, with extensive marshes and a low,
narrow sand beach, with a slight tidal opening
as if the [Santa Clara] river may at one time have
emptied here.*

—DAVIDSON 1897

Introduction

Nineteenth century Ventura County exhibited a complex and heterogeneous shoreline, with a variety of habitats and morphologies associated with different estuarine and wetland systems and different formative processes (fig. 6.2). At the Ventura River mouth, willow-cottonwood forest transitioned into a small, intermittently closed lagoon, while a culturally significant beach-dammed freshwater wetland complex occupied a former river mouth to the east. A distinctive seasonal wetland area—the Pierpont lowlands—extended in a broad arc from Ventura to the Santa Clara River mouth, nearly connecting the eastern edge of the Ventura River corridor to the northwestern edge of the Santa Clara River (they were separated by less than one mile). Here sand dunes trapped Santa Clara River floodwaters and valley seepage in a recently prograded portion of the shoreline, creating a large area of seasonally inundated meadow. At the Santa Clara River mouth, willow swamps bordered a small seasonal estuary similar in form and function to the Ventura River delta (and including a freshwater wetland complex, McGrath Lake). To the south, a series of at least nine elongate lagoons—some brackish, some saline—incised the Oxnard Plain shoreline, marking former mouths of the meandering Santa Clara River. Usually blocked from the tides by substantial beaches and dunes, the water source for these lagoons was a varying mix of saline (through dune overwash and seepage) and fresh water (from precipitation, runoff, and springs). As a result, the lagoon complexes supported a gradient of heterogeneous habitats ranging from freshwater to brackish to saline, including vegetated marsh, salt flat, and open water. At the southern edge of the Oxnard Plain, Mugu Lagoon represented by far the largest coastal wetland system in the county, with extensive subtidal, tidal flat, tidal marsh, and salt flat habitat.

Recent research by Grossinger et al. (2011) puts these patterns within a Southern California regional context. The study examined these wetlands in the context of broader Southern California coastal wetlands, drawing conclusions about broad categories of estuarine systems in the region (see Grossinger et al. 2011 for more information). Ventura County historically represented at least three distinct estuarine habitat mosaics or archetypes: the compressed estuaries merging into broad riparian forest associated

Fig. 6.1. Mugu Lagoon from the east, 1923. This oblique aerial image of Mugu Lagoon shows habitats of the eastern arm of Mugu, including tidal flat, salt marsh, and the lagoon itself. The patterns shown bear a striking resemblance to those shown on the T-sheet, surveyed over 50 years earlier. (Harrington 1923a, courtesy of the Smithsonian Institution)

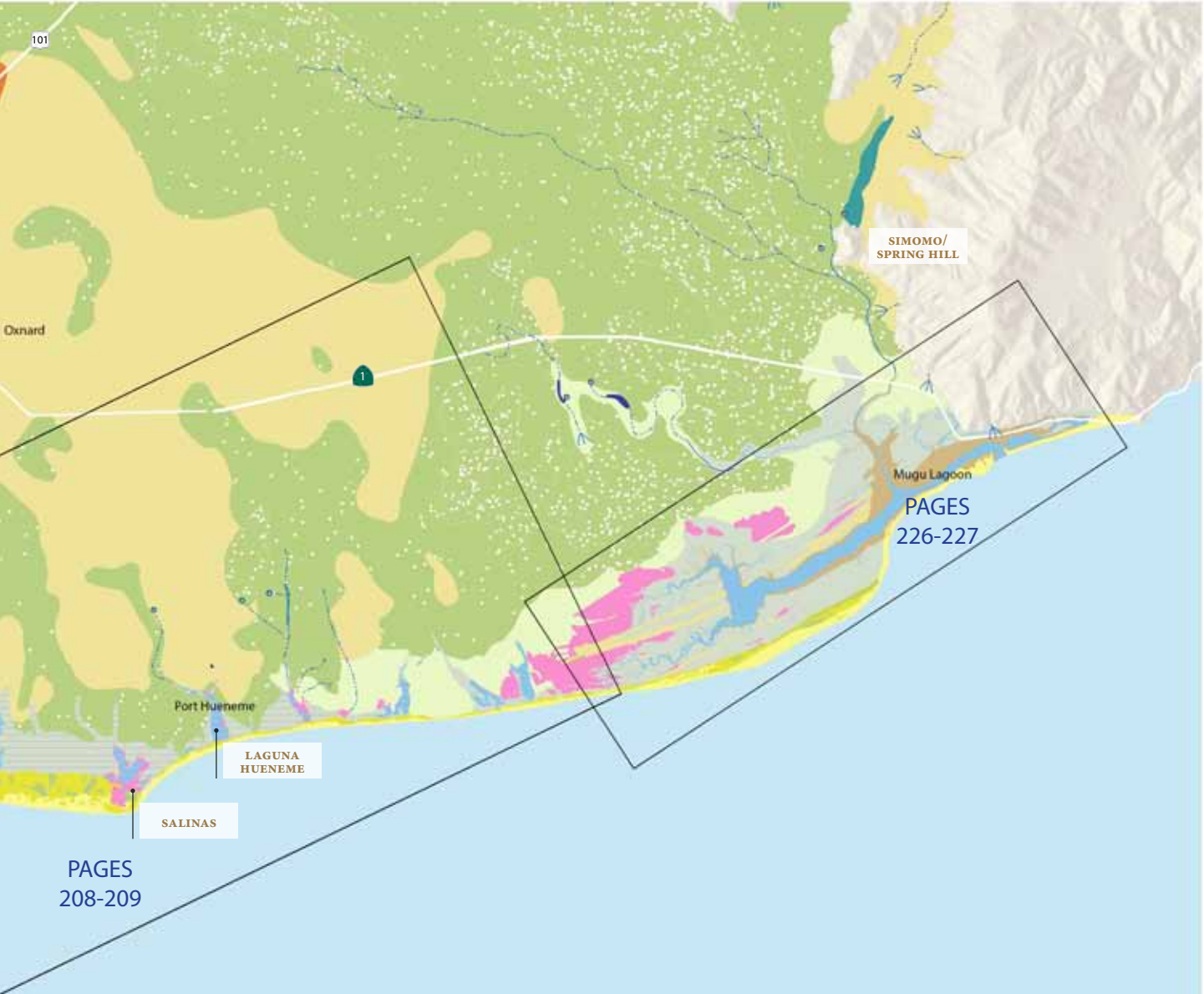


Fig. 6.2. Habitats of the Ventura County shoreline, early 1800s. At least three general types of coastal systems, or coastal archetypes, can be identified along the Ventura shoreline: freshwater-brackish estuaries associated with the Santa Clara and Ventura river mouths, dune-dammed non-tidal lagoon systems (with associated salt/brackish marsh and salt flats) marking former Santa Clara River mouths, and the large coastal wetland system at Point Mugu.

Coastal and Estuarine Habitats

- Ocean
- Beach
- Dune
- Tidal Lagoon (mostly open?)
- Tidal Lagoon (seasonally open)
- Non-Tidal Lagoon
- Tidal Flat
- Tidal Marsh
- Seasonally Tidal Marsh
- Salt/Brackish Marsh
- Salt Flat/Seasonal Pond/Marsh Panne
- High Marsh Transition Zone

Palustrine and Terrestrial Habitat

- Perennial Freshwater Pond
- Valley Freshwater Marsh
- Willow Thicket
- Wet Meadow
- Alkali Meadow
- Alkali Meadow/Flat
- Oaks and Sycamores
- Grassland/Coastal Sage Scrub

Characteristic Riparian Habitat

- Willow-Cottonwood Forested Wetland
- Other In-Channel Riparian
- Hydrology**
 - Intermittent or Ephemeral
 - Perennial
 - Distributary
 - Outer River Bank
 - Spring

with the high-energy Ventura and Santa Clara river mouths and substantial freshwater influences; the distinctive Oxnard plain backbarrier lagoons associated with now-abandoned Santa Clara River mouths; and the large tidal wetland system at Mugu. These environments, exhibiting spatial and temporal variation in vegetation type, extent and duration of open water, salinity, and tidal connection, supported distinct mosaics of native species.

The following chapter provides a historical perspective on the patterns and characteristics of Ventura’s coastal features, including the Ventura River delta, the Santa Clara River mouth, the county’s backbarrier lagoons, and Mugu Lagoon.

Ventura River Delta

The Ventura River and floodplain empty into the ocean west of the city of Ventura. Historically, the estuary consisted of a large willow-cottonwood riparian forest with numerous distribuary channels, a tidal lagoon and tidal flat, salt marsh, high marsh transition zone, and a number of small seasonal ponds within the marsh (fig. 6.3). Similar habitat patterns largely persisted on the T-sheet resurvey (Greenwell and Forney 1870). By the 1933 resurvey, however, most of the estuarine features were no longer depicted, including the former lagoons, marsh, and willow-cottonwood forest (Kelsh 1933a). Only limited trees (labeled “camping grounds in grove,” south of the 1855 extent of forest) and salt marsh are depicted on this later survey.

Apart from the T-sheets, there are limited data available describing the historical character of the Ventura River estuary. Ethnographer John P. Harrington’s informants recalled tule marsh at the mouth of the river, where tule was collected and canoes were stored (Calendaria Valenzuela, in Hudson and Blackburn 1984; Timbrook 2007). These canoes were used on the lagoon at the Ventura River mouth (Simplicio Pico, in Hudson and Blackburn 1984). Wire rush (*Juncus balticus*) and Indian rush (*J. textilis*) were found in the sand dunes at the river mouth as well as “in the *montes*” and “at Sauzal,” both designations that probably refer to the willow-cottonwood forest at the mouth (Blackburn 1963, Timbrook 2007).

Herbarium specimen records also describe the presence of this suite of marsh, flat, lagoon, and dune habitat at the Ventura River mouth, although most records are relatively late. The earliest collection, made by William Brewer in March 1861, describes the estuary and marsh as the “swamp by camp” (he collected distant phacelia [*Phacelia distans*]; Brewer [1930]1974).

Specimens collected in the dune community included marsh jaumea (*Jaumea carnosa*), beach saltbush (*Atriplex leucophylla*), California saltbush (*Atriplex californica*), branching phacelia (*Phacelia ramosissima*), Menzies’ goldenbush (*Isocoma menziesii*), sawtooth goldenbush (*Hazardia squarrosa*), silver bur ragweed (*Ambrosia chamissonis*), pink sand verbena (*Abronia umbellata*), and red sand verbena (*A. maritima*) (Pollard 1945, Hagerty 1950, Pollard 1962, 1963b, 1964). A more detailed exploration of 20th century botanical specimens can be found in Ferren et al. (1990).

The old Ventura canoe builders stored their canoes in the tule marsh at the mouth of the Ventura River. They cut and piled up tule stems so the canoe could rest out of the water, and bent the tule growing on both sides over the canoe as a sunshade. The tips of the tule stalks interlaced like the fingers of clasped hands, and a pole was laid on top to hold them in that position.

—TIMBROOK 2007



Limited available evidence suggests that the Ventura River mouth did not close as regularly during the summer as did the Santa Clara River mouth, perhaps reflective of greater perennial flow in the lower reach in addition to lesser wave exposure. Based on the classification system of Jacobs et al. (2010), the river was a small to medium watershed in a prograding, low exposure (south facing) setting, with hydraulic estuarine formation, and would therefore be expected to be fully open or have subtidal closure more than half the time, with periodic closure up to and above high-high tide.

This analysis is supported by historical accounts. The earliest T-sheets for the two mouths, produced during the same year and the same (summer) season, show the Santa Clara River mouth separated from the ocean by a narrow barrier, while the lagoon at the Ventura River mouth maintained a narrow outlet. A GLO surveyor, surveying along the beach on July 1, 1869, noted crossing the “outlet of the mouth” of the river (Thompson 1869). The earliest evidence comes from the journal of explorer Juan Crespi in mid-August 1769 and May 1770. Crespi observed that the river “reached to the sea” in August, though at high tide there was no perceptible flow and an

Fig. 6.3. Habitats of the Ventura River mouth, early 1800s. Extensive riparian willow-cottonwood forest and estuarine habitat characterized the Ventura River floodplain at its mouth.

inlet was created (Crespí and Brown 2001). In May of the following year, however, his party was able to observe the river at low tide, and Crespí noted that “where we saw it the other time, it was not flowing but instead was ponded up and turning into an inlet; the tide was low this time, it was flowing almost as far as the very shore.”

The mouth did close, though closure dynamics are uncertain and not well documented. Timing, duration, and frequency of closure would have likely varied with yearly oscillations in rainfall, as well as with anthropogenic changes in flow in the lower river over time. The only historical evidence found that directly addresses the question is a newspaper article from 1909, describing a season with abnormally high flow:

The mouth of the Ventura river presents a sight more remarkable than for thirty years past. Indeed, not the oldest inhabitant can remember when it was just exactly as it is at present. There is a great volume of water still coming down from the mountains, and this is of a very beautiful dark green color. It has gathered in a great lagoon below the bridge, the lake presenting a frontage of almost a quarter of a mile to the ocean. Between the sea and the lagoon are piled up great masses of rock, of all sizes, tons and tons of it, and the waves run up on this at high tide, although they do not get over into the lake. The mouth of the river is at the extreme western point of the lake, a quarter of a mile further to the westward than it has ever been known to be... The stream shows small signs of closing up this summer, and very likely will not be closed. But if the lagoon remains as now, there will be plenty of duck shooting and lots of water for boating and for the boys to swim in. The lagoon in fact is deeper than it has been in years. The flood seems to have washed out the bed of the entire stream to an unparalleled depth below the old bed. (*Ventura Free Press* 1909b)

One notable feature in the Ventura River delta was a brackish lake to the west of the end of Figueroa Street. The lake marked a former outlet of the river, and covered about 2.5 acres of open water and 9 acres of marsh. This lake and former river mouth were also the site of a Chumash village, Mitsqanaqan. (See page 130 for more information on channel change at the mouth of the Ventura River.)

On the earliest (1855) T-sheet, the lake is shown occupying a low spot behind a narrow beach, not connected with the ocean and with substantial surrounding marsh (Johnson 1855c; fig. 6.4). It is documented similarly on the 1870 resurvey, though with a larger amount of open water adjacent to the beach. An unrelated survey from May 1868, however, shows a small lake with marsh in this vicinity with a clear connection to the ocean (Bard 1868). If this is indeed the same body of water, then the lake may have had at least an intermittent connection to the ocean.

The lake is vividly described by Chumash residents interviewed by John P. Harrington in the early 20th century. Though at the time they were interviewed the lake no longer existed, his informants recalled what it had been like decades earlier (fig. 6.5). The lake was called Tsikatskats (with variable spellings in Harrington’s notes), which was translated by his informants as “sweet water running below,” presumably referring to

...there used to be a lake, but the lake is gone now. This was not an estero, nor did the water come from the river, but seeped in from sea through the sand.

—HARRINGTON 1913E

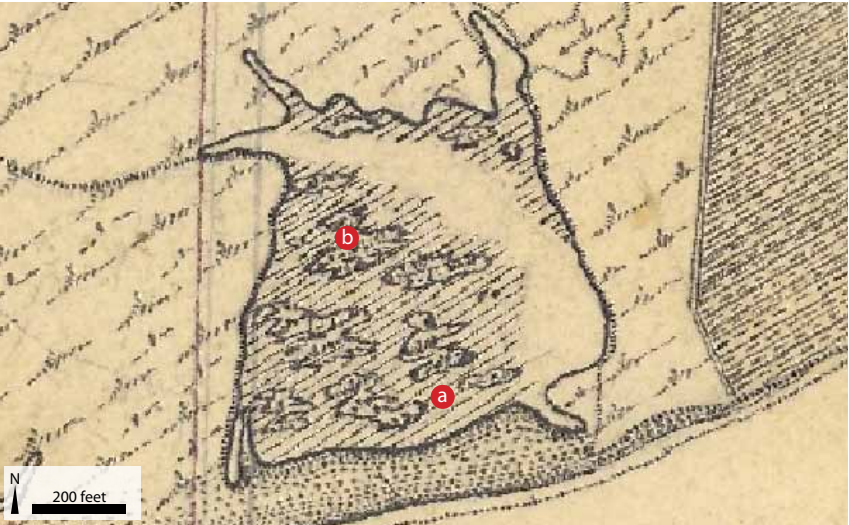


Fig. 6.4. Lake east of the Ventura River, 1855. This small brackish lake marked the easternmost extent of the historical Ventura River floodplain, and was surrounded by extensive tule marsh (shown by the closely spaced lines in the marsh on this map **a**). Though the symbol within the marsh is non-standard **b**, we interpret it to be patches of grassy cover, such as saltgrass or seasonally inundated meadow. (Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration)



Fig. 6.5. Tsikatskats, the lake at the end of Figueroa Street. This photograph, taken in the fall of 1923, shows the remnant of what was once a well known brackish lake in the Ventura River floodplain. What are likely cattails (*Typha latifolia*) are visible in the foreground, along with stands of alkali bulrush (*Scirpus [Bolboschoenus] maritimus*) and bulrush/tule (*Scirpus [Schoenoplectus] californicus*; see particularly the matted vegetation to the right of the open water). Pickleweed (*Salicornia virginica*) dominates the foreground. (Harrington 1923b, courtesy of the Smithsonian Institution; plant interpretation, Baye pers. comm.)

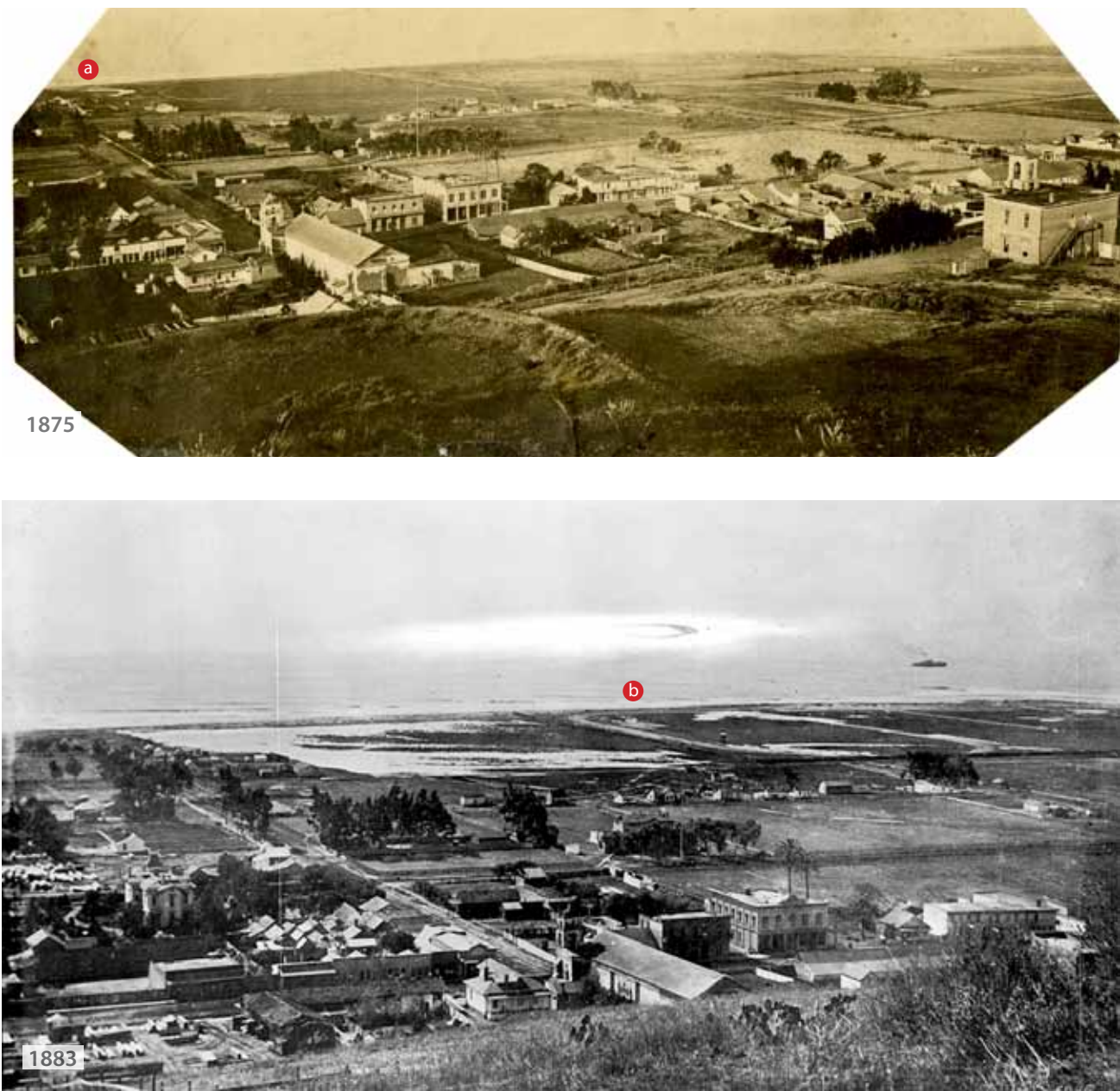


Fig. 6.6. Two views looking across the city of Ventura to the shoreline. A circa 1875 image (top), taken from the hill behind Mission San Buenaventura facing southwest, shows the low floodplain area east of the Ventura River. A portion of what is likely Tsikatskats lake can be seen in the distance, at **a**. A nearly identical view (below), taken about eight years later, shows the same area in flood. What appears to be a small seasonal pond or panne, corresponding in shape to one depicted on the T-sheet 28 years earlier, can be seen at **b**. (This feature is visible on fig. 6.3 as the leftmost salt flat/seasonal pond/marsh panne, shown in pink.) (Unknown ca. 1875, Pierce ca. 1883; courtesy of the California Historical Society)

groundwater from the Ventura River found beneath an otherwise brackish lake (Harrington 1986a,b). It was described as a “pool of brackish water,” surrounded by abundant tule (Harrington 1986b):

The former lake situated where the pool of water is now situated, west of the lower end of Figueroa St. was called in V. *tciaqcqatc*, meaning “sweet water running below”. There used to be much tule there where the tule is now. The lake was where the water is now. (Harrington 1986b)

The lake, only present as a small pond/slough complex in 1913 as described by Harrington’s informants, was barely visible on the 1927 aerial imagery, and left unmapped on the 1933 T-sheet resurvey. The area, historically part of the Ventura River delta, continued to flood well into the 20th century (fig. 6.6). It has remained in relatively unintensive use even today (it is now the parking lot across from Seaside Park at the Derby Club).

Santa Clara River Mouth

The mouth of the Santa Clara River encompassed a diverse array of freshwater, brackish, and saline habitats. A seasonally open tidal lagoon, bordered by tidal marsh, formed the outlet of the river. To the north and south, alkaline/saline habitats (e.g., alkali meadows and salt flats) as well as abundant freshwater habitats (wet meadows, willow-cottonwood forests, and a freshwater lake and surrounding marsh) were also present (fig. 6.7 and 6.8). Under Jacobs et al.’s (2010) definitions, the Santa Clara River mouth regularly closed above high-high tide or perched, with seasonal breaching and opening to the subtidal level. This closure pattern reflects the river mouth’s exposure to wave action in addition to freshwater inputs from the watershed.

The seasonality of the estuary is well documented by historical accounts. The earliest detailed depiction of the lagoon at the river mouth, surveyed during the 1855 summer field season, shows the lagoon separated from the sea by a narrow beach (Johnson 1855c). In a report associated with this survey, Johnson explains that though at the time of writing (October 1) the lagoon was not connected with the ocean, “after the rains of winter begin, it...has water enough to break through the narrow sand-beach at present separating it from the sea” (Johnson 1855a). A subsequent U.S. Coast Survey report supports this, stating that “in the rainy season a volume of water is brought down having sufficient force to break through the narrow sand beach and flow into the ocean” (*Daily Alta California* 1857; a direct quote from Davidson 1864). These descriptions are corroborated by other (albeit less precise) 19th century sources, which also describe a lagoon with “no visible communication with the sea, save when in winter the floods tear away the intervening wall of sand” (Thompson and West [1883]1961; see also Storke 1891) and a river “blocked up by sandhills in summer” (Cooper 1887).

Maps also support this variability: some cartographers showing the lagoon open to the ocean, while others show no connection. One early sketch shows a narrow “salt laguna” at the mouth of the river, with no connection to the ocean (Unknown ca. 1870). Another much later map also shows a large, disconnected lagoon (Farrell 1935). However, other maps show the lagoon with a clear tidal connection (e.g., Stow 1877, Schuyler 1900, Holmes and Mesmer 1901b, Kelsh 1933b; fig. 6.9). The earliest topographic quad and a historical soil survey contain an intermediate depiction, showing thin blue lines connecting the lagoon to the ocean (USGS 1904,

I would state here that there is one peculiarity in the creeks and many of the rivers and small esteros on the southern coast of California, and that is that in the dry seasons the creeks and rivers sink before they get to the ocean, and their mouths are closed or filled up with drifting sand...

— UNKNOWN CA. 1869



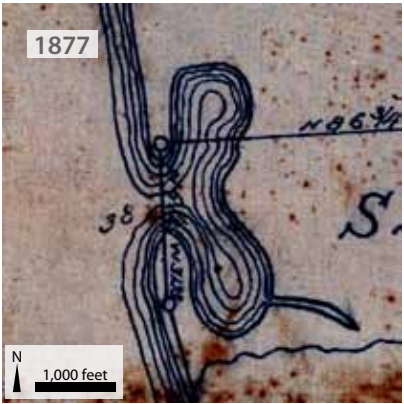


Fig. 6.9. Seasonally tidal lagoon at the mouth of the Santa Clara River, 1877. An early depiction of the lagoon open to the ocean. (Stow 1877, courtesy of the Museum of Ventura County)

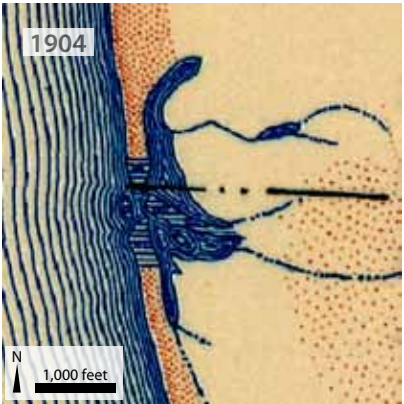


Fig. 6.10. Seasonally tidal lagoon at the mouth of the Santa Clara River, 1904. Rather than showing the lagoon as open or closed, this historical topographic quad uses thin blue lines perpendicular to the coastline to represent the connection between the lagoon and the ocean. (USGS 1904, courtesy of CSU Northridge Geography Map Library)

Nelson et al. 1917; fig. 6.10). Unfortunately, none of these maps specify the season of survey.

The T-sheet resurvey for the river mouth, conducted in January and February 1933, supplies a detailed depiction of the lagoon in winter, and provides a useful counterpoint to the summer survey of 1855. In the resurvey, the lagoon is open through a narrow breach in the sand (Kelsh 1933b). The surveying party describe the closure dynamics in the accompanying descriptive report:

In dry weather this river mouth is practically or wholly closed. At the time of the survey (Jan-Feb 33) a steady shallow stream about 25 M. [80 feet]wide was flowing as shown, but when place was visited in October for additional notes on recent developments the mouth was closed. (Kelsh and Green 1934c)

This description is consistent with roughly contemporary descriptions of the lagoon from engineer C. E. Grunsky, who writes that “during the summer and fall, and, occasionally, throughout the entire year, the mouth of the river is blocked by a barrier of beach sand piled up by the ocean waves” (C.E. Grunsky Company 1925). He also explains some of the steps local landowners were taking to diminish the size of the lagoon:

The mouth of the river is closed to the ocean for a considerable period of time each year by a barrier of sand which is thrown up by the ocean waves. The crest of this barrier is usually at such a height that when the river begins to flow in early winter its water accumulates behind the same to a height which the landowners in the vicinity find undesirable. An artificial cut is then made through the barrier and the ponded water escapes. If there is abundant rainfall and a fair amount of runoff the cut is kept open by the flowing water. If there is but little water to be discharged into the ocean the cut may be repeatedly closed by the ocean storms in a single season.

The limited available evidence describing tules, cattails, willows, and pondweed suggests substantial freshwater influence on the Santa Clara River estuary. The presence of perennial flow in the lowest reach of the river (see chapter 3) and persistent summer closure have the potential to create strong freshwater-brackish zones in the lagoon and surrounding wetlands (ESA PWA et al. 2011). The willow-cottonwood forest of West Grove also suggests freshwater conditions. A birder documented a “tule-bordered lagoon” near the mouth, as well as numerous sloughs with “a dense growth of pondweed [*Stuckenia pectinata*/*Potamogeton pectinatus*]” (Hoffmann 1921, 1926). Cooper, describing a visit to the river mouth in early spring of a dry year (1872), still noted fresh conditions, as well as the presumed inter-annual variability of habitats at the mouth:

On May 10, 1872, I visited the mouth of the river purposely to see what birds bred there, but I found only a Mallard sitting among the cat-tails in the wettest part of the marsh, most of which seemed too dry for safety... Cattle grazed all over the marshes...The advantages for birds to breed there must vary much in different years. (Cooper 1887)



Fig. 6.11. This 1947 view of the coastline around the Santa Clara River mouth shows McGrath Lake **a** to the south of the closed river mouth **b** and the Pierpont lowlands to the north, together composing the low, broad floodplain of the river at its mouth. The city of Ventura can be seen in the background. (Spence Air Photos 1947, courtesy of the Benjamin and Gladys Thomas Air Photo Archives, UCLA Department of Geography)

In addition to West Grove, substantial freshwater habitat was present in the form of freshwater McGrath Lake and the extensive, seasonally flooded wet meadow covering the Pierpont lowlands (what today is the low-lying area around the Ventura harbor; fig. 6.11). These floodplain areas would have been inundated during extreme floods by the Santa Clara River.

McGrath Lake is one of the few remaining coastal water bodies on the Oxnard Plain shoreline, though its origins are different than the mostly closed, brackish/saline tidal lagoons historically to the south (and derived from ancient river flows). Unlike these lagoons, McGrath was a freshwater lake, with hydrologic inputs derived primarily from active surface flows from the Santa Clara River and groundwater. The lake is shown on the region’s T-sheet, labeled “fresh water” (Johnson 1855b; fig. 6.12). The lake as shown here was 8 acres, with 5 acres of fringing freshwater marsh. The lake occurred in a low spot between parallel ridges of sand dunes, and was also surrounded by willow thickets and seasonally inundated grassland. Cooper

Quite a number of persons were down in McGrath’s bottoms last Sunday ‘a blackberrying,’ but the crop seemed to be very light this year...

—VENTURA FREE PRESS 1891A



Fig. 6.12. McGrath Lake, 1855. The lake occurs at the boundary of two T-sheets, and is mapped by both. On this sheet, covering the area from McGrath Lake to Hueneme, the lake is labeled “fresh water,” a rarity on the Oxnard Plain. (Johnson 1855b, courtesy of the National Oceanic and Atmospheric Administration)

Third day journeyed southwesterly ten miles, and struck the sea; thence fifteen more northerly to near the mouth of the Santa Clara, and up the lower bottom of that stream to camping ground in the enclosure of Mr. Pierpont.

—DAILY ALTA CALIFORNIA 1868

(1967) described stands of tule (*Scirpus [Schoenoplectus] spp.*) associated with the lake.

For whatever reason, the historical record is mostly silent on McGrath Lake, though it was likely the site of many summer excursions in the late 19th and early 20th centuries. One record, from a 1910 newspaper article identifying potential park locations on the Oxnard Plain, describes the lake as part of the larger habitat community at the site, noting that “another spot that is a very fine one for the people of Oxnard and community would be at the McGrath Grove, a willow grove beside a fine lake, the property of the Dominick McGrath estate and the scene of numerous picnics” (*Oxnard Courier* 1910).

Though the appellation has persisted, the precise location of the lake has shifted substantially over the past 150 years. What was historically considered to be McGrath Lake is currently predominantly willow-cottonwood forest and developed land; only the tail of the historical lake overlaps with the current lake-marsh complex (fig. 6.13). It is unclear when this shift occurred, though it had clearly happened by the time the first aerial imagery was flown (1927) and the T-sheet resurveyed (1933). Both sources show an extent of open water almost identical to what was present in 2005, with a large area of marsh north of the lake and covering the lake’s former position (Fairchild Aerial Surveys 1927, Kelsh 1933b). Overall, the extent of the lake has increased from eight acres in 1857 to fifteen acres in 2005.

To the north of the mainstem Santa Clara River, the Pierpont lowlands were a broad, low coastal flat extending more than 2.5 miles northward, nearly to the Ventura River, and comprising the westernmost extent of the Santa Clara River delta (fig. 6.14). Located between sand dunes and a bluff marking a former coastline, the flat trapped water from the Santa Clara River during floods, creating a large area of seasonally inundated wet meadow. This feature of the Pierpont area is captured by the early T-sheet survey, where “overflowed during winter” is written across the entire plain. The feature is a result of progradation, as Ventura River sediments were deposited north of the convex Santa Clara River mouth (Putnam 1942).

By the turn of the 20th century, the seasonal wetland between the dunes and the bluff was under cultivation with beets and barley, though the area must have still been frequently flooded (Waud ca. 1899). By the late 1920s, the northern portion of the lowlands had been subdivided and a few houses built on the wetland and dunes, though evidently not without trouble—the T-sheet records that “small streets beyond those shown [are] buried in sand” (Fairchild Aerial Surveys 1927, Kelsh 1933b; see fig. 6.14). This area is what would become the modern subdivision at Pierpont Bay, north of the Ventura Marina. Flooding is still an issue in portions of the Pierpont area, and wetlands are still present at Alessandro Lagoon at the northeastern end of the lowlands (see fig. 6.29).

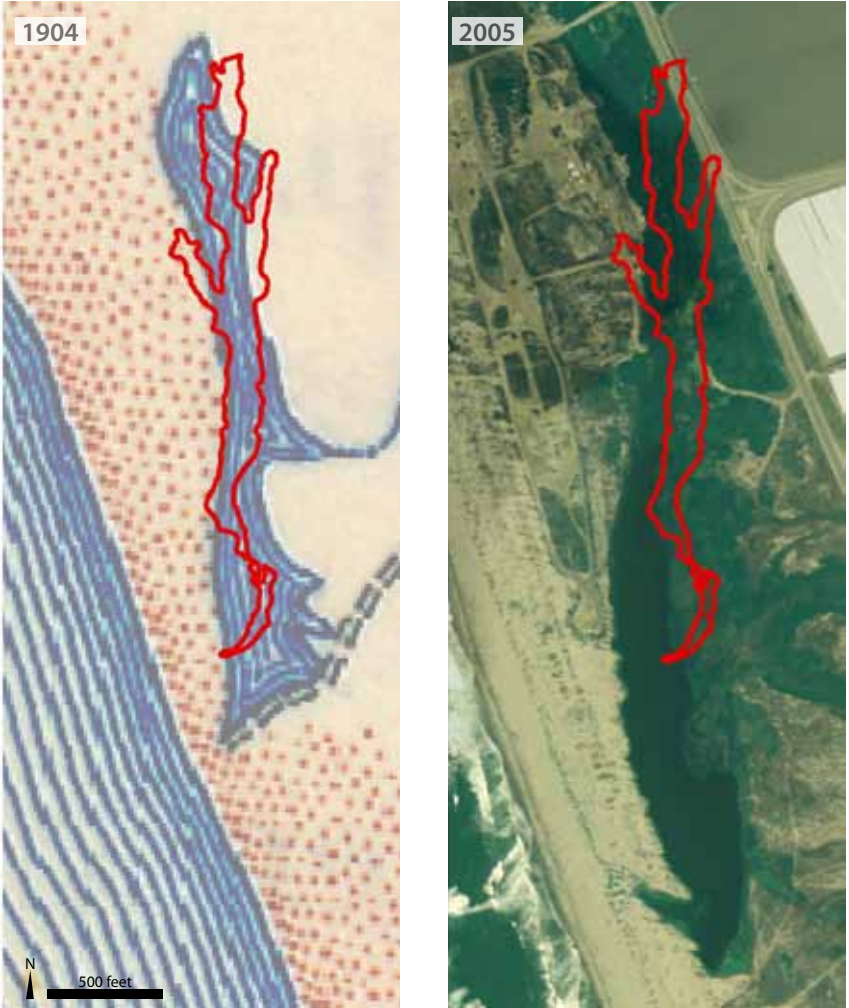


Fig. 6.13. Comparison of historical and modern location and extent of McGrath Lake. Between 1855 and 2005, McGrath Lake has shifted about 1,500 feet to the south. However, the extent of open water appears broadly comparable. The 1904 historical topographic quadrangle (at left) shows the lake covering a broad extent roughly comparable to the 1855 mapping (shown in red outline). (USGS 1904, courtesy of CSU Northridge Map Library; USDA 2005)

Oxnard Plain Shoreline

From the mouth of the Santa Clara River to Mugu Lagoon, a broad barrier beach-dune system characterized the Ventura shoreline. Like the Oxnard Plain itself, this system—and the associated series of backbarrier lagoons and wetlands extending for nine miles downcoast—were formed by the Santa Clara River, each lagoon marking a former mouth of the river and dunes indicating the Ventura and Santa Clara rivers’ ample sediment supply. These non-tidal lagoon complexes covered a total of 1,000 acres with open water and associated marsh habitats (compared to Mugu Lagoon’s 2,550 acres), collectively making them the second largest coastal wetland area in Ventura County (fig. 6.15). (These acreages do not include the adjacent high marsh transition zone, which accounts for an additional 1,640 acres of wetland habitat.) A combination of coastal development (including dredging and drainage), with the reduction of sediment supply from the



Fig. 6.14. Between 1855 and 2005, the seasonally inundated lowlands at Pierpont have been heavily developed. The beginnings of a street grid can faintly be seen on the historical aerial in the dunes (middle); this same street pattern has persisted to the present day (right). Today, this area includes the Ventura Harbor. Note that a subdivision shown on the northern part of the Pierpoint lowlands is now part of San Buenaventura State Beach. (Johnson 1855c, courtesy of the National Oceanographic and Atmospheric Administration; Fairchild Aerial Surveys 1927, courtesy of Whittier College; USDA 2005)

Ventura and Santa Clara River watersheds, has drastically altered this portion of the shoreline (Orme 2005).

Broadly, the lagoon complexes shared multiple characteristics. Most had high marsh to open water ratios, and were dominated by extensive areas of vegetated emergent wetlands rather than open water. They also shared similar tidal dynamics, since each lagoon maintained little to no tidal access and most were blocked by substantial sand dunes. However, in other respects the systems were quite heterogeneous, with a broad array of variable ecological and hydrological expressions. In particular, the salinity concentrations and degree of seasonal inundation both varied widely across systems, in turn implying variations in lagoon depth and the quantity and source of hydrologic inputs. In addition to this inter-lagoon complexity, each lagoon complex also experienced yearly fluctuations in salinity and degree of inundation. As a result of these broad variations by year, season, and lagoon, early sources can be challenging to interpret.

Despite fragmentary historical documentation, many of these similarities and distinctions are captured by early accounts. While fine distinctions (e.g., perennially inundated lagoon versus seasonal pond) may be challenging to make with the available data, the overall characterization of the Oxnard Plain shoreline as a region with a matrix of perennial lagoons, seasonal ponds and salt flats, and salt/brackish marsh is very clear. These four factors—ecology, tidal access, seasonality, and salinity—are explored in detail below.

While they are typically thought of as lagoons, most (65%) of the aggregate area was vegetated marsh, as shown by the USCS T-sheet (Johnson 1855b, 1857). Seasonally flooded salt flats composed another significant proportion of the total area. (Our mapping shows 12% of the total area as salt flat, though this extent might have increased in dry years.) As is the case for other coastal wetland systems in Ventura County, however, little detailed documentation exists describing the historical plant community composition of these lagoon complexes. The idiosyncratic data we discovered mostly describes the Hueneme area, and emphasizes the marshy nature of these systems. Documented plants from narrative accounts include Indian rush (*Juncus textilis*) and a “salt grass point” in the Hueneme area (Eames 1889, Blackburn 1963). Early botanical specimens were collected at Hueneme from both brackish and salt marsh habitats, including obligate wetland species such as Virginia glasswort (*Salicornia virginica*), saltmarsh baccharis (*Baccharis douglasii*), salt sandspurry (*Spergularia marina*), the currently rare species saltmarsh bird’s-beak (*Cordylanthus maritimus* ssp. *maritimus*), and the federally endangered Ventura marsh milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*) (Kline 1924, Peirson 1925, Craig 1927, Purer 1935). A few accounts also describe the abundant waterfowl found around these lagoons, especially in the winter, such as “flocks of wild duck” (Eames 1889) and “many thousands” of geese and ducks (Haydock 1971). One account, from a journal entry describing an outing in March 1902, records more detail:

Deponent avers that there are numerous salt ponds along the whole length of coast from the mouth of the river Santa Clara to the south west corner of the rancho...

—BARD 1869

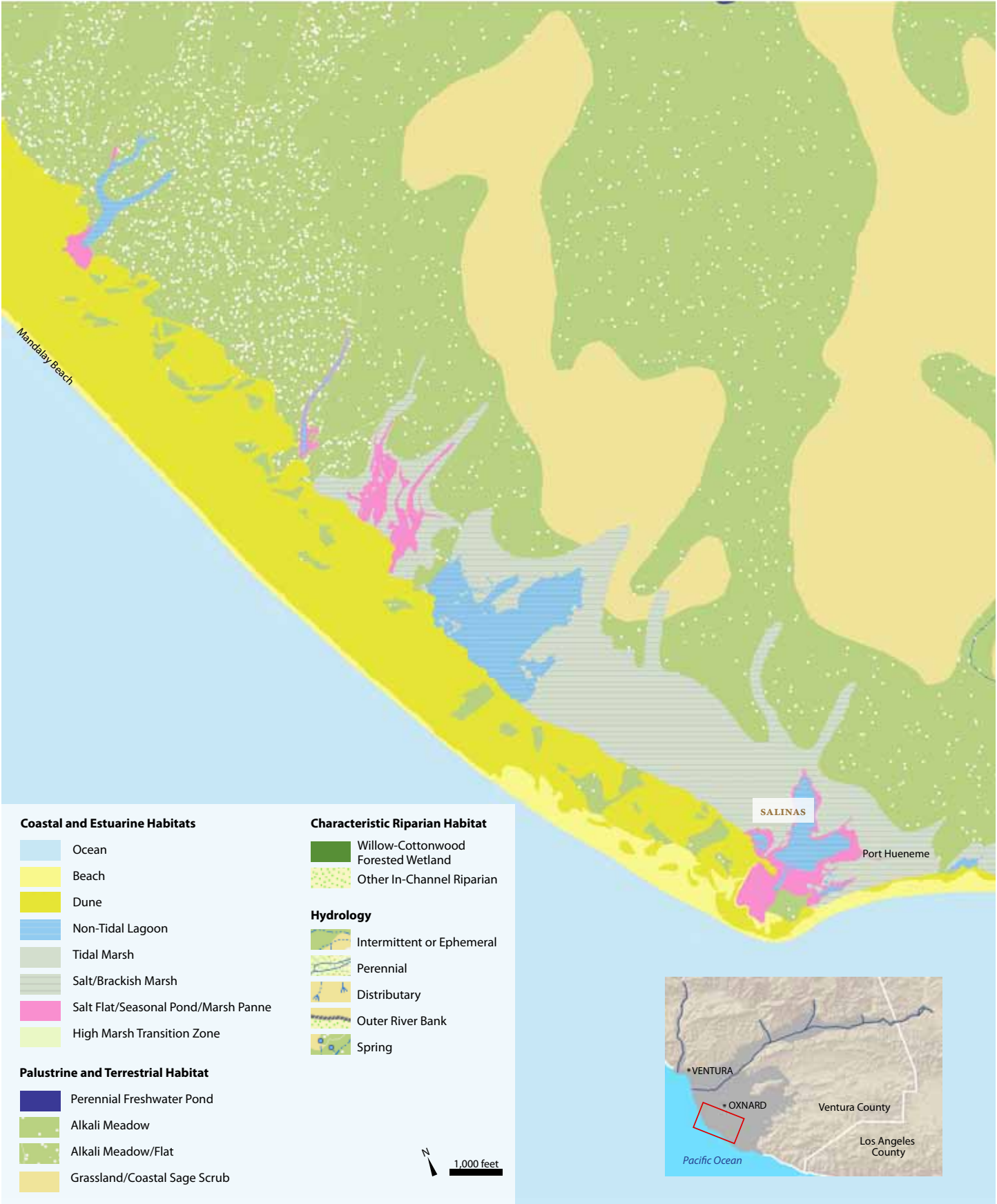


Fig. 6.15. A series of backbarrier lagoons, salt flats, and marshes stretched from south of the Santa Clara River mouth all the way to Mugu Lagoon (the western edge of which is at the right edge of this spread). Separated from the ocean by often extensive dunes, these systems were characterized by variable salinity, seasonality, and habitat proportions. (See fig. 6.24 for the modern aerial of this area.)



Fig. 6.16. The earliest detailed surveys of the Ventura shoreline, completed in 1855 and 1857, show the coastal wetlands with impressive precision. (Johnson 1855b and Johnson 1857, courtesy of the National Oceanographic and Atmospheric Administration)

...we drive along in full view of several islands and observe the sand bar that waves have thrown up, that prevents the water from coming in where it formerly held sway thereby leaving a marsh and beach and many enclosed lakes and streams in and upon which are all kinds of denizens of the deep, fowls and some animals. We note three flamingoes, many water-snipe, pelicans in great numbers and ducks in flocks and pairs; and many familiar birds in these ponds are shovel-bills (resemble shovels and dig in sand)...There was an oyster bed at the point but it has been destroyed by waves and sand. (Wallace Weston Brown, in Brown 1981)

By far the most detailed depiction of the suite of coastal lagoons is provided by a set of USCS T-sheets produced in the summers of 1855 and 1857, the maps upon which the bulk of our own historical habitat mapping is based (Johnson 1855b,c and Johnson 1857; fig. 6.16; see Grossinger 2011 for more discussion of these sources). These early surveys depict the lagoons as a series of open water/salt flat/marsh complexes separated from the ocean by sand dunes, which range from 300 to 3,300 feet wide and with high points consistently above 60 feet in elevation northwest of Hueneme. None of the lagoons are shown with a tidal outlet, and the lagoons’ square-end shapes and the presence of the wide, vegetated barrier dunes suggests that these systems opened relatively infrequently. These systems, though

not identical, could generally be considered perched and/or dune-dammed (Jacobs et al. 2010).

This depiction of the lagoons—as a series of small systems with an infrequent tidal connection—is supported by supplementary sources, which confirm the persistence of these features throughout the 19th century. An early resident testified in 1869 that the two lagoons at Hueneme had been present as long as he had known the area, “as early as 1837 or before that time” (Gonzales 1869). Subsequent independent depictions of the lagoons are consistent with the T-sheet, matching the general location and extent of each feature, though these maps generally did not map salt marsh and fail to distinguish between salt flat and open water (Bard 1870a,b; Reed ca. 1871; Stow 1877; Schuyler 1900; Holmes and Mesmer 1901b; USGS 1904). None of these maps show any of the lagoons with a tidal connection. Narrative descriptions also support the largely non-tidal aspect of the lagoons. It was stated that the two lagoons at Point Hueneme “are some distance from and do not communicate with the sea” (Smith 1871), while the lagoons north of Point Hueneme “have no daily communication with the ocean, but on occasions of storms the waves sometimes wash over from the sea into said

LAGOONS AND DUNES

A broad barrier beach-dune system stretched from the Santa Clara River mouth to Mugu Lagoon, separating the numerous lagoon-salt marsh complexes from the ocean (fig. 6.17). The early T-sheets capture the complex Aeolian topography with characteristic detail, with solid and dashed (intermediate) red contour lines indicating 20 foot contour intervals. The mapping indicates that the dunes were broader and taller north of Hueneme, with the highest points consistently above 60 feet. Sand dune width ranges from 300 - 3,300 feet. This dune topography was described by another observer as a “continuous, high sandy beach or sea wall,” where “hills and sand ridges—some of them being 60 to 75 feet high, lying parallel with the beach line—widen out and occupy a space of from half to three fourths of a mile” (Reed 1871).

Vegetation varied with position on the dune structure, with different species characterizing the foredune, middle, and inner/backdune zones. These patterns

are described by Cooper (1967), who described vegetation on the dunes near Hueneme: saltbush (*Atriplex leucophylla*) and verbena (*Abronia* spp.) on the foredune, herbaceous cover and salt grass (mapped as alkali meadow) and “extensive thickets of the usual species of willow” on the middle zone, and shrubs on the innermost dunes. Many of these patterns are also reflected on the T-sheet, in particular the middle dune zone patterns of large patches of grass in dune depressions and occasional willow trees and groves. Dune species recorded near Mandalay Beach in 1930s specimen records include yellow bush lupine (*Lupinus arboreus*), beach evening-primrose (*Camissonia cheiranthifolia* ssp. *suffruticosa*), and pink and red sand verbena (*Abronia umbellata* and *A. maritima*), among many other species (Fosberg 1931a,b; Wolf 1931; fig. 6.18). Dunes in the Pierpont Bay region were recorded to have seacliff buckwheat (*Eriogonum parvifolium* var. *parvifolium*; Craig 1927).

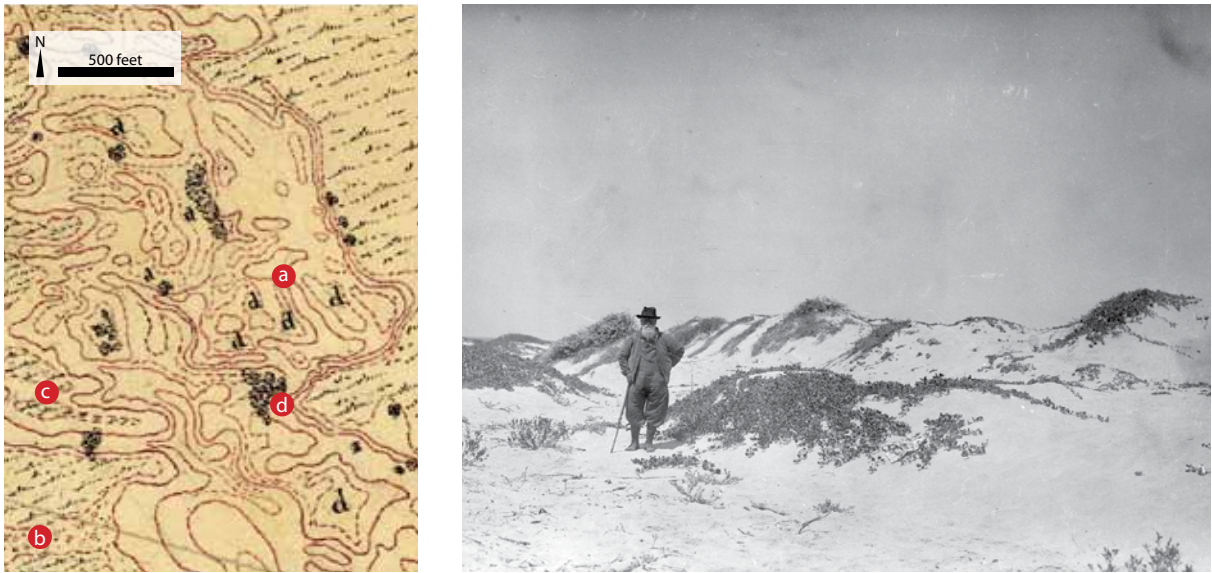


Fig. 6.17. Dune topography and vegetation near McGrath Lake, 1855 (left). Surveyors indicated a depression in the dunes with the letter “d” **a**, while the small red circles are thought to indicate dune tussocks **b** (Grossinger et al. 2011). The grassy symbol in some of the dune depressions (far left of image) is alkaline grassland **c**. A few willows are shown on higher portions of the dunes **d**. This detail is from the dunes north of West Fifth Street. (Johnson 1855/t-576, courtesy of the National Oceanic and Atmospheric Administration)

Fig. 6.18. “Hueneme Point from east,” 1913 (right). Linguist and ethnographer John P. Harrington took Chumash elder Fernando Librado on a series of field trips around Ventura County, documenting significant places and place names. Librado, who would have been in his 70s at the time of this photo, is shown standing in the dunes at Point Hueneme. Some dune vegetation can be seen, including red sand verbena (*Abronia maritima*) and likely shrubby beach primrose (*Camissonia cheiranthifolia* ssp. *suffruticosa*; Baye, pers. comm.). This is consistent with Cooper (1967), who noted that verbena was characteristic of the “hillocks” of the foredunes near Hueneme. (Harrington 1913c, courtesy of the Smithsonian Institution)

...there are no esteros, lagunas, or salt ponds other than the Estero Grande [Mugu Lagoon] that have outlets to the sea...

—STOW 1871

salt ponds” (Rodriguez 1871b). Of the two lagoons at Point Hueneme, one resident wrote:

Neither of these waters are connected with the sea, but both of them are disconnected from the beach by sand hills. It is possible that during the high Spring tides the water may swash over the sand hills in front of the Salinas, as there is very little vegetation growing on the sand hills in front of the said ‘Salinas’—but deponent has never witnessed such over swash, though he has been along the coast here at this point very frequently and at all seasons of the year... (Bard 1871)

Lagoons north of Point Hueneme were blocked from the tides by substantial sand dunes which would have almost never been breached by the ocean, while lagoons south of Point Hueneme, bordered by much smaller dunes, may have experienced more frequent dune overwash.

Though the series of lagoonal systems was composed of at least four distinct complexes, early observers often referred to them as one large, continuous backdune feature (with a few notable exceptions—see below). Early references to “a strip of swampy land full of sloughs, and lagunas...from a half to three quarter of a mile in width” or “sloughs and marsh lands back of the sand hills” extending from the Santa Clara River to Mugu Lagoon illustrate this point (Thompson 1867, Haydock 1971). This is consistent with the habitat patterns represented on the T-sheet, on which lagoons are connected by extensive tidal marsh and seasonally inundated alkali meadow. This entire wetland area would have been flooded for much of the winter, creating one large marsh extending, in some years, all the way to Mugu Lagoon. In the summer, large portions of the shallow lagoons dried up, creating extensive salt flats.

These fluctuations in the quantity of open water throughout the year present a challenge in mapping these systems, particularly the lagoon (open water) and salt flat components. Lagoons and salt flats are similar geomorphic features at different points of the hydrologic spectrum: substantial components of many coastal lagoons dried out during the summer, while many salt flats were flooded during the winter, making the distinction between an open water lagoon and a salt flat somewhat arbitrary. This is reflected in historical sources as well; a few features mapped as ponds or lagoons in one source are mapped as a salt flat in another. Luckily, many of these nuances were captured by early maps and accounts which specified the degree of inundation of various lagoons at different times of year. Olivas (1861) stated that between two of the lagoons north of Hueneme, “all the space between the two lakes at certain seasons of the year is covered with water—at other times it is dry between these.” At the south end of the lagoon series, another resident noted that the lagoons only connected with Mugu Lagoon “in years where there is much rain, when they may discharge their surplus waters in the said estero” (Rodriguez 1871a).

During the summer the region would have looked very different, with many of the seasonal ponds and even shallower lagoons drying up partially

I know the two ponds [lagoons at Hueneme]—they are well known, at times there is dry land between them—they are close together.

—ANTONIO MARIA OLIVERA 1857

or completely. Ornithologist James G. Cooper spent two “uncommonly dry” summers in the region in 1872-1873, and noted that at that time he “could ride a horse through almost any part” of the coastal marshes, “the exceptions being some salt lagoons encrusted with the white crystals, and unfit for nests, besides being almost deserted by all the birds, those seen being only a few small Waders and Sparrows” (Cooper 1887). Another party inspecting the lagoons during the dry season as part of a land dispute in 1871 only found water in three of the lagoons: the two at Hueneme Point and another small lagoon to the east (Reed 1871). Reed further stated that “I judge the water in these lagunas to be about on a level with high tide; the ordinary tides rising only about four feet, and spring tides about five feet, on this coast...In the summer, they contain very little water—the evaporation being almost equal to the seepage through the sand hills from the sea.” (It should be noted that seepage from the ocean may have been unlikely prior to groundwater extraction on the Oxnard Plain; Swift pers. comm.)

These general observations are corroborated by annotations on an early map, which identifies some lagoons as “salt ponds” and another as “dry pond” (Bard 1870a; fig. 6.19). Remarkably, the T-sheet also has annotations describing summer conditions, written in exceptionally faint pencil within some of the lagoons and seasonal ponds. A few (for example, two seasonal ponds south of modern-day Channel Island Boulevard) are labeled “dry,” another portion of one as “salt land” (perhaps marking an exposed portion of the lagoon), while others are labeled “salt water.”

Despite outward similarity—each lagoon is consistently described as “salty” by 19th century observers—such variations in hydrology and topography across different lagoon complexes created variations in salinity between and within systems. Water sources for these lagoons were a mix of saline input (from sea spray and possibly from infrequent dune overwash and seepage) and fresh water input (from precipitation, runoff, and springs). Evidence indicates that some of these lagoons were fed by freshwater springs, and therefore would have maintained fresh-brackish-saline gradients and salinity stratification with depth (Parsons 2004, ESA PWA et al. 2011). Conversely, other lagoons had extremely small watersheds and no defined

Fig. 6.19. Coastal lagoons near Point Hueneme, 1870. Four lagoons between Point Hueneme (at left) and Mugu Lagoon (western edge visible as “mud flat” at right). Though we mapped each feature as a non-tidal lagoon, note the labels on the lagoons—meaningfully, each of the four lagoons is labeled slightly differently. The Salinas was so known because of its use as a collection site for salt in the 19th century, suggesting substantial hypersaline and salt flat components. Similarly, the “dry pond,” though it would not have dried out completely every year, may have been shallower than adjacent lagoons. The “Laguna Hueneme” was well known for its freshwater inputs. The “salt pond” was found at the mouth of what is known today as the Oxnard Industrial Drain at Ormond Beach. Despite outward similarity, this map suggests substantial variation in hydrology and habitats across systems. (Bard 1870b, courtesy of The Bancroft Library, UC Berkeley)

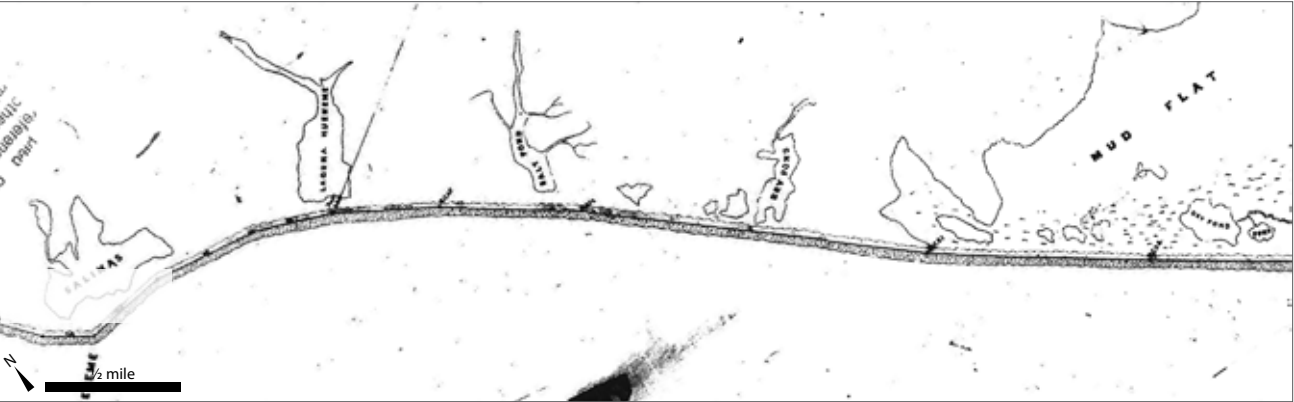
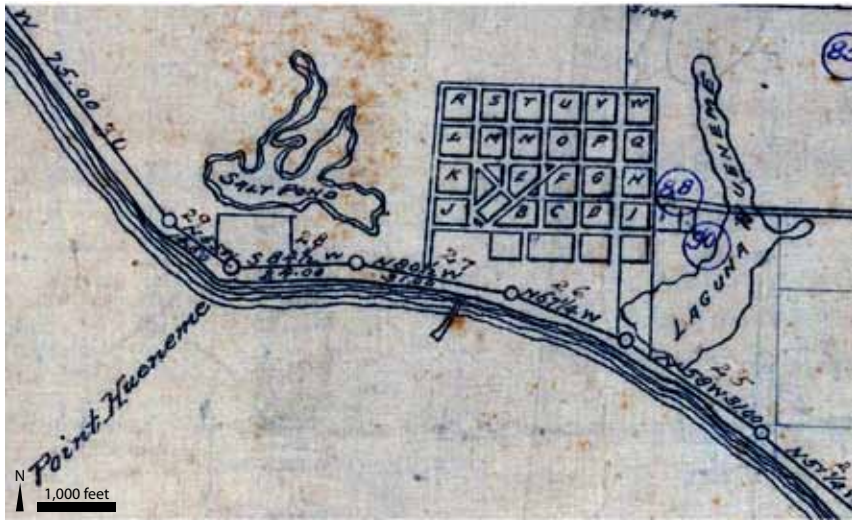


Fig. 6.20. Lagoons near Hueneme, 1877. Two well recognized lagoons were found on either side of the town of Hueneme (shown in its nascent form here). The “salt pond,” to the west of town, was known as the Salinas. To the east was spring-fed Laguna Hueneme. (Stow 1877, courtesy of the Museum of Ventura County)



surface channel for freshwater input, and as a result maintained saline or hypersaline conditions. Different systems would have included different components, ranging from perennial freshwater zones in the upper portions of spring-fed lagoon/slough complexes to hypersaline salt lagoons, salt flats, and seasonal pannes.

An extreme example of this variability is found in the two ponds formerly near Hueneme (fig. 6.20). Both lagoons were well known in the 19th century, with names preserved in the historical record. To the west of Hueneme, at the current site of the port of Hueneme, was a salt water lagoon called Sitiptip by the Chumash (Harrington 1913e) and La Buena Salina or the Salinas by Spanish-speaking residents (Harrington 1986a). The Salina was so called because of its use as a gathering place for salt, implying that substantial portions of the lagoon were shallow enough to dry out during the summer for salt harvesting (fig. 6.21). This lagoon was described as the place where early residents would gather salt, and which was “well known to and is designated by the older inhabitants as the place where a certain Dr. Poli, several years ago was accustomed to collect salt and to ship the same to San Francisco” (Bard 1869, Bard 1871). This is reflected in our mapping from the T-sheet, where the ratio of salt flat to open water is 1.4.

To the east of Hueneme, another lagoon covered approximately 35 acres. Unlike the Salina to the west, this lagoon had a very low ratio of salt flat to open water, only 0.14. It was popularly known as Laguna Hueneme (and to the Chumash as Sislomow; Harrington 1913e). The use of the term *laguna* (lake) here is notable, and unique to this lagoon. It may refer to a greater water depth, the relative lack of salt flats, or to a difference in salinity from the salt ponds surrounding it. It was quite renowned, and was included in the language of the 1846 sale of the San Buenaventura Mission as a primary landmark: “the *Laguna Hueneme*, *Palo Alto* [a large sycamore tree on the Oxnard Plain], the cultivated fields of Santa Paula, [and] the Mission Cañon [Ventura River valley]” (Weber 1978).

The laguna, or lake, at Hueneme, is shown on the diseño near Point Hueneme, and also on the U.S. Coast Survey map, and the small ‘salinas,’ or salt ponds, further inland. Between the laguna and salt ponds, at Hueneme, and the sea, is a wide barrier of high land, ‘staying the sea,’...

—FERNALD & RICHARDS AND GREEN
1871

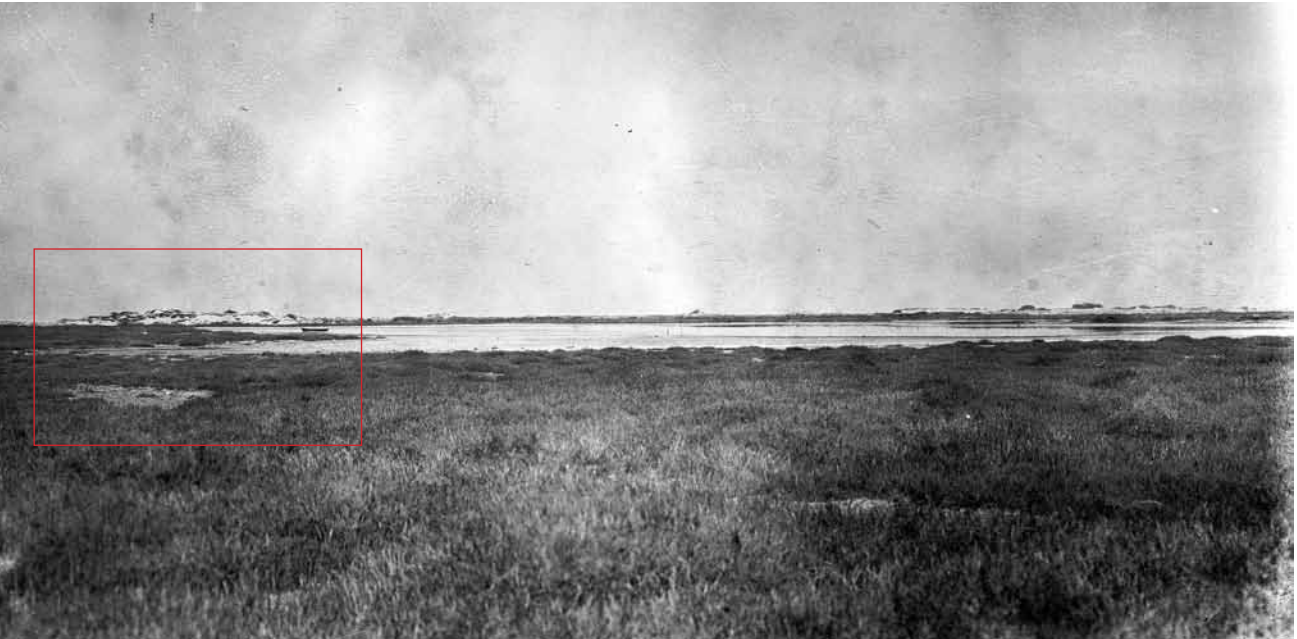


Fig. 6.21. The Salinas, 1913. These two images provide two different views of the Salinas lagoon, formerly located where the port is now. The view is generally southwest; high dunes (top and middle) and the Point Hueneme lighthouse (top; built in 1874) can be seen in the background. In the foreground, extensive salt marsh (mainly pickleweed, probably with some salt grass component and visible pannes) stretches toward the lake. A small boat (detail; at left) can be seen on the lagoon in both pictures, indicating some depth. (Harrington 1913b,d; courtesy of the Smithsonian Institution)

WHAT IS AN ESTUARY?

The abundance of information preserved in the historical record about these coastal lagoons, in particular about the Salinas and Laguna Hueneme, is in large part thanks to an early land dispute. The resulting court case centered on the wedge of land on the Oxnard Plain between two interpretations of the eastern boundary position for the Río de Santa Clara o la Colonia Rancho. The case largely hinged on the use of the word *estero* in the original property description (translated variously as a salt marsh, tidal creek, or estuary), where the boundary was described as hitting the coastline “between two *esteros*.” But what, exactly, was an *estero*? And to what feature in Ventura County did the term refer? The grant’s owners contended that

the term referred to the two sloughs or arms feeding into Mugu Lagoon, and that *estero* should be translated as “estuary,” and argued that the term must refer to a water body with a tidal connection. The settlers, however, interpreted the term to refer to Laguna Hueneme and the Salinas, arguing that Mugu Lagoon was an *estuario* (estuary), while *estero* was a broader term that referred to the salt lake and marsh complexes along the coast and was unrelated to the tides. (The settlers’ interpretation would have opened up a wedge of land between Point Hueneme and Mugu Lagoon for settlement.) Ultimately, the dispute was resolved in favor of the land owners, and the boundary line was run to Mugu Lagoon.



Fig. 6.22. “Duck shoot near Hueneme,” ca. 1889. This image shows a portion of Laguna Hueneme in the late 19th century. The lagoon is surrounded by tule (likely *Scirpus [Schoenoplectus] californicus*). What is likely sago pondweed (*Potamogeton pectinatus/ Stuckenia pectinata*) can be seen in the foreground (Collins pers. comm.). This photograph, also included as a lithograph in an 1889 article in *Overland Monthly and Out West* magazine on traveling in Ventura County, matches the description included in that article well: “spears of purple reeds [likely tule], with flocks of wild duck plowing luminous furrows across its steel-gray floor” (Eames 1889). (Brewster ca. 1889, courtesy of the Museum of Ventura County)

The most notable aspect of Laguna Hueneme, however, was its freshwater input from springs on the Oxnard Plain. Though this characteristic was not unique to the lagoon (it has also been documented for the lagoon immediately to the east; Parsons 2004), it is extremely well documented in this case. Early residents testified that the lagoon was “fed by springs of fresh water” (Bard 1871). This characteristic of Laguna Hueneme is a product of its status as a former mouth of the Santa Clara River, relatively recently occupied and still the recipient of substantial freshwater flows (see page 71). Though Laguna Hueneme itself is long gone, this is still the case today: the Hueneme Drain/Bubbling Springs Drain, a man-made channel which occupies the location of the former slough which fed into the lagoon, has perennial flow today as a result of springs (HDR Engineering 2009).

Despite this, the lagoon was still considered to be a “salty” lagoon, labeled “salt water” on the T-sheet and described as salty in court testimony: “though the Hueneme is fed by fresh water springs” (Johnson 1855b, Reed 1871). It is likely that portions of the lagoon (for example, closest to the shore) were saline, while other portions further upslope were brackish. An early image of a portion of the lagoon shows abundant tule fringing the water (fig. 6.22).

Fragments of the Laguna Hueneme complex have persisted to the present day in the form of Moranda Park/Bard’s Bubbling Spring. Though the lagoon looks largely intact in the 1938 aerial imagery, it was drained shortly thereafter, apparently filled with sediment from the dredging of the harbor at the site of the Salina lagoon (Moranda 1999, Maulhardt 2005). Currently, though the lagoon has been completely drained and filled, the slough that fed it still runs to the ocean in the same location. This is also true of the formerly spring-fed lagoon to its east, at Ormond Beach.

Most traces of the other lagoon complexes have been completely obliterated over the past 100 years (figs. 6.23 and 6.24). Much of this change had already happened by the early 1930s, by which time a five mile long drainage ditch, stretching from south of the Santa Clara River all the way to its outlet at Hueneme and bisecting the former locations of many of the coastal lagoons, had been constructed to drain the area.

Many lagoons became salt flats or marshes, tidal marshes became alkali meadows, and alkali meadows were in large part flushed and cultivated. Historical aerial imagery from 1927 and 1938 hint at this transformation, showing a long canal bisecting dry flats and clearly salt-affected land where 1850s surveyors mapped lagoons. The USCS T-sheet resurvey from winter 1933 captures the lagoons’ disappearance even more explicitly (Kelsh 1933b and Kelsh 1934; fig. 6.25). Precise annotations describe former lagoon locations as “former salt pond (now drained)” in the Mandalay Beach area, “ponds formerly shown now drained” near Channel Islands harbor, and “pond, apparently drying up” at the south end of Ormond Beach. Other lagoons are shown with a combination marsh/lagoon symbol. The obvious exception is the spring-fed Laguna Hueneme, shown with substantial water

We stopped our horses on a rustic bridge that we might better view the Laguna, winding sinuously among its spears of purple reeds, with flocks of wild duck plowing luminous furrows across its steel-gray floor.

—EAMES 1889



Fig. 6.23. Oxnard Plain shoreline, 1927/1938. Traces of most of the 19th century lagoon complexes are still visible at the time these photos were taken in the 1920s and 1930s, though it is clear that many are in the process of being drained by the long canal seen at left **a**. A few lagoons, such as Laguna Hueneme **b** and the adjacent lagoon to the east, still appear to be filled with water. Traces of the former Santa Clara River channel are clearly visible at **c**, feeding into Laguna Hueneme. (Fairchild Aerial Surveys 1927, courtesy of Whittier College, USDA 1938, courtesy of Ventura County)





Fig. 6.24. Oxnard Plain shoreline, 2005. By 2005, most traces of the former lagoon complexes have been erased. A few markers remain, such as sloughs near Ormond Beach that used to empty into lagoons (portions of which have been repurposed as the Oxnard Industrial Drain and the Hueneme Drain). A lagoon similar to former features has formed to the east of Laguna Hueneme at Ormond Beach. (USDA 2005)



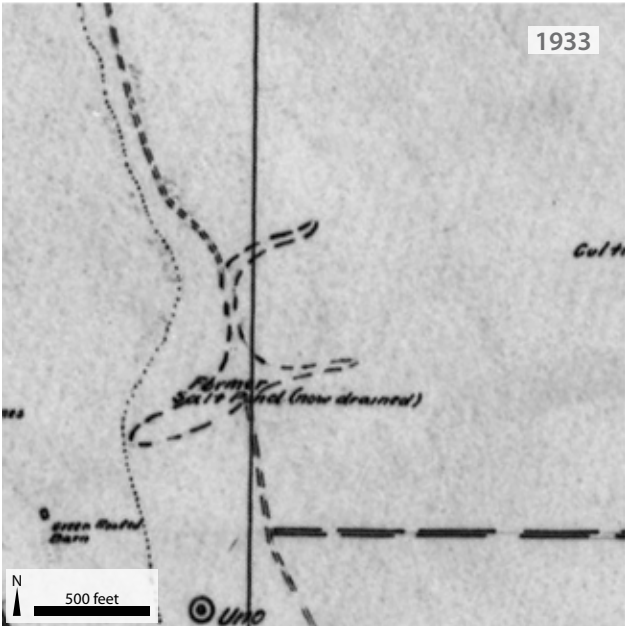
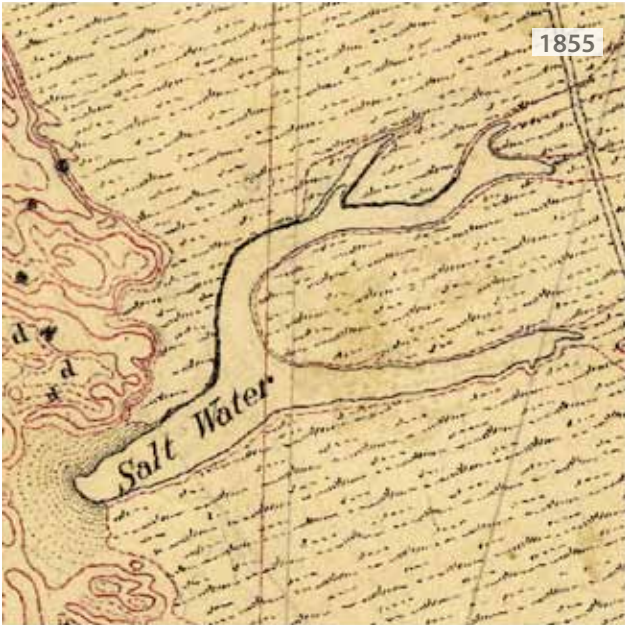


Fig. 6.25. In 1855, a small (14 acre) coastal lagoon was recorded by the U.S. Coast Survey, at what is now the end of West Wooley Road at Mandalay Bay (top left). Nearly 80 years later, in the descriptive report accompanying the T-sheet resurvey, the cartographers note that a drainage ditch (visible here on the aerials; top right) “has drained the salt pond shown on the former work... although the general shape as a dry hole is still apparent” (bottom left; Kelsh and Green 1934c). By 2005 all traces of the lagoon have been erased: only the drainage ditch remains (bottom right). (Johnson 1855b, courtesy of the National Oceanic and Atmospheric Administration; Fairchild Aerial Surveys 1927, courtesy of Whittier College; Kelsh 1933b; courtesy of IMC; USDA 2005)

in the aerial imagery and apparently intact on the resurvey. The two lagoons on either side of it, the Salinas and another spring fed lagoon to the east (at Ormond Beach), are shown with what appears to be both open water and marsh components.

Changes are also documented in the surrounding former salt marsh and high marsh transition zone, labeled as “dried up marsh,” “meadow” or “marshy meadow,” and “dry salt meadow.” In a few portions of the former salt marsh (and in much of the former alkali meadow) the resurvey identifies “cultivated field.” In the descriptive report accompanying the T-sheet resurvey, the surveyors describe this transition:

East of this town [Hueneme] the country has remained in an undeveloped state except for the fact that farming has increased and developed this area for truck farming. As a result small swamps and sloughs have been filled in, and the farm land pushed out towards the coast, in turn tending to dry up the small ponds lying behind the sand dunes along the coast... From Hueneme west the beach area has been developed into a series (continuous) of summer resorts... Behind this ridge [of sand dunes] a long drainage ditch parallels the coast, draining into the sea just west of the Hueneme Lighthouse. This has completely eliminated the ponds previously shown, and the whole area has been developed into farming country. (Kelsh and Green 1934b)

Mugu Lagoon

Mugu Lagoon, known historically as the Estero Grande or Mugu Laguna, was one of the largest coastal wetland systems in Southern California, covering about 2,550 acres in the mid-1850s. (An additional 1,110 acres of high marsh transition zone formed an ecotone between Mugu Lagoon and the alkali meadows of the Oxnard Plain.) The lagoon occurs in a structural basin formed by the folding and faulting of marine sediments. The lagoon itself is trapped in an embayment behind prograding beach spits (Warne 1971, Jacobs et al. 2010).

The lagoon/marsh complex was the site of a broad range of coastal wetland habitats, many of which are still present today due to Mugu Lagoon’s relative protection within the Point Mugu Naval Station. The complex contains the largest coastal wetland remnant in southern California today (Orme 2005).

A number of researchers have studied the history of cultural and physical change at Mugu Lagoon at length (e.g., Warne 1971, Steffen 1982, Onuf 1987, Swanson 1994, USACE 2003). An exhaustive search of the available historical record yielded little additional detail on early ecological patterns and processes at Mugu Lagoon, understandable given the region’s extensive salt marshes and subsequent lack of intensive early development. As a result, we focus here on discussion and interpretation of the 1857 T-sheet (the most detailed early picture of the area), bringing to bear supplementary sources to describe the patterns of historical habitat distribution in the area.

October 26. At noon we made a little tea and were eating it when suddenly the wind blew a spark into a bunch of green tule, which was in a blaze in a minute, the flames spreading with great rapidity... Fortunately an estero prevented its spreading far and by night we had it subdued.

—BOWERS 1879, IN BENSON 1997; AT POINT MUGU

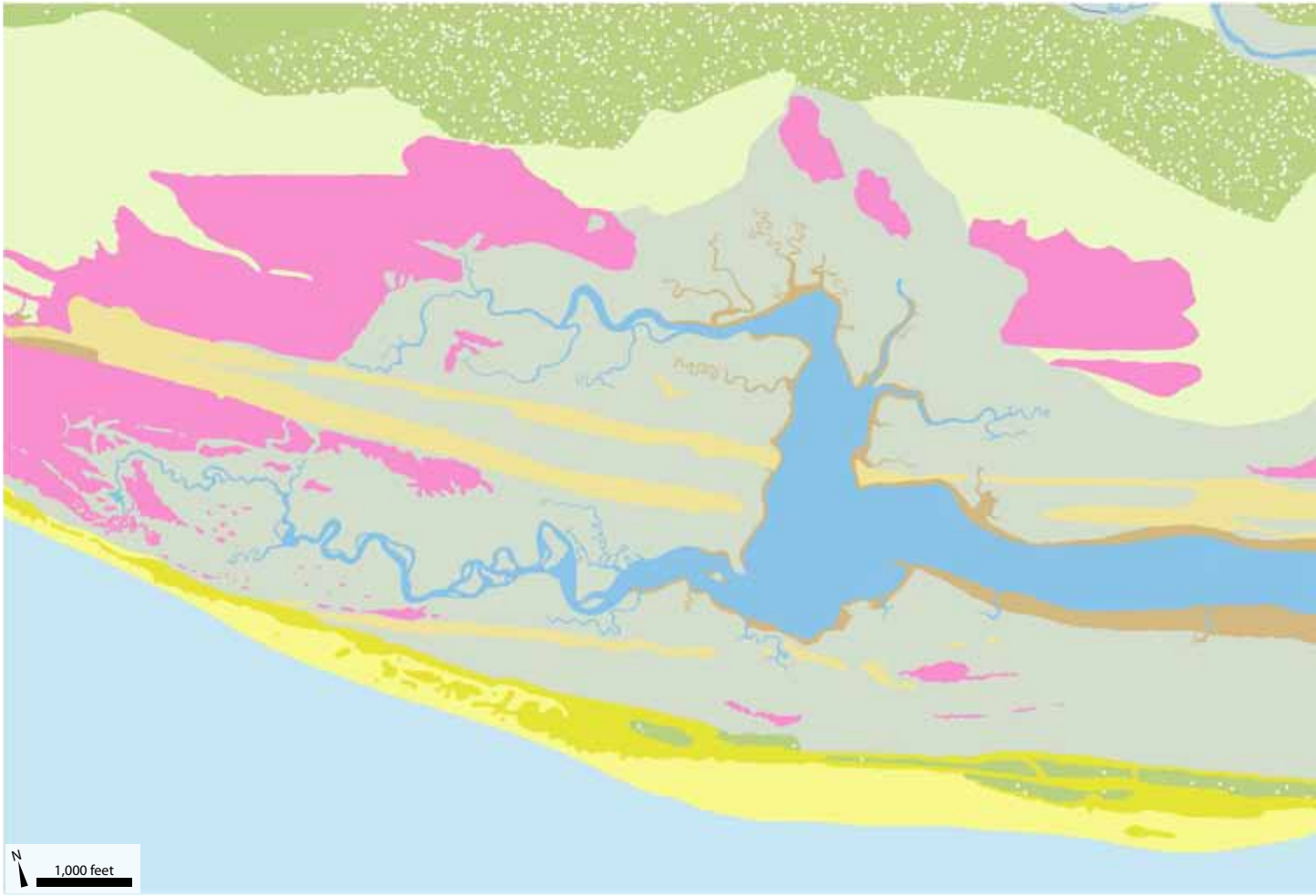
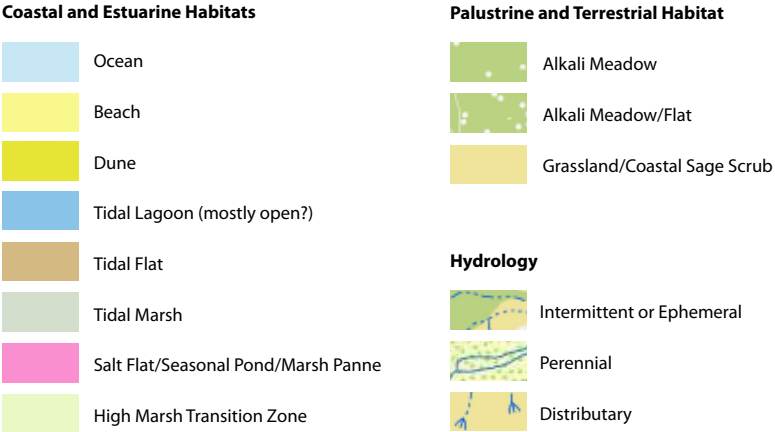


Fig. 6.26. Habitats of Mugu Lagoon, early 1800s. The historical habitat mosaic surrounding Mugu Lagoon included substantial amounts of subtidal habitat, tidal flat, tidal marsh, tidal channels, marsh pannes, salt flat, vegetated former dune strands, and high marsh-alkali meadow transitional zones.



This map is now available in greater resolution than previously (Grossinger et al. 2011).

The historical habitat mosaic at Mugu Lagoon included substantial amounts of subtidal habitat, tidal flat, tidal marsh, tidal channels, salt pannes/seasonal ponds, salt flat/playa, vegetated former dune strands, and high marsh-alkali meadow transitional zones (fig. 6.26). Most of these features are shown in detail in the 1857 US Coast Survey T-sheet (Johnson 1857; fig. 6.27). The predominant habitat type at this time was tidal marsh (58%), with the remainder of the area distributed among subtidal water (14%), tidal flat (12%), salt flat/marsh panne (10%), and open water ponds (5%).

Mugu Lagoon included a relatively large subtidal area compared to most other Southern California estuaries (Grossinger et al. 2011). Historical maps also show evidence of extensive tidal channel networks as well as former beach ridges reflecting former shoreline positions (Thompson 1994). Historical botanical records support the prevalence of tidal marsh in the first half of the 20th century, with specimen localities described as “salt marsh on shore of lagoon,” “dry salt marsh,” “border of salt marsh,” and “mudflats around tidal lagoon” (Fosberg 1931c,d; Hoffmann 1932a; Nobs and Smith 1948). Salt marsh vegetation captured in early (pre-1950)

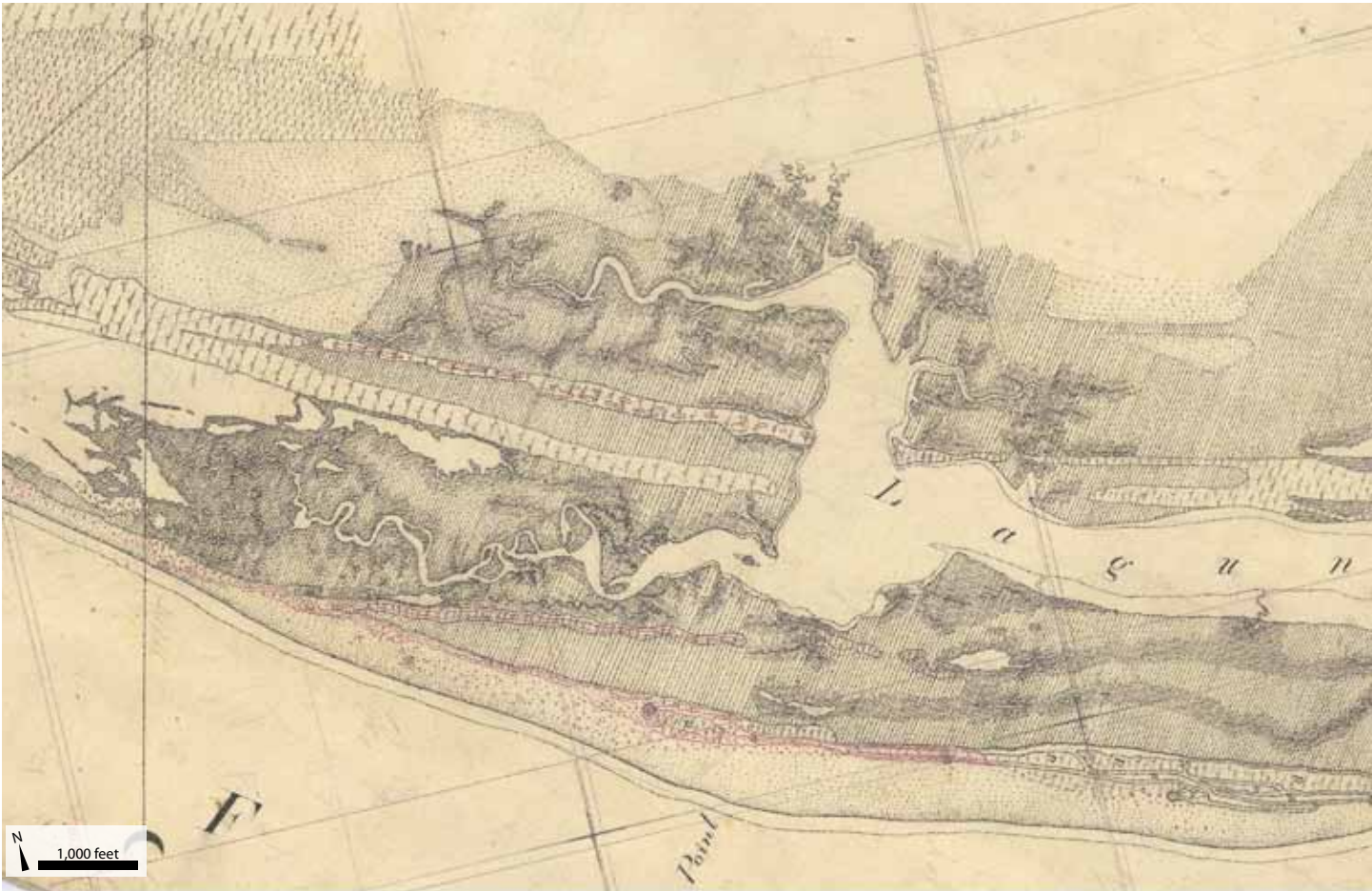


Fig. 6.27. Mugu Lagoon, 1857. (Johnson 1857, courtesy of the National Oceanic and Atmospheric Administration)

We soon came to miles of marked surface, overflowed by salt water in the winter and spring season, when the tides and winds are highest. At such times they are the shallow extension of the western branches of the Estero Grande—the now bare surface being then covered with water...

—REED 1871, DESCRIBING THE SALT FLATS OF WESTERN MUGU LAGOON

records includes Virginia glasswort (*Salicornia virginica*), Parish’s glasswort (*Salicornia subterminale*), marsh jaumea (*Jaumea carnosa*), and marsh rosemary (*Limonium californicum*) (Howell 1927; Fosberg 1931c,d; Purer 1935). The T-sheet resurvey of 1932 described the salt marsh south of the western arm of the lagoon as “low coarse eel grass” (Kelsh 1933b).

Supplementary sources help confirm habitat interpretations on the T-sheet. In particular, Thomas Bard’s 1870 map of Mugu Lagoon is another highly detailed mid 19th-century depiction of coastal wetlands, and provides independent confirmation (after the 1861-2 flood) of many of the features shown on the T-sheet 15 years earlier. For example, Bard (1870a) confirms stippled areas shown on the T-sheet at the marsh margin as unvegetated salt flats, and refers to the salt grass area and neighboring salt flats as “mudflats,” generally confirming their alkali playa characteristics. An early soils map helps confirm the extent of salt marsh depicted on the T-sheet (Nelson et al. 1917).

These sources also provide details not represented on the T-sheet, particularly at the upland edge of Mugu Lagoon (since the early T-sheet does not consistently map the full inland extent of tidal marsh). The full extent is indicated by these additional sources (6.28; see also fig. 6.2). The zone of strong alkali influence shown on the 1917 soils map provides a continuous boundary for the inland extent of tidally-influenced habitats



across the entire lagoon complex, while the Bard map provides clues to the nature of the habitat at the upland edge of the marsh. The map shows a number of areas of “Juncal” or “Juncal Grande” on the upland edge of the marsh, a now-rare ecotone between tidal marsh and the adjacent lowlands of the Oxnard Plain that we mapped as high marsh transition zone. These depictions presumably represent large stands of *Juncus*, likely spiny rush (*Juncus acutus*), which was collected extensively in the area by native peoples for basketry (Timbrook 2007). *Juncus acutus* var. *leopoldii* was collected at the site in the 1950s and 1960s (Raven and Thompson 1959) and is reported today (USACE 2003). The presence of these large stands of rush indicates substantial brackish tidal marsh zones, both at the eastern margin towards the Calleguas Creek drainage and elsewhere in the marsh. These habitats appear to have been greatly reduced today. This modification to Mugu Lagoon may have significant habitat implications. For example, the rare light-footed clapper rail (*Rallus longirostris levipes*) is found to nest at Mugu Lagoon primarily in the spiny rush stands (USACE 2003).

The T-sheet indicates the presence of this high marsh ecotone in a few places, using a subtle variation in symbology at the northwest edge of Mugu Lagoon to show the broad transitional area between the tidal marsh and adjacent alkali meadow (Johnson 1857). The surveyor fortunately provided a clue for the interpretation of this symbol, annotating the margin with

the words “line of salt grass” in faint handwritten pencil. We interpret this annotation as the distinction between the high marsh ecotone (which would have presumably had a high concentration of saltgrass (*Distichlis spicata*)), and the adjacent alkali meadow, which may have been a matrix of salt-tolerant and other grassland species.

Despite the detail these sources provide, the full former inland extent of the Mugu complex is unknown, and there is some indication that it once extended substantially further inland. Dr. William Livingston, who grew up in the Hueneme area in the 1870s and 1880s, recalled in a 1929 interview that Mugu Lagoon had shrunk considerably over his decades living on the plain:

Dr. Livingston also tells me that in his time Mugu Lagoon has filled up to a very great extent. Originally it was a large body of water and the probabilities are that it extended in the sixteenth century to the foot of the hills where the principal town was located. Indeed, it is possible that at that time it was open ocean at that point, the lagoon not having formed. Dr. Livingston states that one time the Santa Clara River emptied into the ocean in this neighborhood, the old channel being still plainly visible. (Wagner 1929, in King 2005)

This remark is corroborated by a member of an outing to Point Mugu in March 1902, who stated that “there are indications that the marsh extended further inland, and it is claimed that small steamers and boats used to come up to the now tidewater mark” (Wallace Weston Brown, in Brown 1981).

It is possible that these accounts capture early sedimentation and deposition on the marsh plain as a result of the construction of a channel connecting Calleguas Creek to Mugu Lagoon, reducing tidal extent. The initial date of channelization has been widely stated as 1884 (e.g., Steffen 1982, Onuf 1987, Swanson 1994, USACE 2000); while this is possible, the origin of the assertion is unclear and we found no direct evidence to support it. Regardless of the precise timing, however, it is clear that Calleguas Creek did not maintain a defined connection to Mugu Lagoon prior to channelization efforts, which would have likely been initiated sometime during the late 19th or early 20th century (see page 169). If this is the case, shrinking of Mugu Lagoon could have been a result of increased sedimentation from the Calleguas watershed after channelization, as sediments previously deposited on the Oxnard Plain during floods were transported instead to Mugu Lagoon and the ocean. This process is confirmed by sediment transport calculations, which estimate a ten-fold increase in sedimentation rates over geologic levels as a result of the channelization of Calleguas Creek (Warne 1971, Steffen 1982, Capelli and Cave 1983).

Another possibility is that the former extent of Mugu Lagoon before Mission times is not captured fully by the 1857 T-sheet survey and other early sources described above. There is no way to verify this with the available historical data, though early General Land Office survey notes –slightly predating the T-sheet—suggest that this might have been the case (fig. 6.28). Notes from two surveyors in 1853-4 indicate tidal influence above our mapped zone of tidal marsh and high marsh transition



Fig. 6.28. Historical extent of tidal influence at Point Mugu, early 1800s. The Mugu Lagoon wetland complex, including high marsh transition zone areas, extended quite far inland in the 19th century compared to its current extent. Early surveyor’s notes hint that the tidal zone may have extended even further inland, as shown by the excerpts above. Excerpts along the survey line refer to a line segment rather than an individual point. (USDA 2009)

zone. Washington (1853) described a mile-long transect “almost entirely overflowed by tide from the Pacific Ocean” crossing the western slough entering Mugu Lagoon, from 500 to 1,600 feet north of our mapped extent of tidal influence. He also noted “mostly rich low prairie...is overflowed by tide water” for nearly a mile west of modern Calleguas Creek, an area mapped by Bard (1870a,b) as “juncal” and largely interpreted in our mapping as high marsh transition zone, and noted “over flow from tide” more than 1,600 feet north of this mapped edge of high marsh transition zone. Hancock (1854) also noted “tide wash” extending 1,200 feet above the mapped edge of the high marsh transition zone above the western arm of the lagoon, differentiating between “tide wash” to the south and “salt weed” (presumably alkali meadow) to the north. We did not consider these points sufficient evidence to extend our mapping, since it is also possible that these areas were non-tidal, salt-affected lands (e.g., alkali meadows and flats) of the lowland Oxnard Plain. These accounts may also reflect flooding induced by perched conditions created by periodic or partial inlet closure (Jacobs pers. comm.).

Despite these changes, Mugu Lagoon has shown significant resilience over time. By the time of the T-sheet resurvey of November-December 1932, though most of the non-tidal lagoons to the north had been (or were in the process of being) drained, the subtidal and salt marsh components of Mugu Lagoon looked largely similar to the 1857 condition: so much so that the 1933 surveyors called the coastal complex “practically unchanged... even the small sloughs in the swamp area were found as shown” (Kelsh and Green 1934a). The major exception was the migration of the lagoon inlet, which had shifted almost 3,000 feet west during the intervening 76 years.

As might be expected, evidence of closure states for Mugu Lagoon indicate that the nature of the lagoon’s connection to the ocean was complex, dynamic, and variable. The cyclical migration and closure of Mugu Lagoon’s inlet in the 20th century has been well documented. Sources indicate repeated closure of the inlet and migration in response to onshore and longshore wave action balanced with hydraulic forces from the lagoon and the Calleguas Creek watershed (Bascom 1954). The general location of the mouth is governed by the presence of Mugu Canyon offshore, but its location moves from the northwest to southeast over time in response to longshore movement of sand. When the mouth gets to the southeastern portion of this range it is more susceptible to complete closure from the berms built during winter storms (Bascom 1954). The lagoon then breaks through again at the canyon head and repeats the process. In the mid-20th century, this process was documented to occur up to twice a year (Bascom 1954). This closure pattern was also documented by Warne (1971), who noted that “at present the lagoon mouth is naturally sealed off about every six months to one year” before being immediately dredged open.

Many of the above observations date from after significant modifications to the lagoon complex such as road building, diking, dredging, and the construction of a channel between Mugu Lagoon and Calleguas

Creek. These activities would have impacted lagoon processes, reducing tidal prism, restricting tidal access, and altering sediment availability, distribution, and freshwater inputs. As a result, the relationship of these later observations to 18th and 19th century lagoon closure dynamics is uncertain and has been intensively debated. While Warne (1971) stated that Mugu Lagoon experienced a similar cycle of closure and mouth migration prior to the major modifications of the 20th century, Onuf (1987) asserted that even prior to channelization the lagoon’s tidal prism “would have been sufficient to keep the mouth open at all times.”

Nineteenth century sources accentuate the relatively open character of the lagoon complex. Historical maps consistently show the lagoon with an open inlet, suggesting a direct connection to the ocean (e.g., Johnson 1857, Bard 1870b, Reed ca. 1871, Stow 1877, USGS 1904, Petit 1919). Early descriptions of the lagoon also emphasize its communication with the ocean, in contrast to the other lagoon complexes along the coast: “there are no esteros, lagunas, or salt ponds other than the Estero Grande [Mugu Lagoon] that have outlets to the sea” (Stow 1871). No 19th century source was found that described inlet closure. These data suggest that on the spectrum of Southern California estuaries, Mugu Lagoon likely had a greater degree of tidal connection than neighboring, smaller systems.

However, comparison of the early maps listed above also clearly shows changes in mouth position and width over time. One early surveyor described perceived changes in the nature of the outlet in the mid-19th century, noting that Mugu Lagoon’s “outlet to the sea, which is now only 25.00 chains or a little more than ¼ mile wide” had shrunk substantially: “old residents informed me that its width had lessened one half, within the period of their knowledge of it” (Reed 1871). It is not clear whether these data represent cyclical mouth migration and periodic closure as described in the 20th century or change through time in the lagoon’s closure dynamics.

Southern California lagoons existed in a range of closure states, and were connected to or closed off from the ocean at different times. Understanding of and terminology to describe these systems is currently in development, as advanced by Jacobs et al. (2010). Unfortunately, the historical record itself is insufficient at this time to resolve degree of closure or the former frequency, timing, and duration of closure patterns. It seems clear from 19th century data that Mugu Lagoon was at least periodically tidally influenced. It is possible that the size of the open water area may have created a sufficiently large tidal prism to maintain connectivity with the ocean for extended periods of time (Onuf 1987, Coats et al. 1989). Nevertheless, it is important to note that though these data emphasize the lagoon’s connection to the ocean, they do not preclude occasional or regular cycles of closure, or closure in the subtidal/intertidal by a bar (Jacobs et al. 2010). Further archival and field-based research at Mugu and other sites may provide additional insight into the nature of these early lagoon dynamics.

SUMMARY OF FINDINGS

The following points represent some of the significant findings from our research on the Ventura County shoreline. Along with an understanding of modern conditions, these findings can support scientists and managers working to identify restoration opportunities in these coastal systems.

1. **A diversity of coastal systems characterized the Ventura shoreline**, each with differing habitat patterns and hydrologic dynamics. The overall habitat distribution is well documented, though available historical sources only begin to indicate the range of coastal processes that created these patterns, from Mugu Lagoon to the backbarrier lagoons, dunes, salt flats, and tidal marshes of the Oxnard Plain.
2. **Coastal wetland habitats covered about 4,300 acres**, accounting for a large proportion of former Ventura County wetlands. Differences in freshwater input, extent of vegetative cover, and closure regime led to varying support functions for native fish and wildlife.
3. **Three distinct types of coastal estuarine systems characterized the Ventura County shoreline**: the freshwater-brackish, intermittently or seasonally closed estuaries of the Ventura and Santa Clara rivers; the non-tidal lagoon complexes marking former Santa Clara River mouths; and the large, more tidally-influenced wetland system at Mugu.
4. **The Ventura and Santa Clara River estuaries were periodically open to the Pacific Ocean**. Regular, seasonal cycles of closure were documented for the Santa Clara River mouth. The Ventura River mouth closed only occasionally (less frequently than the Santa Clara River), reflecting its greater historical volume of summer flow in the lowest reach, steeper channel gradient near the mouth, and lesser wave exposure.
5. **The estuaries of both rivers also shared similar habitat mosaics**. Both rivers had fairly compressed estuaries, with the relatively limited saline and brackish wetland habitat near their mouths bordered by extensive freshwater habitats, most notably the willow-cottonwood forest and wetland documented at both mouths.
6. **McGrath Lake is a regionally significant feature**, unique because of its persistence over the past centuries and its freshwater character. Though the lake has persisted, its location has shifted substantially since the mid-1850s; only a small portion of its current area overlaps with its historical extent.
7. **An extensive suite of marsh, salt flats/pannes, and lagoons stretched from south of the Santa Clara River to the western edge of Mugu Lagoon**. Prior to drainage and agricultural expansion, these systems were a significant component of the Ventura County shoreline. They exhibited a range of habitat patterns based on variable salinity gradients and hydrologic inputs, from the spring-fed brackish Laguna Hueneme to the hypersaline Salinas near Point Hueneme.
8. **Mugu Lagoon was the largest wetland complex in Ventura County, and the site of a broad range of coastal wetland habitats**, including salt and brackish marshes, large salt flats, and

extensive tidal channel networks. Dominant habitat cover was tidal marsh. There is some indication that the complex formerly extended substantially further inland than currently recognized. Its acreage has been dramatically reduced.

9. **Salt flats and high marsh transition zone were major components of Mugu Lagoon**. These transitional, high elevation habitats were particularly characteristic of the semi-arid climatic setting (Ferren et al. 2007), and have been disproportionately lost from this system. These features likely provided breeding habitat for shorebirds such as least tern and snowy plover (as small present-day remnants still do), as well as an inland migration zone for tidal marsh transgression in response to naturally rising sea level in the past.

Management Implications

- **The preponderance of closed conditions in most lagoons along the Oxnard Plain suggests strategies for habitat rehabilitation in these areas**. Efforts to restore coastal lagoon functions in these areas, for example at Ormond Beach, should consider these historical dynamics in restoration design. Current physical conditions at these sites (e.g., barrier dunes, small watersheds) may not reliably support open marine conditions without regular maintenance, but could potentially provide support functions for a range of native species. Restoration activities could also enhance the ecological functions of existing features. For example, the lagoon at Ormond Beach, though formed at a different location than historical features, currently exhibits similar closure dynamics. Sustaining and augmenting the geomorphic and ecological functions of this feature is an important restoration consideration.
- **Coastal lagoon complexes with high salinity levels and extensive surrounding salt marsh and salt flat were a significant component of the historical Ventura County shoreline**. These complexes, which occurred in areas with extremely small watersheds and limited freshwater input, may be under-represented in Southern California today.
- **Conversely, brackish-freshwater conditions maintained in some coastal complexes may be considered a significant component of coastal habitat restoration strategy**. While most coastal habitats historically exhibited high salinity levels, a few places maintained fresh-brackish conditions. In particular, the Santa Clara and Ventura river mouths and spring-fed lagoons such as Laguna Hueneme were less saline than surrounding systems. Maintenance of contemporary freshwater sources should be considered to restore or maintain such environments, with adequate consideration of water quality concerns.
- **Re-establishing transitional habitats at Mugu Lagoon is an important component of habitat restoration, and may be of regional significance**. Mugu Lagoon is recognized as the biggest coastal wetland complex in Southern California, yet it has lost much of its habitat area, particularly on its landward edge. High marsh ecotone, a transitional habitat between tidal marsh and alkali meadow, was a significant component of Mugu Lagoon and accounted for much of the region’s wetland area. Re-establishing portions of this ecotone may be an important component of the lagoon’s future persistence and resilience, and could provide room for inland

migration in response to sea level rise. This is one of the few places where this is possible in Southern California.

- **Consideration should be given to potential brackish marsh areas within Mugu Lagoon.** Rush stands documented at the northern edge of the complex may have been important historically for light-footed clapper rail, as they are today. Expansion of this habitat may be an important part of species recovery and enhancement plans.

Fig. 6.29. San Jon Road at Highway 101, looking west. Areas of the Pierpont lowland are still susceptible to flooding, as shown in this December 2008 photograph.



RECOMMENDED FUTURE RESEARCH

This study documents historical landscape patterns of the Santa Clara and Ventura river valleys, the Oxnard Plain, and the Ventura County shoreline prior to major Euro-American modification. In particular, it focuses on former habitat distribution, riverine character and processes, and riparian ecology in each of these areas. However, there are a number of additional research directions that would enrich our understanding of the historical landscape and enhance our ability to apply these findings to current local management.

Additional geographic areas of interest

This research focused on the Ventura County portion of the Santa Clara River and valley, with limited investigation on upper (Los Angeles County) river reaches. Additional data on the upper river undoubtedly exists in Los Angeles County archives not visited during the course of this project, such as the Santa Clarita Valley Historical Society, the Los Angeles Public Library, the Braun Research Library, the Los Angeles County Surveyor’s Office, and the Los Angeles County Assessor’s Office. A more detailed understanding of this portion of the river, in conjunction with other studies (e.g., Stillwater Sciences 2011), would provide insight into the historical hydrogeomorphic processes and riparian patterns across the entire river.

The study area also excluded a few adjacent areas of possible interest. These include the Ojai Valley east of the Ventura River, and the Santa Rosa Valley and Conejo Valley/Thousand Oaks area east of the Oxnard Plain. In addition, while the lowest reaches of major tributaries to the Santa Clara River were included within the study area, they were not the focus of our research. Subsequent data collection and analysis efforts could reveal more details on the historical dynamics of these systems, in particular Santa Paula, Sespe, and Piru creeks.

Future research directions

Though this study covers many aspects of the Ventura County historical landscape, it is not comprehensive. A number of additional topics merit further research, and would contribute to a better understanding of ecological and hydrogeomorphic pattern, process, and function in the

region. While we performed limited analysis of historical botanical and ornithological records, the voluminous available data merit more substantial analysis. In addition, we did not explore historical faunal records. A detailed analysis of these wildlife records by regional experts may support interpretation of historical habitats and linkages with species support functions, which is for the most part not covered in this report. This is particularly true for native fisheries use of Ventura County streams.

Future research into processes and dynamics that shaped the historical ecological landscape would further develop our understanding of former conditions. For example, more in-depth investigations of the history of invasive species introduction (such as *Arundo donax*), fire ecology, historical grazing impacts, and Chumash land management would provide important context for interpreting historical conditions.

In addition, future research may further elucidate historical trends and characteristics outlined here. Interviews with long-time county residents would deepen our understanding of local environmental change and persistence. Scientific studies using geoarchaeology, coring, remote sensing, and other techniques could also add additional detail to this picture of early conditions. More extensive field-based assessment of the findings outlined here would also be useful.

Application of report findings

The research presented in this report provides the foundation for supporting local and regional environmental management with detailed historical data. However, the historical record alone is insufficient to apply these findings on the ground. This research must be integrated with contemporary assessments of physical and biological conditions to develop practical, place-specific conservation strategies for use by local organizations. For example, the management implications explored here for floodplain and riparian restoration need to undergo feasibility analysis before application to particular sites. Partnerships between local residents, managers, and scientists is a crucial component of determining how and where to apply these data.

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ATTACHMENT 1

CENTRAL COAST ALLIANCE UNITED FOR A SUSTAINABLE ECONOMY
EARTHJUSTICE
NATURAL RESOURCES DEFENSE COUNCIL
WISHTOYO CHUMASH FOUNDATION

February 14, 2022

VIA ELECTRONIC MAIL

Jay Dobrowalski
Senior Planner
City of Oxnard Planning Division
214 South C Street
Oxnard, CA 93030
Email: jay.dobrowalski@oxnard.org

**Re: The Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project
(#2020069039) and PZ 18-500-02 (Special Use Permit)**

Dear Mr. Dobrowalski:

We respectfully submit the following comments to the Draft Environmental Impact Report (“DEIR”) for the Port of Hueneme- Temporary Outdoor Vehicle Storage Facility Project (“Port of Hueneme Project” or “Project”) on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, National Resources Defense Council (“NRDC”), and Wishtoyo Chumash Foundation.

CAUSE is a base-building organization with deep roots in the City of Oxnard. CAUSE has worked closely with Oxnard residents to organize around social, economic, and environmental justice issues for over two decades. CAUSE has worked to protect communities from the environmental hazards of liquified gas terminals, power plants, and metal scrapyards. For years, CAUSE has worked with residents of South Oxnard working towards a vision to deindustrialize the Oxnard coast and open access to Ormond Beach, where the environmental restoration of hundreds of acres of wetlands is underway. Many of its members live, work, and go to school in and around the Project. They have a direct interest in the decision at issue here that will shape Oxnard’s future, and specifically in the City of Oxnard Planning Department’s careful analysis regarding the impact of this Project on their neighborhoods and the surrounding areas.

Earthjustice is a nonprofit public interest environmental law organization serving grassroots environmental justice organizations across the country to preserve irreplaceable wildlands, protect biodiversity, demand clean air and water, and protect frontline communities from polluting industries. Earthjustice has represented several nonprofit organizations, community groups, and grassroots coalitions in Ventura County on a number of environmental issues.

NRDC is a non-profit organization that works to safeguard the earth, including its people, its plants and animals, and the natural systems on which all life depends. NRDC combines the power of roughly 3 million members and activists, including approximately 50 in South Oxnard and Port Hueneme, with the expertise of some 700 lawyers, scientists, and policy advocates across the globe to ensure the rights of all people to the air, the water, and the environment.

Founded in 1997, Wishtoyo Foundation is a California 501(c)(3) nonprofit public interest organization with members composed of Chumash Native Americans, First Nations People, and Santa Barbara, Ventura, and Los Angeles County residents. Wishtoyo is a place, organization, and movement inspiring people to live in harmony with our Earth again. Wishtoyo serves as a “rainbow bridge” linking Chumash and Indigenous lifeways with the protection of natural and cultural resources, utilizing traditional ecological knowledge to provide environmental and cultural preservation and justice, education, research, and advocacy.

With this DEIR, the City of Oxnard (“City”) seeks approval for a vehicle storage site to facilitate the Port of Hueneme’s (“Port”) operations off-site. At the outset, it is important to provide some perspective on the true magnitude of the Project and its potential impact on the surrounding communities. This Project, which will serve to bring port-related activity into the communities of South Oxnard, cannot be treated in isolation. It must be seen as part of a larger Port expansion project that includes plans to create similarly dedicated but much larger storage sites that will undoubtedly impact the region. Unfortunately, as described throughout these comments, the DEIR fails to comply with the California Environmental Quality Act (“CEQA”). As such, the City cannot rely on the document as a form of environmental impact review for the purpose of Project approval. Should the City decide to move this Project forward, it must engage in a new DEIR that allows the public and decision-makers an opportunity for meaningful review of the Project’s impacts.

The commenters reserve their right to supplement, amend and otherwise augment these comments at or prior to the hearing for this Project and any later hearings or proceedings pertaining to the Project.¹ Commenters would be justified in submitting any later comments to supplement as they had requested an extension of time to accommodate the City and the Oxnard Harbor District’s slow responses to Public Records Act Requests seeking documents pertinent to many of the issues presented by the DEIR.

Commenters incorporate by reference all comments raising issues regarding the DEIR submitted prior to certification of the EIR for the Project.² These comments follow previous comments that commenters CAUSE made on January 31, 2019 (MND Comment letter)³ in response to the Mitigated Negative Declaration, and by CAUSE, Natural Resources Defense Council, Wishtoyo

¹ Cal. Gov. Code §65009(b); Cal. Pub. Rec. Code §2117(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109,1122.

² *Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173,191 (finding that any party who has objected to a Project’s environmental documentation may assert any issue timely raised by other parties.)

³ Letter from Central Coast Alliance United for a Sustainable Economy to Oxnard Planning Department (January 31, 2019) (In response to Mitigated Negative Declaration) [hereinafter “January 2019 CAUSE Letter to Oxnard Planning Department”]

Jay Dobrowalski
February 14, 2022

Chumash Foundation, and others, on July 24, 2020 (NOP comment letter)⁴ in response to the Notice of Preparation related to this Project. The DEIR has failed to remedy many of the legal deficiencies noted in those letters, and for those reasons and others, it is inadequate under CEQA. This letter supplements and expands upon certain of the arguments in those previous letters, but it is not intended to be exhaustive and incorporates by reference arguments made previously.

⁴ DEIR, Vol. II, Appendix B.

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I. Experts and Addendums to Comments

In addition to the comments outlined in this letter, we submit technical expert analysis and comment letters prepared by Matthew Hagemann and Dr. Paul Rosenfeld (Addendum A), Dr. Shawn Smallwood (Addendum B), and Brenton Spies (Addendum C). We refer the City of Oxnard Planning Department to these expert comments throughout this letter for further discussion of the DEIR inadequacies. This letter incorporates by reference the arguments made in the attached technical expert comment letters and we ask that the City respond to each of the separate points made therein, even if not separately raised in the body of this comment letter.

II. The DEIR Is Inadequate as an Informational Document and Precludes Meaningful Public Review

The City recognized the need to provide DEIR-related documents in Spanish, but failed to translate any portion of the actual DEIR into Spanish other than a five-page executive summary.⁵ A large percentage of residents in the impacted areas include primary Spanish speakers. According to the latest census data, in Oxnard as a whole, 66% of residents speak a language other than English at home, and 30% speak English less than “very well.”⁶ While Spanish speakers have access to the five-page Executive Summary for the DEIR, they do not have Spanish translation for any of the close to 1,000 pages of documents that provide the environmental review undertaken by the City and the details of the Project. If the City truly aims to provide meaningful opportunities for engagement and public review of the DEIR, it should translate the entire DEIR, technical reports, and attachments into Spanish. Once the translated documents are released, the City should provide a 60-day comment period for review and public comment.

The City also acknowledged that a significant percentage of Oxnard residents speak Mixteco and require oral translation of the relevant documents into their primary language. The City issued an 18-minute video interpreting the content of the Executive Summary into Mixteco with only 5 minutes of explanatory graphics. At the same time, however, the City rejected an extension request to comment on the DEIR and failed to respond to timely requests for a public hearing that would have allowed for outreach to the Mixteco community concerning the content of the DEIR as well as an opportunity for residents to engage with decisions makers in a public forum prior to closing the comment period. For these reasons, the City has not provided meaningful public review of the DEIR and should extend the public comment period to allow for a public hearing that will offer all residents an opportunity to fully engage in the commenting process.

⁵ Oxnard Harbor District- *Spanish Language- Project Summary Port of Hueneme Installation of Temporary Outdoor Vehicle Storage Site EIR* (January 2022); available at <https://www.portofhueneme.org/wp-content/uploads/2022/01/Spanish-Project-Summary-Puerto-de-Hueneme.pdf>

⁶ U.S. Census Bureau (2021). *Quick Facts- Oxnard, California*. Retrieved from <https://www.census.gov/quickfacts/oxnardcitycalifornia>

III. The DEIR's Analyses of Impacts, Alternatives and Mitigation are Flawed and Based on an Improper and Incomplete Project Description

One of the key elements of CEQA is to foster greater transparency to ensure that decision-makers and stakeholders are informed of potentially harmful environmental consequences of proposed projects. “Only through an accurate view of the project may outsiders and public decision-makers balance the proposal’s benefits against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the “no project” alternative) and weigh other alternatives in the balance.”⁷ Under CEQA, a “project” is defined as the whole of an action that has the potential to cause direct or indirect physical changes to the environment.⁸ CEQA mandates “that environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences.”⁹ A project description that omits integral components of the full project may result in an EIR that fails to disclose all the impacts of the project.¹⁰

“[A]n accurate, stable and finite project description is the sin qua non” of a legally sufficient EIR, and “the defined project and not some different project must be the EIR’s bona fide subject.”¹¹ If a project is too narrowly defined, such as where a proposed development is divided into several segments, it will improperly limit the analysis to a portion of a project and run the danger “...that consideration of the cumulative impact on the environment of the two halves of the project may not occur.”¹² CEQA prohibits the piecemealing of projects to avoid a more robust review of the potential direct or indirect physical changes to the environment caused by a project¹³. An EIR must include analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and 2) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.¹⁴

A. The DEIR disingenuously omits plans to expand Port-Related Storage at a 250-acre site that will Serve as a Reasonably Foreseeable extension of the Project.

The DEIR lists project objectives for the Project to include the facilitation of “commercial success for Port clients to ensure they keep their business in the region.” as well as “[t]he consolidation of vehicle storage closer to the Port [to] enable more efficient movement of vehicles and reduce the need for heavy duty truck movement.”¹⁵ Yet the DEIR limits the description of the Project to approximately 34-acres which will be used to accommodate parking

⁷ *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192

⁸ Cal. Code Regs., tit. 14, §15378(a)

⁹ *Ozung v. Local Agency Formation Comm’n* (1975) 13 Cal.3d 263, 283-84.

¹⁰ *Santiago County Water Dist. V. County of Orange* (1981) 118 Cal.App.3d 818, 829 (project description for sand and gravel mine omitted water pipelines serving project).

¹¹ *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.

¹² *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 166.

¹³ *Berkeley Keep Jets Over the Bay Committee v. Board of Port Com’rs* (2001) 91 Cal.App.4th 1344, 1358.

¹⁴ *Laurel Heights Improvement Ass’n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 367, 396.

¹⁵ DEIR Section 3.6 p. 3-15

for up to 4,944 vehicles.¹⁶ In fact, mention of the 250-acre site does not appear anywhere in the DEIR analysis even though it was specifically raised as an issue by commenters CAUSE, NRDC and Wishtoyo in response to both the Negative Mitigation Declaration and the Notice of Preparation. This omission of the 250-acre site from the DEIR is misleading and disingenuous and should raise serious misgivings about the reliability of the analysis and recommendations contained in the DEIR.

Yet the City and the applicant Oxnard Harbor District (“OHD”), which operates the Port of Hueneme, set their sights on a larger off-site port expansion well before this DEIR was drafted.¹⁷ The Port has previously sought federal funding to partially support the acquisition and permitting of 250 acres of land to build out a Multimodal Logistics Park with existing direct access to railroad shipping.¹⁸ OHD touted the 250-Acre Multimodal Logistics Park as part of their plan to transfer more cargo by train and truck to ocean-going vessels and “increase the capacity of the Port to accommodate exports and imports, while freeing up space for dockside operations.”¹⁹

In a fact sheet titled “Ensuring the Commercial Viability of major Ventura County Economic Engine- The Port of Hueneme (PoH)- for a better tomorrow at the City of Oxnard,” OHD cites to a “serious off port land deficit” of about 300 acres that is resulting in the Port and its clients operating above 100 percent operational land capacity- a situation it acknowledges is not sustainable.²⁰ OHD cites as solutions the creation of an immediate “stop gap land measure” and a longer term accommodation near the port as critical to attracting additional business from customers such as GLOVIS.²¹ In the fact sheet used to apply for funding, OHD states:

The stop gap 34-acre measure discussed herein will ensure that the City of Oxnard and the POH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail.²²

The statement shows that it is reasonably foreseeable for the City to expect that the 250-acre development will become an extension of the 34-acre site, yet no mention of the 250-acre plan is referenced anywhere in the DEIR. Statements by OHD leadership bolster the notion that the Port has planned for some time to expand vehicle storage sites off-port and that the current Project is just a step in that direction. In an email dated July 2020, OHD executive staff reference budget allocations being made for continued efforts to secure additional off-port land expressing “how important addressing this a major commitment[sic]” is to OHD.²³ The email states that the Port intends to build a larger storage lot that would leave the 34-acre site available for other uses.²⁴

¹⁶ *Id.*

¹⁷ City of Oxnard & The Port of Hueneme Ensuring Commercial Viability Report [hereinafter, “Oxnard & POH Commercial Viability Report”], p.1.

¹⁸ INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary, p.1.

¹⁹ *Id.* at 2.

²⁰ Oxnard & POH Commercial Viability Report, p.1.

²¹ *Id.*

²² *Id.*

²³ Email from Dona Toteva Lacayo, Chief Commercial and Public Affairs Officer to Kristin Decas, OHD CEO (July 13, 2020)

²⁴ Claudia Boyd-Barret, *As California’s Ports Expand, Neighboring Communities Fight Back Against Pollution*, California Health Report (March 18, 2019), available at: <https://www.calhealthreport.org/2019/03/18/as-californias-ports-expand-neighboring-communities-fight-back-against-pollution/>

These plans are consistent with OHD's long-established ambitions regarding off-port vehicle storage as reflected in its FY2018 Financial Report, which states:

The Port is also working on two additional land developments within 1-2 miles of the entrance of its terminal. A 34-acre parcel on Port Hueneme Road to be used for temporary autos parking, and 250-acres on Port Hueneme Road to be used predominantly by automotive and fruit segments. Both properties represent the Port's strategic plan to invest in more options for growing its footprint off-port in order to increase its throughput and velocity.²⁵

These statements were echoed in meetings held between commenter, CAUSE, and the OHD leadership. Over the course of four meetings held between March 29th, 2018, and January 11, 2019, Port representatives shared their views regarding the importance of the 34-acre site. According to executive staff, the site would serve as a 3-5 year bridge to hold access capacity of imported vehicles while the Port seeks permitting and rezoning for a 250-acre permanent expansion site in the area bounded by Hueneme Rd., Olds Rd., Edison Dr. and Sanford St.²⁶ Port representatives shared that the short-term 34-acre site would be needed to accommodate growing shipment since the permitting process for the planned 250-acre site would take time as it would require annexation into the city and approval by the Ventura County Local Agency Formation Commission—a process that would likely take several years to complete.²⁷

Other communications show that OHD has linked the 34-acre site to a much larger plan to expand to the 250-acre site sometime in the future. In a 2019 letter to the then U.S. Transportation Secretary Elaine Chao, OHD refers to investments from the private sector to leverage \$75,000,000 being solicited for the “acquisition, development, utilities, entitlements, and permitting for 250 acres of land located just 2.4 miles from the central gate of [the] port” to form part of the Multimodal Optimization and Vehicle Efficiency Project.²⁸ The “Port’s plan” to acquire and use the 250-acre property to expand the Port’s capacity to store cargo are referenced in emails between the OHD leadership and logistics representatives throughout 2020.²⁹ In July 2020, OHD staff prepared a 250-Acre Site Development Checklist, which shows the Port’s checklist for everything from awarding contracts to development teams, drafting CEQA documents and putting them out for comment, report approval, and permit applications to the City of Oxnard, all the way to ribbon cutting.³⁰ As of June 2021, standing weekly “Project 250” meetings- related to the 250-acre site development, had been put back on the calendar by OHD staff.³¹ The plan to acquire and develop the 250-acre site is not just a mere wish list item for the

²⁵ Oxnard Harbor District, Comprehensive Annual Financial Report FY 2018 (July 2017 to June 2018), p. 7, [hereinafter “OHD FY18 Annual Financial Report”] available at <https://www.portofhueneme.org/wp-content/uploads/2019/01/FY-2018-CAFR-Oxnard-Harbor-District.pdf>

²⁶ Declaration of Lucas Zucker, February 26, 2019, [hereafter “Zucker Decl.”], ¶3.

²⁷ Zucker Decl., ¶5.

²⁸ Oxnard Harbor District, Letter to Secretary of U.S. Department of Transportation Elaine Chao Dated February 28, 2019.

²⁹ Email from Dona Lacayo To Cameron Spencer, dated March 6, 2020; *see also*, Email from Cameron Spencer to Lucas Zucker, dated June 17, 2019, (referencing plans to “begin the master planning process for the Port’s future development and the potential of [the] 250 acre site will be included in that process”);

³⁰ Oxnard Harbor District, *Port of Hueneme 250 Acre Site Development Checklist and Status* (7/13/20)

³¹ Email from Kristin Decas to Sandra Cruz, dated June 7, 2021

OHD, but part of a strategic plan underway to expand Port capacity as evidenced through funding solicitations and careful planning with Port property advisors.

B. The Future Expansion of the Project onto the 250-acre Site Will be Significant and Will Change the Nature of This Project and Its Environmental Effects

The 250-acre storage site has more than seven times the capacity of the 34-acre site currently under review but will serve much the same purpose in storing vehicles awaiting shipment after arriving at the Port.³² As OHD has stated, the 34-acre site is merely one step to keeping GLOVIS as a customer by expanding capacity to accommodate 60,000 new cars.³³ The 250-acre site, less than a mile east of the Project on W. Hueneme Road, will have a profoundly more significant impact on the environment and the local community as compared to the 34-acre site alone.

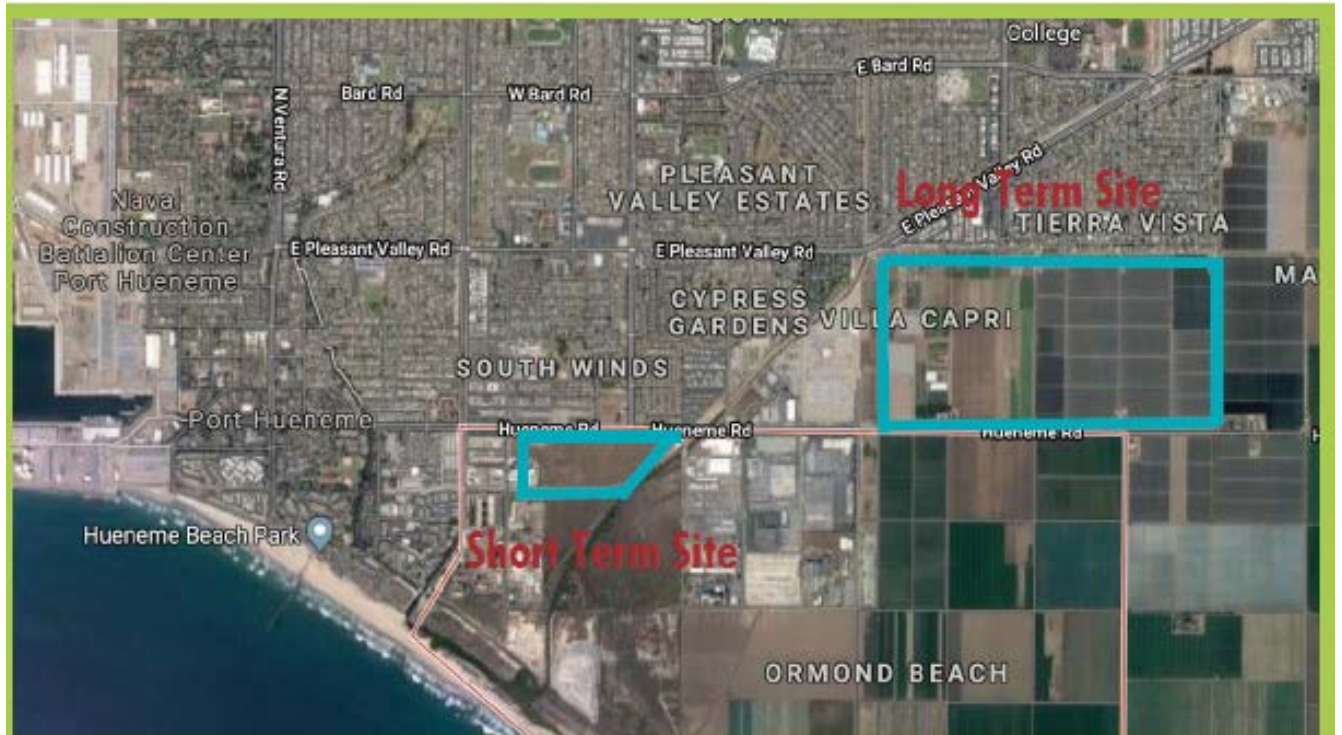
The 250-acre site would undoubtedly result in more vehicles being transported on Hueneme Road from the Port and through already impacted communities—therefore adding considerably more traffic impacts and emissions to the region.³⁴ The 250-acre Multimodal Logistics Park will be a permanent operation, and will trigger even greater growth-inducing effects by expanding throughput capacity at the Port. Moreover, the project will include both refrigerated cargo capacity in addition to vehicle storage thus changing the makeup and quantity of emissions related to the site as compared to the original 34-acre site alone.³⁵

³² Oxnard Harbor District, 2018. Comprehensive Annual Financial Report- Port Hueneme. Available at: [<https://www.portofhueneme.org/wp-content/uploads/2019/01/FY-2018-CAFR-Oxnard-Harbor-District.pdf>]

³³Letter from Kristin Decas to Greg Nyhoff dated January 20, 2017[hereinafter 2017 Letter from Kristin Decas to Greg Nyhoff], and *Economic-Environment Partnership*, Oxnard Harbor District, Presentation

³⁴ In addition, OHD has invested in a new rail line with GLOVIS which is projected to grow GLOVIS's annual income by 30% and increase total automobile throughput at the Port by 10%. See OHD FY18 Annual Financial Report, p.6.

³⁵ Oxnard Harbor District INFRA Grant Narrative - Appendix C Benefit-Cost Analysis



Source: CAUSE, Port of Hueneme Expansion: *How Would it Impact Us?* (2019), p. 1

C. The DEIR should Include an Accurate Project Description that Encompasses Other Port Expansion Projects

Expanding the Port's capacity to receive more automobile imports has been part of the OHD's objectives for some time, and it has taken steps to put this in motion.³⁶ In grant applications, OHD has described dredging and an on-site storage structure as the two primary components of its strategy to its double automobile capacity.³⁷

The OHD has prioritized its plans to widen all five berths to facilitate expanding throughput because that will allow larger vessels to use the Port.³⁸ The Port does not mince words in its

³⁶ Oxnard Harbor District: 2030 Strategic Plan Port Infrastructure Workshop (April 8, 2021), Slide 25; Available at: <https://www.portofhueneme.org/wp-content/uploads/2021/04/10822-Infra-Workshop8Apr2021RFS.pdf> (hereinafter 2030 Strategic Plan Port Infrastructure Workshop)

³⁷ Oxnard Harbor District, "INFRA FY20: INVEST Project; Infrastructure Needed for Vehicle Exports to Support Trade Project" [hereinafter "INFRA FY20 Application Project Summary"] (OHD touts its proposed five-level structure to serve as a first or last point of rest for over 120,000 new automobile exports and imports each year, along with the DEEP Element- for deepening three berths at the port to accommodate auto carrier and fresh produce vessels).

³⁸ Mike Harris, *Army Corps of Engineers dredging Port of Hueneme channel, to replenish Hueneme Beach*, Ventura County Star, January 8, 2021; available at <https://www.vcstar.com/story/news/local/communities/port-hueneme/2021/01/08/port-hueneme-army-corps-of-engineers-beach/4143430001/>; see also Press Release, Los Angeles District, U.S. Army Corps of Engineers, *Corps to begin dredging project at Port of Hueneme*, January 5, 2021, available at: <https://www.usace.army.mil/Media/News-Releases/News-Release-Article->

capital improvement plan when describing how dredging will invite not only larger vessels with more cargo into the Port but also *more* vessels.³⁹ The Port anticipates that it will also increase capacity to handle 229,000 tons more cargo annually⁴⁰ and has stated that the deepening complements plans to land more cars at the Port.⁴¹

The City cannot afford to ignore the environmental impacts that the Port's channel deepening and berth widening to receive larger ships will have on the region. Existing economic data and emerging research suggest that ports that expand their capacity to receive larger container ships may experience a variety of economic pressures to expand operations, many of which produce adverse environmental impacts. For example, a 2014 report by neighboring Port of Long Beach concludes: "[T]he trend toward larger vessels will have significant implications for ports that compete to service them as well as for the land side warehouse, trucking and rail operations that must accommodate an increase in volumes."⁴² More recently, a 2021 study by Jungen *et al.* discussing the rise of ultra-large container vessels concluded, based on practical observations and empirical studies, that ultra-large container vessels experience "significantly longer port stay times" compared to smaller vessels, which in turn puts "enormous pressure on terminal operators to increase handling efficiency."⁴³ One way operators may handle such pressure is by increasing reliance on cargo handling equipment, and in particular, by increasing "crane intensity": the number of cranes deployed per calling vessel.⁴⁴ That research has already borne out in Florida, where Port Miami reportedly "raced" to replace its crane equipment to be ready to handle an influx in ultra-large "post-Panamax" vessels alongside a planned dredging project that would deepen its shipping canal.⁴⁵ Thus, existing research shows it is reasonably foreseeable that callings by larger container ships could increase pressures on local Port-side infrastructure. In the case of the Port of Hueneme, the quest to accommodate larger capacity ships is already putting

[View/Article/2462330/corps-to-begin-dredging-project-at-port-of-hueneme/](#) ("Curtin Maritime Corp., the Corps' contractor for the project, will be deepening the port's federal navigation channels by dredging 385,000 total cubic yards of material. Deepening the harbor will accommodate Panama-sized vessels, which are currently unable to load to their maximum capacity."); Press Release, Oxnard Harbor District, *History in the Making! Port Celebrates Completion of Deepening Project*, June 28, 2021, available at: <https://www.portofhueneme.org/port-deepening-completion-06-28-2021/> (The Port was able to complete the widening of Berths 1 and 2 as of June 2021 and has received \$5 million to dredge the Berth 3); Hrvacevic, Zlatan, *\$5M Funding Secured for Port of Hueneme Dredging Project*, DredgingToday.com, October 25, 2021; available at <https://www.dredgingtoday.com/2021/10/25/5m-funding-secured-for-port-of-hueneme-dredging-project/>.

³⁹ Oxnard Harbor District, *Oxnard Harbor District Comprehensive Economic Development Strategy 2020*, (Spring 2020), p. 32 available at: <https://www.portofhueneme.org/wp-content/uploads/2020/04/OHD-2020-CEDS-FINAL-04-08-2020.pdf> [hereinafter "2020 OHD Comprehensive Economic Development Strategy"].

⁴⁰ Oxnard Harbor District, *Port of Hueneme Deeping Project: New 40ft Channel at the Port of Hueneme to Benefit Local Economy and Support Beach Nourishment* (2015), available at https://www.portofhueneme.org/wp-content/uploads/2015/09/Dredging_Flyer_2015_Web.pdf

⁴¹ OHD FY18 Annual Financial Report at 7.

⁴² Dr. Noel Hacegaba, "Big Ships, Big Challenges: The Impact of Mega Container Vessels on U.S. Port Authorities" (June 30, 2014), https://www.supplychainbrain.com/ext/resources/secure_download/KellysFiles/WhitePapersAndBenchMarkReports/PortofLongBeach/Hacegaba_PPM_PAPER_7_3_0_14.pdf.

⁴³ Hendrik Jungen, et al., "The Rise of Ultra Large Container Vessels: Implications for Seaport Systems and Environmental Considerations," *Dynamics in Logistics* 249-275 (2021) at pp. 258-59, https://link.springer.com/chapter/10.1007/978-3-030-88662-2_12.

⁴⁴ *Id.*

⁴⁵ "Port Miami Upgrades Cranes in Race for Giant Cargo Ships," *ColumbusCEO* (Oct. 7, 2013), <https://www.columbusceo.com/story/business/2013/10/07/portmiami-upgrades-cranes-in-race/22907038007/>.

pressure on local communities as the Port seeks to increase its off-port storage capacity that will bring more shipping activities into their neighborhoods. The DEIR must analyze the environmental impacts of this encroachment.

Further, callings by ultra-large container ships also increase traffic flow to and through ports and nearby communities. The Jungen *et al.* study found a relationship between the number of containers handled per port call (also known as “call size”) and coastal road traffic, apparently by trucks transporting the cargo flowing to and from the ultra-large vessels increasingly calling on local ports.⁴⁶ “Especially ports with a high modal share of road transportation show increased gate congestion in relation to arrivals of larger vessels.”⁴⁷ In other words, as the number of containers per vessel goes up, so too does the local truck traffic. These data are further corroborated by a recent short paper issued by the California Air Resources Board on the emissions impacts of recent congestion at California ports, which noted the strong correlation between increases in cargo imports, traffic congestion at ports, and resulting regional air pollution.⁴⁸

Locally, plans to increase volume at the Port will likely mean an increase in all modes of transporting goods through the region. The Port has also been investing in rail projects, for example, which will allow cargo to run through Port-owned rail lines that run adjacent to both the 34- and 250-acre sites. The Port has invested in a new rail line with GLOVIS, which is projected to grow GLOVIS’s annual income by 30% and increase total automobile throughput at the Port by 10%.⁴⁹

With regard to the on-dock storage structure, the Port has sought funding for a proposed Structure for Transfer of Automobiles Creating Key Economic Development (“STACKED”)—an intermodal Planning project that is expected to expand capacity to accommodate 33% more automobiles at the Port.⁵⁰ The project proposes to expand capacity to accommodate an additional 98% more automobiles on-site at the port, through the installation of a cargo transfer structure similar to a parking structure intended to be the on-dock first and last point of rest for both import and export of automobile cargo.⁵¹ An FY20 grant application by OHD shows that the STACKED project will be located on the North Terminal.⁵²

⁴⁶ Hendrik Jungen, et al. (2021), at pp. 258-60.

⁴⁷ *Id.* at p. 261.

⁴⁸ See Cal. Air Resources Board, “Emissions Impacts of Recent Congestion at California Ports” (Sept. 13, 2021), https://ww2.arb.ca.gov/sites/default/files/2021-09/port_congestion_anchorage_locomotives_truck_emissions_final_%28002%29.pdf.

⁴⁹ OHD FY18 Annual Financial Report at 6.

⁵⁰ See 2020 OHD Comprehensive Economic Development Strategy, *supra*, p. 29; See also, INFRA FY20 Application Project Summary.

⁵¹ *Ibid.*

⁵² INFRA FY20 Application Project Summary



Source: Oxnard Harbor District Fact Sheet INFRA FY20: INVEST Project

While the 34-acre site is intended only to be temporary,⁵³ the growth associated with this additional capacity is not. Since the Port intends the 34-acre site to facilitate increased capacity and throughput, once the 3-5-year term expires, another property will be needed to store cars.⁵⁴ It is clear from executive staff communications, funding applications, and reports, that OHD has known for some time that the 34-acre site would only serve to facilitate a greater expansion of the Port's vehicle storage capacity. Acquisition of the 34-acre site was always seen as just a provisional measure that would lead to even greater expansion of the Port's capacity through the acquisition of larger plots of land to accommodate more cars.

The Port has had its sights on acquiring land outside its borders in order to expand port operations for over 40 years—yet the DEIR fails to make the connection between the off-port cargo storage yards and the overall expansion of Port operations. The 1978 Port Master Plan identifies the need to acquire more land to expand the Port's capacity in the future.⁵⁵ Indeed, the Plan identifies the 34-acre site as a “future port expansion.”⁵⁶ This suggests that the Port has long aimed to acquire this property in order to expand its operations and increase cargo throughput. There can be no surprise that the Port is pursuing utilization of the 34-acre and 250-acre sites to

⁵³ OHD FY18 Annual Financial Report, at 7.

⁵⁴ See *id.* at 6.

⁵⁵ John J. McMullen Associates, Inc., A Master Development Plan for the Port of Hueneme, Vol. I: Executive Summary, [hereinafter, “POH Master Development Plan”] at pp. 5, 11, 12

⁵⁶ *Id.* at p.11

increase its cargo throughput, but the DEIR fails to recognize this and analyze the impacts of expanded Port operations.

Each of these projects and investments are designed to increase Port capacity and highlight how the DEIR is flawed by having such a limited scope of inquiry. The DEIR, therefore, gives an incomplete picture of the full scope of direct and indirect impacts stemming from this Project when placed into context with the larger efforts to increase vehicle shipping capacity at the Port. If this project is allowed to proceed with just an analysis of a temporary 34-acre site under consideration, it will violate CEQA and prevent proper vetting of the Project's full environmental impacts.

IV. The DEIR Inadequately addresses the Cumulative Impacts that the Project Will Have on the Region

CEQA requires that the DEIR address cumulative impacts.⁵⁷ Cumulative impacts are those that result from “the combination of the project evaluated in the EIR together with other projects causing related impacts.”⁵⁸ The incremental effects of an individual project “are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”⁵⁹ Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.⁶⁰ A relatively “small” impact is not insignificant under CEQA if it contributes to an existing environmental problem.⁶¹

CEQA requires a cumulative impact analysis to contain, at minimum, either 1) a list of past, present, and reasonably anticipated future projects, including those projects outside the agency's control, which produce related or cumulative impacts⁶² or 2) a summary of such projections contained in an adopted general plan or related planning document which evaluates regional or areawide conditions.⁶³ Failure to include a complete list of projects which produce related or cumulative impacts is a violation of CEQA.⁶⁴

⁵⁷ Cal.Code Regs., tit.14, §15130; *see also* Cal.Code Regs., tit.14, §15355

⁵⁸ Cal.Code Regs., tit.14, § 15130(a)(1).

⁵⁹ *Id.* at § 15065(a)(3).

⁶⁰ *Id.* at § 15355(b) (The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time).

⁶¹ “[A] project’s cumulative environmental impact cannot be deemed insignificant solely because its individual contribution to an existing environmental problem is relatively small.” *See, San Francisco Baykeeper, Inc. v. State Lands Comm’n* (2015) 242 Cal.App.4th 202, 223. “In fact, ‘the greater the existing environmental problems are, the lower the threshold should be for treating a project’s contribution to cumulative impacts as significant.’” *Id.* (quoting *Cmtys for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 120).

⁶² CEQA suggests that agencies consider factors such as the nature of the environmental resource examined, location of project, and type. Cal.Code Regs., tit.14, § 15130(b)(2).

⁶³ *Id.* at § 15130(b)(1).

⁶⁴ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 740, as modified (Sept. 12, 1994); *See also, San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 80 (agency improperly failed to consider cumulative impacts of reasonably foreseeable development in addition to the four high-rise developments in the proposed project, and “[t]he inadequate cumulative analysis prevented the Commission from gaining a true perspective on the consequences of approving these projects”)

A. DEIR fails to analyze the cumulative impacts of the projects it lists as reasonably foreseeable, planned, and approved future projects

In Table 4-1, the City lists projects it considers to be “reasonably foreseeable, planned and approved future projects.”⁶⁵ Notably, the DEIR lists these projects, but does not provide any analysis on the type of cumulative impact these projects would contribute to the region. One project, for example, is already being utilized as a warehouse shipping facility with outdoor vehicle storage and offices and is situated directly across Hueneme Road from the proposed Project site.⁶⁶ This proposed Project would likely contribute to congestion already attributed to logistics activities on the same thoroughfare, yet the DEIR fails to properly analyze these potential impacts. There are numerous other cumulative impacts from the listed projects the DEIR should have studied, which are discussed in more detail throughout this letter.

B. The DEIR fails to consider the full range of projects required of a cumulative impact analysis

Glaringly missing from the list is the 250-acre site planned for land further east on Hueneme Road.⁶⁷ Through unlawful piecemealing, the DEIR attempts to avoid consideration of the cumulative impacts of both phases of the 34-acre and 250-acre expansion sites. By requiring that agencies evaluate the cumulative impacts of other similar projects, CEQA attempts to guard against the dangers of piecemealing, as attempted here, which would avoid a full analysis of the actual effects of a project.⁶⁸ As discussed above, the OHD has described publicly, its intent to invest in a project that will grow its capacity. Therefore, the City must consider reasonably foreseeable projects such as widening the Port’s berths and on-dock expansions that are in the planning stages and have been sufficiently described by the OHD.

A project should be considered in a lead agency’s cumulative impact analysis if the physical elements of a project are sufficiently quantified so as to make an analysis of their future impacts more accurate.⁶⁹ Here, the 250-acre project is cited in plans calling for greater capacity at the Ports by expanding storage areas. Memos and other documents from OHD make a clear connection between the “stop gap” 34-acre site and the 250-acre site.⁷⁰ OHD’s own documents also show a projected timeline that includes submitting the project for environmental review.⁷¹

⁶⁵ DEIR, Table 4-1, p. 4-2

⁶⁶ *Id.*

⁶⁷ Oxnard & POH Commercial Viability Report

⁶⁸ *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 166; *Las Virgenes Homeowners Federation, Inc. v. County of Los Angeles* (1986) 177 Cal.App.3d 300, 306, citing *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284. (“The purpose of this requirement is obvious: consideration of the effects of a project or projects as if no others existed would encourage the piecemeal approval of several projects that, taken together, could overwhelm the natural environment and disastrously overburden the man-made infrastructure and vital community services. This would effectively defeat CEQA’s mandate to review the actual effect of the projects upon the environment.”)

⁶⁹ *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 76.

⁷⁰ 2017 Letter from Kristin Decas to Greg Nyhoff, Oxnard & POH Commercial Viability Report, and *Economic-Environment Partnership*, Oxnard Harbor District, Presentation

⁷¹ Oxnard Harbor District, *Port of Hueneme 250 Acre Site Development Checklist and Status* (7/13/20)

The City also solicited federal dollars for the project and spent time and resources to secure funding for the project through federal grants.⁷²

It is impossible to ignore the ties between the two parcels.

- Both the 34-acre and 250-acre lots will have related and compounding impacts.
- Both parcels of land are less than two miles from the port and slated to serve as storage for vehicles imported through the Port.
- Both parcels would access Hueneme Rd with a direct line to the Port, and both are immediately adjacent to rail.⁷³

OHD has already invested considerable time and resources into preparing for the development of a Multimodal Logistics Park at the 250-acre site to make it a probably future site that should be included in the cumulative impact analysis.⁷⁴ The cumulative impacts of both project phases must be considered in the DEIR's analysis.

The DEIR also failed to analyze a host of other *probable future projects*, as well as existing projects that may have cumulative impacts similar to the types of impacts associated with the 34-acre project. These include, but are not limited to:

- **INVEST Project.** The OHD is prioritizing infrastructure to expand vehicle imports and exports. The project incorporates two interdependent investments- a five-story tall automobile storage facility for exports and the expansion of three berths at the Port to accommodate “larger and deeper vessels.”⁷⁵ OHD makes references that INVEST will “influence and strengthen the efficiency of the Port Intermodal Corridor.”⁷⁶ OHD touts the dredging projects as offering “increased flexibility to accept more vehicles in the growing international markets of automakers.”⁷⁷ OHD identified capital investments to modernize Berth 3, 4, and 5 to allow logistics partner to accommodate existing customer's larger-capacity vessels by berth and channel deepening to complement the intermodal improvement project.⁷⁸ Moreover, the car storage component of the project is lauded as having the capacity to expand Port capacity to accommodate an additional 33% more automobiles on Port.⁷⁹ The cumulative impact of the increased throughput from the INVEST project coupled with the 34-acre project and the 250-acre Multimodal Logistics Park must be analyzed in the DEIR.
- **Rail expansions.** Both the 34-acre and the planned 250-acre Multimodal Logistics Park are within close proximity to a Port-owned rail line.⁸⁰ As far back as 2017, OHD was reportedly encouraging increased use of rail to help reduce dwell time and congestion as

⁷² OHD Letter to Secretary of U.S. Department of Transportation Elaine Chao Dated February 28, 2019

⁷³ INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project (map showing location of both sites in proximity to rail and Hueneme Road).

⁷⁴ INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary (INFRA FY19 Project Summary by OHD protecting estimated costs for the Multimodal Logistics Park at the 250-acre site and seeking INFRA grant funding to compliment a 44% private funding match.)

⁷⁵ INFRA FY20 Application Project Summary; 2020 OHD Comprehensive Economic Development Strategy

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ 2020 OHD Comprehensive Economic Development Strategy

⁷⁹ Oxnard Harbor District, *Tiger IX Stacked Intermodal Project Overview- Project Summary*.

⁸⁰ INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project

more than 300,000 units of imported vehicles and 38,000 units of exports are processed.⁸¹ The Port recognized the need to expand Port capacity to accommodate more vehicle shipments.⁸² Increased use of rail from the Port is often touted for removing truck trips on roads. The increased volume, however, especially at existing rail crossings that impact proposed car routes to both the 34-acre site and the proposed Multimodal Logistics Park, are likely to impact traffic due to a lack of grade separations. The DEIR should consider this increased use of rail from the port as part of the cumulative impact analysis.

- **BUILD Project.** The BUILD project would call for port modernization which will increase storage areas and reefer plugs to handle an additional 7,200 forty-foot equivalent units of locally produced agriculture. The project is expected to begin construction in 2022 and be completed in 2023- resulting in expanded terminal space.⁸³ This increased capacity for agricultural exports at the Port will likely increase trucking of exports along the same roads proposed for the Project and the Multimodal Logistics Park. The DEIR's cumulative impact analysis should include an analysis of the likely cumulative effect of this project on the local environment.
- **Port Intermodal Corridor.** In 2021, OHD applied for additional federal funding for Hueneme Modernization Project and recognized a "long-range vision for the Region's Port Intermodal Corridor, a designated Freight Intermodal Corridor connecting the Port's main entrance with Interstate Highway 101 via the Hueneme Road and Rice Road Corridors."⁸⁴ This Project, along with the Multimodal Logistics Park, would increase traffic along Hueneme Road and connected throughfares. This plan is reiterated in the Ventura County Freight Study, which identifies Hueneme Road as the "primary last-mile access to the Port of Hueneme from Rice Avenue," and highlights the corridor as a key transportation project of the Port of Hueneme Strategic Plan. The study identifies Hueneme Road as one that is slated for widening to four lanes, with special consideration being given to Oxnard's Ormond Beach Restoration and Public Access Plan.⁸⁵ There should be no doubt that planned road widening and the creation of a "Hueneme Road Corridor"⁸⁶ will undoubtedly impact the surrounding area with increased volumes of freight traffic. The DEIR should, at a minimum, have included analysis of these cumulative impacts to traffic, air pollution, land use, and other elements impacting the vicinity of the Project site.

⁸¹ Oxnard Harbor District, Board of Commissioners Meeting Agenda- September 11, 2017-Press Report Attachment

⁸² *Id.*

⁸³ Oxnard Harbor District, The Hueneme Modernization Project BCA Appendix - March 17 2021, [hereinafter "The Hueneme Modernization Project Appendix"], p.3.

⁸⁴ Oxnard Harbor District, The Hueneme Modernization Project INFRA Grant Application FY2021

⁸⁵ Ventura County Freight Corridor Study, (October 2021), Prepared by Iteris, Inc., on behalf of Southern California Council of Governments, The Port of Hueneme, Caltrans and Ventura County Transportation Commission [hereinafter "Ventura County Freight Corridor Study"], p.36.

⁸⁶ *Id.* at 35.



Source: OHD Hueneme Modernization Project INFRA GRANT 2021 Narrative⁸⁷

Once the agency has a set of projected projects, CEQA requires that it also include a summary of the environmental effects expected to be produced by those projects and an analysis of whether those impacts are cumulatively considerable.⁸⁸ Here, the City failed to even mention any of these projects in the DEIR. Many of the anticipated projects will increase air pollution from ship visits and truck and rail traffic, increase VMT, impact biological resources, further environmental injustice, and impede access to the coast.⁸⁹ These impacts should be analyzed in the DEIR considering air quality and coastal access problems they could present to the region when fully operational alongside the construction, vehicle traffic, and other environmental impacts anticipated from the Project.

V. The DEIR Fails to Properly Analyze Growth-inducing impacts

The DEIR must also describe growth-inducing impacts of the proposed project,⁹⁰ including ways in which the project could directly or indirectly foster economic growth that could lead to an adverse physical change to the environment.⁹¹ The DEIR must discuss the growth-inducing

⁸⁷ The Hueneme Modernization Project INFRA Grant Application FY2021

⁸⁸ See Cal.Code Regs., tit. 14, § 15065(a)(3).

⁸⁹ See e.g., *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 80 (agency improperly failed to consider cumulative impacts of reasonably foreseeable development in addition to the four high-rise developments in the proposed project, and “[t]he inadequate cumulative analysis prevented the Commission from gaining a true perspective on the consequences of approving these projects”).

⁹⁰ Pub. Res. Code 21100(b)(5); Cal.Code Regs., tit. 14, § 15126(d).

⁹¹ Cal.Code Regs., tit. 14, §§ 15126.2(d), 15064(e); see also, *Napa Citizens for Honest Gov’t v. Napa County Bd. Of Supervisors* (2001) 91 Cal.App.4th 342, 368; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205 (If the forecasted economic or social effects of a proposed project directly or indirectly will lead to adverse physical changes in the environment, then CEQA requires disclosure and analysis of these resulting physical impacts.); see also Cal.Code Regs., tit. 14, § 15131(a).

effects of the Project, even if the effects will manifest only indirectly from the Project.⁹² CEQA requires the inclusion of growth-induced impacts in an EIR when there has been evidence that economic activity resulting from a proposed project will lead to physical changes in the environment.⁹³

The DEIR must analyze the growth-inducing effects associated with the Project's potential to increase in port capacity and therefore spur future economic growth. In analyzing growth-impacts, "[i]t must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."⁹⁴ The DEIR, "must discuss growth-inducing impacts even though those impacts are not themselves a part of the project under consideration, and even though the extent of the growth is difficult to calculate."⁹⁵

The DEIR erroneously concludes that the Project would not be growth-inducing, "in as much as it would not foster significant unanticipated economic expansion and growth opportunities."⁹⁶ The City's analysis of growth-inducing impacts, however, is flawed because it involves only a piecemeal review of the overall Port expansion project. This allows for critical environmental considerations, such as growth-inducing impacts, to "become submerged by chopping a large project into many little ones"⁹⁷ therefore obscuring proper analysis under CEQA.

It is impossible to ignore the Project's connections to OHD's larger port-expanding endeavors. OHD has described both the Project and the proposed 250-acre Multimodal Logistics Park as strategic properties that will allow for increased automotive imports, stating that "[b]oth properties represent the Port's strategic plan to invest in more options for growing its footprint off-port in order to increase its throughput and velocity."⁹⁸ OHD has also specifically identified that the 34-acre lot will "allow for increases in capacity and throughput for the ro-ro segment"⁹⁹ and will "serve as a relief valve for auto cargo."¹⁰⁰ Repeatedly, OHD has acknowledged that the

⁹² *Napa Citizens for Honest Gov't v. Napa County Bd. Of Supervisors*, 91 Cal.4th 342, 368 (2001).

⁹³ See *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1207 (evidence suggesting that the economic and social effects caused by proposed shopping centers ultimately could result in urban decay or deterioration obligated the lead agency to assess this indirect impact); *El Dorado Union High School Dist. v. City of Placerville* (1983) 144 Cal.App.3d 123, 131 (potential of increased student enrollment in an already overcrowded school resulting from construction of the proposed apartment complex was an environmental effect that required treatment in an EIR because it could lead to the necessity of constructing at least one new high school); *Citizens Ass'n. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171 (lead agency required to analyze whether physical deterioration of the downtown area would be an indirect environmental effect of the proposed shopping center); *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 446 (must analyze proposed project's possible result in business closures and physical deterioration of the downtown as an indirect environmental effect of the project).

⁹⁴ See Cal.Code Regs., tit.14, § 15126.2 (d)

⁹⁵ *Napa Citizens*, *supra*, 91 Cal. App.4th at 368

⁹⁶ DEIR, Section 7.1, p. 7-4.

⁹⁷ *City of Antioch v. City Council* (1986) 187 Cal.App.3d. 1325, 1333.

⁹⁸ OHD FY18 Annual Financial Report at 7.

⁹⁹ *Id.* at 6.

¹⁰⁰ See Oxnard Harbor District, *Green Port Development Project 34 FAQs*, https://www.portofhueneme.org/wp-content/uploads/2019/02/34Acre_FAQs_01-2019.pdf, [hereinafter "OHD 34-acre Site FAQs"] at 1; see also Oxnard Harbor District, *Green Project 34 Vehicle Storage Facility*, fact sheet, available at https://www.portofhueneme.org/wp-content/uploads/2019/03/34Acre_PropStorage_03-2019.pdf, [hereinafter "OHD 34-acre Site Fact Sheet"] at 1.

34-acre lot on its own, and both the 34-acre lot and 250-acre lot together, are intended to grow the Port's capacity and throughput for automobiles.

Moreover, while OHD has stated that the 34-acre lot "will consolidate cars from other parts of the County," which suggests it may replace or at least supplant the Port's existing car storage facility in Ventura,¹⁰¹ OHD's statements about growth and the fact that OHD has not committed to closing down the existing off-port vehicle storage sites undermine the assumption in the DEIR that the 34-acre site will only receive the cars that would otherwise go to Ventura or other sites. Freeing up capacity at the Ventura site could allow the Port to import even more cars, or other goods that it did not have room to store before. Without assurances that existing sites will cease operations permanently, emissions resulting from trips to and from the Ventura *and* Oxnard sites must be accounted for, including the prospect that the sites shift to storing other cargo.¹⁰²

The 34- and 250-acre lots have also long been associated with further expansion of the Port's capacity to receive larger volumes of cargo, including the deepening of the harbor channels, which has been described as an opportunity to allow the Port to receive larger and more vessels and increase throughput.¹⁰³ The combination of these projects would build out the long-term capacity of the Port to increase its car imports. In fact, OHD has already poured about \$20 million from federal and other sources into infrastructure modernization during the past six years to increase its capacity.¹⁰⁴ An increase in shipping capacity at the Port, in turn, would spur further economic activity, increasing the demand for workers in the area.

While the DEIR downplays the significance of the Project and does not address growth-related impacts, there is no denying the Project will enhance the Port's ability to expand. The Port, one of the region's most important economic engines, serves as a catalyst for job creation and consumer spending. According to The Local and Regional Economic Impacts of the Port of Hueneme Report, the Port generates more than 2,900 "induced" jobs, including those created by retail, wholesale, social, and educational services paid for by direct employees at the Port.¹⁰⁵ According to the report, activity at the Port already generates \$177.2 million in direct wages to direct employees, which in turn results in local purchases and an additional \$405.9 million of income and local consumption expenditures supporting an additional 2,930 "induced" jobs.¹⁰⁶ In addition, roughly 1,500 indirect jobs are created in the local economy by firms "directly dependent" on port activity.¹⁰⁷ These "indirect" workers receive approximately \$86.6 million in wages due to Port operations.¹⁰⁸

¹⁰¹ See OHD 34-acre Site FAQs at 1; see also OHD 34-acre Site Fact Sheet at 1.

¹⁰² *City of Long Beach v. City of Los Angeles* (2018) 19 Cal. App. 5th 465, 487

¹⁰³ OHD FY18 Annual Financial Report at 6.

¹⁰⁴ *In the shadow of LA congestion, Port Hueneme becomes cargo magnet*, Hellenic Shipping News, 12/21/2021; available at <https://www.hellenicshippingnews.com/in-the-shadow-of-la-congestion-port-hueneme-becomes-cargo-magnet/>.

¹⁰⁵ Martin Associates, *The Local and Regional Economic Impacts of the Port of Hueneme*, (May 15, 2019), pp. 17-19

¹⁰⁶ *Id.* at 10.

¹⁰⁷ *Id.* at 9.

¹⁰⁸ *Id.* pp. 18, 23.

Expansion of the Port will undoubtedly have a ripple effect across the region. The DEIR, therefore, cannot ignore these growth-impacts associated with the Project. One of the Project's objectives is to facilitate the commercial success of GLOVIS to ensure they keep their business in the region.¹⁰⁹ This is a clear example of a project serving as growth-accommodating infrastructure as illustrated by OHD's own comments that the 34-acre site serves primarily as a "stop gap" measure for the eventual development of the Multimodal Logistics Park, allowing 60,000 additional units to be stored.¹¹⁰ The DEIR must analyze how the Project, when viewed as part of the planned development of the Multimodal Logistics Park, will foster greater Port throughput leading to even greater economic activity. This increased economic activity has the potential to bring population growth, increased traffic in the area, increased need for additional housing, increased air pollution, and otherwise cause physical changes to the environment. The DEIR must address these growth-inducing impacts as part of the analysis for this Project.

Finally, the DEIR analysis focuses almost entirely on the potential direct impacts of the 34-acre site without examining the effects of the project as a whole.¹¹¹ For example, the City bases much of its conclusion that the project will not trigger population growth on the premise that the Project "does not include residential development, which would have a direct effect on population growth."¹¹² The City cannot avoid conducting a more thorough growth-inducing impact analysis under CEQA simply because a project does not itself call for the construction of housing¹¹³, CEQA requires¹¹⁴ that the DEIR discuss "the ways in which" the Project could "directly or indirectly" foster economic or population growth.¹¹⁵

Here, the Project itself should be analyzed as serving new infrastructure that will be used to foster growth of OHD's larger off-port vehicle storage expansion plans.¹¹⁶ The Project has repeatedly been described by OHD as a "stop gap" measure for the 250-acre port logistics park with access to rail¹¹⁷ In fact, OHD states in documents to the City that GLOVIS is operating overcapacity at its facilities and needs to process an additional 60,000 units on the West Coast and that "[i]f the District can secure adequate off port land for temporary storage, it will be able to capture this business for the District¹¹⁸ and address supply chain issues at other Ports by taking on larger and more diverse cargo volumes.¹¹⁹ The DEIR should therefore analyze Project's growth-inducing impact serving as infrastructure for larger Port expansion plans.

¹⁰⁹ DEIR, p. 1-1.

¹¹⁰ 2017 Letter from Kristin Decas to Greg Nyhoff at 3.; also *Economic-Environment Partnership*, Oxnard Harbor District, Presentation, Slide 12

¹¹¹ See *Napa Citizens*, *supra*, 91 Cal.App.4th at 369

¹¹² DEIR, p. 7-3

¹¹³ See *Napa Citizens*, *supra*, 91 Cal.App.4th at 369

¹¹⁴ *Id.*

¹¹⁵ Cal. Code. Regs., tit. 14, §15126.2(e)

¹¹⁶ OHD FY18 Annual Financial Report at 7.

¹¹⁷ Oxnard & POH Commercial Viability Report

¹¹⁸ 2017 Letter from Kristin Decas to Greg Nyhoff at 3.

¹¹⁹ *In the shadow of LA congestion, Port Hueneme becomes cargo magnet*, Hellenic Shipping News, 12/21/2021; available at <https://www.hellenicshippingnews.com/in-the-shadow-of-la-congestion-port-hueneme-becomes-cargo-magnet/>

VI. The Traffic Analysis Fails to Disclose and Mitigate Significant Traffic Impacts

A proper traffic analysis is critical to understanding the impacts of any project. Here, the DEIR's traffic analysis is faulty and fails to properly analyze traffic impact using updated CEQA guidelines on Vehicle Miles Traveled (VMT) and offers only a very narrow picture of this impact due to piecemealing of the project.

A. Thresholds Used do not Adequately Address CEQA Guidelines Concerning Vehicle Miles Traveled

California Public Resources Code §21099 and 14 Cal. Code Regs § 15064.3 (CEQA Guidelines), govern how agencies must determine the significance of transportation impacts for a project. These rules generally provide that transportation impacts are to be based on the VMT generated by traffic that the project will draw or otherwise cause. According to Guideline 15064.3, VMT is “the most appropriate measure of transportation impacts,” and an increase in VMT should be treated as a significant impact.¹²⁰

The DEIR does not carry out the VMT analysis with the level of vigor that would result in data reliable enough to inform proper decision-making according to Guideline 15064.3. OHD admits that “at this time, neither the City of Oxnard nor City of Port Hueneme have adopted a methodology for determining Vehicle Miles Traveled by development projects.”¹²¹ Indeed, no quantitative analysis of VMT was provided for this Project. Instead, OHD extrapolates possible VMT reductions based on the assumption that the two existing off-port sites will be consolidated onto the 34-acre project site.¹²² The DEIR analysis only accounts for one-way trips.¹²³ Furthermore, the DEIR concludes that because the two current sites, Camarillo Airport and Tuff Shed, are farther from the Port than the Project site, vehicle miles traveled will be reduced.

We do not assume that the DEIR's description of VMT is correct. But even this simplistic view of VMT ignores a critical fact—that currently, car-carrying trucks are capable of transporting multiple vehicles to and from these existing locations as opposed to driving the estimated maximum 240 vehicles individually each day to the Project site.¹²⁴ The average U.S. car transport trailer can hold up to 9 cars at a time on average.¹²⁵ Assuming each car carrier holds 9 cars and the same number of cars are delivered to a site daily as is currently proposed for the Project, the car carrier trucks would make around 26 trips each day.¹²⁶ Accounting for the 26 trips by truck for 10.6 miles to the farthest current site located at Camarillo Airport, that adds up to 275.6 vehicle miles traveled if you count miles per vehicle driven. Assuming the 240 daily trips are made with each individual car for 1.65 miles to the proposed site, that amounts to 396 vehicle miles traveled. Even if VMT for the car carrier truck was weighted, the estimation used in the DEIR does not add up.

¹²⁰ Cal. Code Regs., tit. 14, §150643(b)(1).

¹²¹ DEIR, p. 5.19-18.

¹²² DEIR, pp., 5.19-18, 5.19-19

¹²³ DEIR, Section 3.0, p. 3-21.

¹²⁴ DEIR, Section 5.19.5, p. 5.19-9.

¹²⁵ <https://www.quora.com/How-many-cars-can-the-largest-car-carrying-ship-hold>

¹²⁶ 240 maximum daily trips divided by 9.

We, of course, are not advocating the use of diesel trucks as a preferred alternative. In fact, the City should more thoroughly consider zero-emissions trucks as a reasonable and viable alternative and mitigation measure for this Project (see section on alternatives below). However, because the DEIR fails to properly assess VMT for the Project, its conclusion that the VMT impact is not substantial cannot be relied upon.

Finally, the City uses a baseline for traffic impacts that assumes the elimination of two current off-port vehicle storage sites and status quo when it comes to the level of vehicle imports coming through the ports. The DEIR's analysis, therefore, is premised on an examination of the project's impacts on environmental conditions projected to exist in the future. To use such an analysis, OHD must first justify the decision by showing that the existing conditions are somehow misleading or without informational value.¹²⁷ No such justification is offered. Instead, the analysis assumes the two existing sites will be consolidated without any evidence to suggest that such a plan is guaranteed to take place. Nowhere in the DEIR, for example, is there a concrete timeline for when the two current storage sites would be decommissioned. This analysis is misleading as it obscures the impact that the Project is likely to have either during an interim period, while the two existing sites are decommissioned, or under a scenario where GLOVIS or some other OHD customer decides to continue using the two sites as vehicle storage facilities. The DEIR should account for the possibility that the Project will contribute to the traffic already flowing from the Port to these storage sites.

The increasing traffic is especially important given the Project's proximity to Ormond Beach and the Ormond Beach Wetlands. As discussed further in these comments, the Ormond Beach Restoration and Public Access Plan (OBRAP) designates several entryways to the natural scenic area, including a bike path on Perkins Road leading to the wetlands and the beach, as well as an entry point near Saviers Rd. and Hueneme Rd. closest to the northeast corner of the proposed Project site.¹²⁸ One of the main goals of OBRAP is to "[e]nhance opportunities for people to easily and safely visit Ormond Beach and enjoy the nature, educational opportunities, and recreation that are compatible with the restored Ormond Beach ecosystem."¹²⁹ The DEIR fails to reconcile with the fact that increased traffic volume on Hueneme and Perkins Roads will undoubtedly impact the OBRAP and has the potential for causing significant safety concerns to pedestrian and non-vehicle traffic from residents and members of the public attempting to access this natural recreational area.

B. The DEIR Underestimates the Traffic Impacts Associated with the Project

The DEIR should evaluate the traffic impact based on the number of vehicles anticipated to arrive at the lot in the 3-5 years it may be operational. The updated traffic study used to support the DEIR findings estimated that there would be a maximum of 240 new vehicles transported to or from the Port to the Project site daily— with vehicles shuttled to or from the site

¹²⁷ *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.*, (2013)57 Cal.4th 439, 304 P.3d 499

¹²⁸ Ormond Beach Restoration and Public Access Project: Preferred Alternative and Preliminary Design Plan, (May 2021), figure ES-3.

¹²⁹ *Id.* at ES-1.

approximately 18 days each month.¹³⁰ This does not account for other vehicle traffic to the site or construction-related traffic. Total daily peak trips generated by shuttling employees to the site, in addition to new cars, amount to approximately 316 daily.¹³¹ Approximately 30 one-way vehicle trips can occur in one hour.¹³² The Port reported in FY 2019 that it received 326,585 automobile imports (up 13% from FY2018).¹³³ Even assuming the Port will shuttle vehicles 365 days per year, that comes to approximately 895 vehicles per day. Adding an additional 60,000 new cars, which this Project is reported to help attain, would result in a nearly 20% increase in automobile processing.

The traffic study, however, assumed vehicles would only be shuttled 18 days per month.¹³⁴ As cited in the FY2019 report, OHD would need to shuttle approximately 1,512 vehicles per day to keep up with the growing number of automobile imports. That traffic rate would certainly impact not only VMT analysis but also the overall picture for how traffic volume will increase on the streets leading to the site and raising safety concerns as stated above.

The numbers used to conclude that traffic would have no significant impact do not represent a realistic estimate of the number of vehicles the Project will ultimately contribute on the road. The DEIR must rely on accurate data to determine the number of vehicles anticipated to enter and exit the 34-acre lot and the overall impact it will have on emissions, VMT, traffic congestion, and safety.

C. Analysis of Cumulative Traffic Conditions from Existing and Approved/Pending Project Conditions is Flawed

The DEIR relies on incomplete data and flawed analysis to conclude that the Project would not generate significant cumulative impacts to the surrounding communities based on the City of Oxnard's traffic impact thresholds.¹³⁵ As mentioned above, the analysis failed to properly consider VMT as required by CEQA Guideline 15064.3 and instead focuses exclusively on Level of Service and a study of traffic flow at intersections. Even with the analysis of LOS, however, the conclusion that the project will not have significant cumulative impacts fails to account for existing traffic flow from the Port of Hueneme and the potential future traffic triggered by the proposed 250-acre site planned farther east from the proposed Project site on Hueneme Road.

As noted throughout these comments, the Port is currently undertaking plans to expand, including channel deepening, berth widening, and increasing on-site and off-port storage.¹³⁶ This port-side expansion is coupled with plans to enhance a freight corridor by widening Hueneme

¹³⁰ DEIR, Appendix J, Associated Traffic Engineers- Port of Hueneme Outdoor Vehicle Storage Facility, Oxnard, California Traffic Study [hereinafter "Traffic Study"], Pp. 8-9 (May 4, 2021).

¹³¹ Traffic Study, P. 9.

¹³² Ibid.

¹³³ OHD 2019 Year End Review at 5.

¹³⁴ DEIR, Appendix J, P. 8.

¹³⁵ DEIR, section 5.19.6, pp. 5.19-19 through 5.19-21.

¹³⁶ See 2020 OHD Comprehensive Economic Development Strategy ; See also, INFRA FY20 Application Project Summary.

Road.¹³⁷ At a minimum, the DEIR should account for traffic currently being generated from existing Port throughput as well as projected growth at the Port in determining the cumulative traffic impact of the Project. We reassert that this Project cannot be studied in a vacuum and must be viewed considering its role in facilitating the planned 250-acre Multimodal Logistics Park.

The Associated Transportation Engineers Traffic Study (Traffic Study) that the DEIR relies on for its analysis of cumulative traffic conditions, completely ignores the recently published Ventura County Freight Corridors Study (Freight Study) published in October 2021.¹³⁸ Had it included the findings of the Freight Study, the DEIR analysis on cumulative traffic conditions would have included the daily truck trips generated at the Port of Hueneme and other existing sites served by the same roads as the Project. Already, land use in the City of Oxnard generates 23 percent of Ventura County's total truck trips.¹³⁹ Based on the Freight Study, approximately 56,600 daily one-way truck trips begin and end from sites within Ventura County.¹⁴⁰ These trips occur on many of the same roads that will be impacted by this Project, including Hueneme Road. The 2021 Port Hueneme Road daily gate count shows that 350 truck trips are generated from the Port of Hueneme's main gate.¹⁴¹ This number represents an average day with a ship in port and only accounts for trucks specific to the commercial port operations and not those truck trips generated by moving or trans-loading cargo from secondary distributions sites or warehouses¹⁴² like the proposed Project. The cumulative impact of this truck traffic should be accounted for in examining the Project's contribution to the number of vehicles that will drive on local roads during peak hours.

Similarly, the DEIR leaves out of its impact analysis the 250-acre site being planned to expand off-Port capacity for vehicle storage even further.¹⁴³ The 250-acre Multimodal Logistics Park is slated for a location east of the Project site on Hueneme Road¹⁴⁴ and would likely add to traffic generated by the Project. Both properties represent the Port's strategic plan to invest more options to grow its footprint off-port. Because the Project and the Multimodal Logistics Park will be located along what has been dubbed the Hueneme Road Freight Corridor¹⁴⁵, the DEIR is wrong to ignore the connections and the cumulative impact this will bring to the region's traffic.

¹³⁷ Ventura County Freight Corridor Study at 36.

¹³⁸ *Id.*

¹³⁹ *Id.*, Table 2 at p. 61.

¹⁴⁰ *Id.*, Section 1.2.1 Truck Trip Generation, p. 60

¹⁴¹ *Ibid.*

¹⁴² *Ibid.*

¹⁴³ OHD FY18 Annual Financial Report at 7.

¹⁴⁴ See CAUSE, Port of Hueneme Expansion: *How Would it Impact Us?* (2019), p. 2 [hereinafter "CAUSE Fact Sheet"].

¹⁴⁵ Ventura County Freight Corridor Study, at 36

VII. The DEIR Underestimates Health Risks from Toxic Air Contaminants and Increased Emissions and also Fails to Mitigate Health Impacts

A. Air Quality Impacts

The DEIR must assess the direct and indirect impacts on air quality. This analysis must describe whether the project will result in increases of the six “criteria pollutants” for which there are national air quality standards: particulate matter (PM_{2.5} and PM₁₀), nitrogen oxides (NO_x), sulfur oxides (SO_x), ground-level ozone, carbon monoxide, and lead.

Each phase of the project will have direct air quality impacts related to construction as well as the transport of cars to and from the storage sites. The Port has stated that to reach the 34-acre site, imported cars will roll off ships individually, then move either by rail, individually, or by truck to a short-term storage site just outside the Port.¹⁴⁶ Employees will then drive the cars to the proposed storage lot individually, using a shuttle van to return to the short-term site as many times as is required to move every car to the 34-acre lot.¹⁴⁷ OHD asserts that the proposed 34-acre storage site will reduce emissions of criteria air pollutants by decreasing “truck traffic in Ventura County by consolidating car storage.”¹⁴⁸

The City to date has only studied the emissions associated with the trips generated between the short-term storage site and the 34-acre lot, including employee trips.¹⁴⁹ The DEIR assumes that there are 240 new car trips (one way) to or from the Port to the Project site, 24 shuttle trips to or from the Port, and 28 individual employee trips per day for a total 292 trips related to the project.¹⁵⁰ Based on these vehicle trips alone, the City determined that the air quality impacts from the operation of the 34-acre site would not cause a significant effect on the environment.¹⁵¹

This analysis is incomplete. First, it fails to analyze multiple segments of the trips generated by the Project and instead focuses on one-way trips without providing clarity on the traffic impact of the back-and-forth movement of vehicles stored, shuttle service for employees, and employee commutes. This is something the Ventura County Air Quality Assessment Guidelines state should be used to evaluate all potential air quality impacts.¹⁵² Second, the DEIR should also evaluate the emissions from transporting cars to and from the 250-acre lot in addition to the 34-acre site. As highlighted throughout these comments, there is ample evidence showing that OHD had a vision for the 34-acre site to serve as a bridge for building the 250-acre project.¹⁵³ By ignoring the connection to the Multimodal Logistics Park and improperly piecemealing the

¹⁴⁶ OHD 34-acre Site Fact Sheet at 3; OHD 34-acre Site FAQs.

¹⁴⁷ OHD 34-acre Site Fact Sheet at 3; OHD 34-acre Site FAQs.

¹⁴⁸ *Ibid.*

¹⁴⁹ *Ass’n of Irrigated Residents v. Kern County Bd. Of Supervisors* (2017) 17 Cal.App.5th 708, 753.

¹⁵⁰ DEIR, p. 5.3-11

¹⁵¹ Planning Division, City of Oxnard, *Mitigated Negative Declaration No. 18-02* (Dec. 13, 2018), [hereinafter “Oxnard MND”], p.13.

¹⁵² Comment Letter on Notice of Preparation of DEIR for Somis Ranch Farmworker Housing Project PL 19-0046 from Nicole Collazoe, Air Quality Specialist, dated July 23, 2020. Attached in Volume II of the DEIR.

¹⁵³ Oxnard & POH Commercial Viability Report

analysis of impacts, the DEIR fails to properly analyze traffic, air quality, and cumulative impacts of the Project, and therefore its conclusions cannot be relied upon.

Moreover, the analysis is incomplete because it fails to consider the connection to the already existing and continuing growth of Port-related activities mentioned in these comments. As this Project is tied to the expansion efforts of the Port and designed to facilitate increased throughput, an air quality impacts analysis that ignores port activity is flawed. OHD is undergoing efforts for significant expansion of Port activity, including deepening its harbor to bring in more imports¹⁵⁴, and expanding off-port into various parts of the adjacent communities.¹⁵⁵ As part of this endeavor, OHD plans to increase the utilization of rail.¹⁵⁶ The Ventura County Railway line is located immediately adjacent to the southeastern portion of the Project site¹⁵⁷, and the 250-acre Multimodal Logistics Park is slated to have rail capacity.¹⁵⁸

According to the Port's own emissions inventory from 2018, the locomotives servicing the Port use older, more heavily polluting technology. For example, the Port continues to use a locomotive with outdated locomotive engines such as Pre-Tier 0 or Tier 0 models that have been in operation since 2008.¹⁵⁹ Since 2008, locomotive emissions at the Port have increased 41%.¹⁶⁰ The DEIR must account for these emissions as part of its analysis as the Project would contribute to throughput and expand the use of these locomotives, which are utilized to take new vehicles to their ultimate destinations once they have been stored at the Project site.¹⁶¹

1. The DEIR Fails to Address how the Project will Shift Air Pollution Burdens of Port Operations onto Residents of South Oxnard Neighborhoods

In addition to a complete evaluation of the emissions from the transport of the automobiles to both the 34-acre and 250-acre sites, the DEIR must also address that the Project will shift the burden of air pollution onto different populations. In *City of Long Beach*, the court faulted the EIR for failing to address the fact that the project would shift areas of high PM₁₀ concentration to areas with homes and schools.¹⁶² As CAUSE has argued, and the Port has acknowledged, the project will shift vehicle traffic from the 9-mile stretch between the Port and the storage site in

¹⁵⁴ Mike Harris, *Army Corps of Engineers dredging Port of Hueneme channel, to replenish Hueneme Beach*, Ventura County Star, January 8, 2021, available at: <https://www.vcstar.com/story/news/local/communities/port-hueneme/2021/01/08/port-hueneme-army-corps-of-engineers-beach/4143430001/> (Berths 1 and 2 were deepened to 40 feet last year); see also Wendy Leung, *Construction to begin to deepen Port of Hueneme channel by 5 feet*, Ventura County Star, February 22, 2019, available at: <https://www.vcstar.com/story/news/2019/02/22/construction-being-deepen-port-hueneme-channel-five-feet/2887612002/>

¹⁵⁵ 2020 OHD Comprehensive Economic Development Strategy at p. 32.

¹⁵⁶ Mike Harris, *Army Corps of Engineers dredging Port of Hueneme channel, to replenish Hueneme Beach*, Ventura County Star, January 8, 2021, available at: <https://www.vcstar.com/story/news/local/communities/port-hueneme/2021/01/08/port-hueneme-army-corps-of-engineers-beach/4143430001/>

¹⁵⁷ DEIR, 5.10-7

¹⁵⁸ INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary at p.1.

¹⁵⁹ Port of Hueneme Draft Emissions Inventory, Calendar Years 2018, 2017, and 2008.

¹⁶⁰ *Id.* at pp. 81, 89.

¹⁶¹ Mike Harris, *Army Corps of Engineers dredging Port of Hueneme channel, to replenish Hueneme Beach*, Ventura County Star, January 8, 2021, available at: <https://www.vcstar.com/story/news/local/communities/port-hueneme/2021/01/08/port-hueneme-army-corps-of-engineers-beach/4143430001/>

¹⁶² See *City of Long Beach*, *supra*, 19 Cal. App. 5th at 487.

Ventura to the 1-mile stretch between the Port and the 34-acre site in Oxnard.¹⁶³ The proposed Oxnard site is across the street from Southwinds, one of Oxnard's most densely populated neighborhoods.¹⁶⁴ To reach the 34-acre site, traffic will pass by five elementary schools, one high school, two community parks, low-income housing, and a community health clinic, impacting several thousand young children who are more sensitive to air pollution, residents who may be seeking treatment for conditions exacerbated by poor air quality, and comprise a population that already experiences disproportionately high levels of air pollution.¹⁶⁵ The DEIR fails to analyze the impact the project will have on these vulnerable populations by shifting air pollution away from the Ventura corridor towards them.¹⁶⁶

2. The DEIR Fails to Properly Address the Project's Impact on Regional Attainment of Air Quality Standards

The City must also address how the project's emissions will contribute to the region's ability to meet state and federal air quality standards. OHD is in the Ventura County Air Pollution Control District (VCAPCD), which is in serious nonattainment of the state and federal 8-hour ozone standard¹⁶⁷, and the state particulate matter standards.¹⁶⁸ Increases in ozone pollution and particulate matter could impact the VCAPCD's ability to meet the standards, and mitigation measures should be developed and included in the DEIR to account for the Project's contributions to already high levels of air pollution.

The DEIR must also discuss indirect air quality impacts from both phases of the Project. One indirect impact could be increased emission of criteria pollutants from reasonably foreseeable off-site activities caused by the Project. A lead agency must evaluate the significance of criteria air pollutants emitted by off-site activities that are a "reasonably foreseeable physical change to the environment."¹⁶⁹ For example, an EIR for a refinery expansion must analyze how the expansion will impact the movement of rail cars and the impacts on air quality from those rail changes.¹⁷⁰

As mentioned throughout these comments, it was reasonably foreseeable that the 34-acre site will serve as a pathway for OHD to acquire and build the 250-acre Multimodal Logistics Park, yet the DEIR makes no mention of the latter in the air quality impact analysis. Had it properly done the analysis, the air quality impacts would include contributions of an increased number of cars being transported to and from the larger site. The analysis of air quality impact also omits consideration of the increased truck transport of vehicles once they are taken back to the Port for their final destination—an issue previously raised by CAUSE in response to the Mitigated Negative Declaration.¹⁷¹ As mentioned above, given the capacity-generating objective of the

¹⁶³ See CAUSE Fact Sheet, p.2; OHD 34-acre Site Fact Sheet at 1.

¹⁶⁴ CAUSE Fact Sheet, p.2.

¹⁶⁵ *Id.* pp. 1-2.

¹⁶⁶ See *City of Long Beach, supra*, 19 Cal.App.5th at 487.

¹⁶⁷ Environmental Protection Agency, Air Quality Greenbook, Current Nonattainment Counties for All Criteria Pollutants, as of January 31, 2022; available at: <https://www3.epa.gov/airquality/greenbook/ancl.html>

¹⁶⁸ DEIR, p. 5.3-3

¹⁶⁹ *Ass'n of Irrigated Residents v. Kern County Bd. Of Supervisors, supra*, 17 Cal.App.5th at 753.

¹⁷⁰ *Id.* 750 – 51.

¹⁷¹ January 2019 CAUSE Letter to Oxnard Planning Department

Project, the air quality impact of increased Port throughput must also be considered. The analysis of air quality impacts is therefore flawed and must be revised.

3. *The DEIR fails to offer a complete picture of Air Quality Impacts by not Incorporating Increased Port Activity*

Reasonably foreseeable indirect air quality impacts from the addition of almost 5,000 parking spots one mile from the Port include increased emissions from the off-site ship, rail, truck, and cargo handling activities associated with expanding the port's car storage capacity. If the sites increase the number of storage spots available to the Port, this will likely increase the Port's capacity to ship cars, which OHD has indicated is its intention in expanding its offsite car storage capacity.¹⁷² OHD has gone as far as to say that the purpose of the 34-acre Project is to expand the Port's capacity to bring in an additional 60,000 new cars for GLOVIS.¹⁷³ Because these cars will eventually need to be distributed out from the Port, increases in rail, heavy-duty truck, or individual vehicle traffic and the resulting increased emissions are reasonably foreseeable.¹⁷⁴

On the other end, it is also reasonably foreseeable that increased car imports will result in more ships visiting the Port, increased berthing, maneuvering, and cargo handling activities. The DEIR should consider the different effects and emissions that each transportation method will have on surrounding populations, given the types of fuel that each uses.¹⁷⁵ Heavy-duty trucks and ships, for instance, use diesel fuel that contains higher levels of particulate matter than ordinary gasoline.¹⁷⁶ Increased Port activity will likely contribute to higher levels of these pollutants in the South Central Coast Air Basin. Moreover, according to OHD's 2020 Comprehensive Economic Development Strategy, the North terminal, where car-carrying ships dock, currently does not have shore power.¹⁷⁷ This indicates that ships are not plugging in when they dock and instead are idling their engines, emitting even higher levels of emissions. Yet, the DEIR fails to capture any of this pollution in its analysis.

As mentioned, this Project is inherently tied to port operations. Both the Port and the Project site are in the Ventura County Air Pollution Control District (VCAPCD), which is in nonattainment of the state and federal 8-hour ozone standard, and state particulate matter standards. The Port acknowledges that its activities impact the surrounding communities and has identified ocean going vessels, harbor craft, heavy-duty drayage trucks, on-road mobile sources (vans and cars moving employees), and cargo handling equipment as the major emission sources associated with Port operations.¹⁷⁸ Based on the Draft Inventory of Emissions for the Port of Hueneme, Ocean-going vessels accounted for 72% of NOx emissions from the port in 2018 and contributed

¹⁷² OHD FY18 Annual Financial Report at 6.

¹⁷³ 2017 Letter from Kristin Decas to Greg Nyhof

¹⁷⁴ See *Ass'n of Irrigated Residents*, *supra*, 17 Cal.App.5th at 753.

¹⁷⁵ See *City of Long Beach*, *supra*, 19 Cal.App.5th at 487.

¹⁷⁶ See CAUSE Fact Sheet at 1.

¹⁷⁷ 2020 OHD Comprehensive Economic Development Strategy, p.33.; *see also*, H3 Engineering Solutions, Inc, *Draft Port of Hueneme Electrical Master Planning Report*, prepared for Oxnard Harbor District, (January 12, 2019), p.18.

¹⁷⁸ Oxnard Harbor District, *Draft Environmental Management Framework Strategic Implementation Plans* (April 22, 2013), p. 12, available at https://www.portofhueneme.org/wp-content/uploads/2014/06/POH_E2_Framework_2015.pdf [hereinafter "2013 OHD Framework Plans"]

117.7 tons of NOx into the South Central Coast Air Basin that same year.¹⁷⁹ Auto carrier ships emitted the greatest amount of NOx at 58.1 tons in 2018.¹⁸⁰

The DEIR erroneously omits these emissions stemming from Port activity and their potential to grow given the increasing capacity the Project is intended to create. OHD has long held leveraging off-port infrastructure as part of its strategic plan for significantly increasing cargo throughput and velocity.¹⁸¹ Without acknowledging the impact that this increased activity will have on the region's air quality, the DEIR shows only a small part of the environmental impact from the Project and is therefore unreliable.

B. The DEIR is Replete with Fundamental Modeling Errors and Omissions that Make the Emissions Findings Unreliable

The DEIR uses the California Emissions Estimator Model (CalEEMod), version 2016.3.2 to calculate emissions for both construction and operations of the Project.¹⁸² An analysis of the underlying model inputs used to form the DEIR's air quality impact analysis reveals several flaws that call into question the DEIR conclusions about air quality and VMT. In their expert report¹⁸³, Matt Hagemann and Dr. Paul E. Rosenfeld explain how the DEIR conclusions on Air Quality impacts are flawed and cannot be relied upon. Several model inputs for CalEEMod were not consistent with the information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. We briefly summarize the findings of their review here:

- ***Failure to Model All Proposed Land Uses*** - the DEIR modelling inputs fail to include land uses for all 34-acres that the proposed Project will occupy. This, in turn, skews CalEEMod's analysis which relies on the proper designation of land uses which are each assigned a set of energy usage emissions factors and trip rate factors that are used to calculate mobile-source emissions. Without proper modeling of proposed land uses, the calculations generated are unverifiable and unreliable.¹⁸⁴
- ***Mixing Construction Phase Lengths*** - the DEIR arbitrarily changes default construction phase lengths without justification as is required, therefore making verification of the resulting calculations impossible. It also obscures the analysis as it arbitrarily spreads construction emissions out over a longer period for some phases but not other. This results in an underestimate of the peak daily emission associated with construction.¹⁸⁵
- ***Changes to various default units result in unsubstantiated calculations for VMT*** - the DEIR imposes changes to the default off-road construction equipment amounts used for the modeling but fails to provide documentation to substantiate the changes as required

¹⁷⁹ Starcrest Consulting Group, LLC, *Draft Inventory of Air Emissions for Calendar Years 2018, 2017 and 2008*, prepared for Oxnard Harbor District, (August 2020) [hereinafter, OHD Draft Air Emissions Inventory], pp 15 and 42.

¹⁸⁰ *Id.* at 44.

¹⁸¹ See, 2030 Strategic Plan Port Infrastructure Workshop

¹⁸² DEIR, p. 5.3-10

¹⁸³ Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (February 9, 2022), [hereinafter "Hagemann & Rosenfeld"] attached as Addendum A.

¹⁸⁴ Hagemann & Rosenfeld, p. 5

¹⁸⁵ *Id.* pp. 6-8

under the CalEEMod User's Guide. Changes to the default vendor trip number, without proper documentation to show justification for modifications, can result in an underestimate of construction-related emissions making the DEIR figures presented unreliable.¹⁸⁶

- ***Presenting incorrect weekday and Saturday Operational Vehicle Trip Rates*** - the model used is inconsistent with the information provided in the DEIR by underestimating the number of weekend and Saturday vehicle trips to the site, therefore, making the emissions findings unreliable.¹⁸⁷
- ***Incorrectly Analyzing Mobile-Source Operational Emissions for the Project*** - The modeling did not include a breakdown of the purpose of trips to the site, and in doing so, it failed to calculate annual VMT. Because no trip purpose is included- CalEEMod calculates the average overall trip length of zero, resulting in an annual VMT of zero. The model underestimates the Project's operational emissions and should not be relied upon to determine the Project's operational emissions.¹⁸⁸
- ***Incorrectly Applying Construction-related and Energy-related Operational Mitigation Measures*** - The DEIR's modeling includes alleged compliance with mitigation measures to justify changes without fully committing to their implementation, therefore potentially underestimating the Project's construction-related impacts. In the case of energy-related operational mitigation, the DEIR bases its changes to default settings in the modeling with unsupported claims that nineteen solar light fixtures would result in a 75% energy reduction.¹⁸⁹ Each of these errors calls into question the DEIR's conclusions concerning air quality impact.

When these errors and omissions are removed, updated CalEEMod models result in much higher construction-related and operational emissions, as demonstrated in modeling conducted by Hagemann and Rosenfeld. In the case of construction-related VOC and NOx emissions, for example, the revised modeling results in increases of approximately 1,579% and 11%, respectively—amounts that substantially exceed VCAPCD significance thresholds.¹⁹⁰ This updated analysis shows how air quality impacts in the DEIR may be significantly underestimated, and the Project has the potential to cause greater harm than is presented by the City's findings.

In short, Hagemann and Rosenfeld conclude that the Project is likely to have significant air quality impacts related to construction and operation and the DEIR must conduct a full, detailed VMT analysis and adopt appropriate mitigation measures or pursue alternatives accordingly. The full analysis and conclusions reached by Hagemann and Rosenfeld can be found in the expert comment letter attached hereto and incorporated by reference as Addendum A. The City must respond to each of the points raised in the Hagemann and Rosenfeld comment letter.

¹⁸⁶ *Id.*, pp. 6-10

¹⁸⁷ *Id.* pp. 10-11

¹⁸⁸ *Id.* pp. 11-12

¹⁸⁹ *Id.*, pp. 12-14

¹⁹⁰ Hagemann & Rosenfeld, p. 15

C. The DEIR fails to adequately address the health impacts & toxic air pollutants of emissions

The DEIR improperly concludes that the Project will have less-than-significant health risk impacts without conducting a health risk impact assessment. To justify this omission from its analysis, the DEIR claims that the proposed Project would not be a potential source of Toxic Air Contaminants (TACs) because it is a temporary vehicle storage facility.¹⁹¹ This cursory analysis of the Project's potential exposure to nearby sensitive receptors is flawed, and the conclusion that TAC impacts would be less than significant is incorrect for several reasons, including the following.

1. The DEIR should include a quantified construction and operational Health Risk Assessment

The DEIR concludes that the Project will have a less-than-significant health risk impact without conducting a quantified construction or operational Health Risk Assessment (HRA).¹⁹² It bases its evaluation on an unsubstantiated conclusion that the land use does not involve TAC emissions based solely on the list of potential land use sources of toxic emissions from the California Air Resources Board (CARB) Air Quality and Land Use Handbook from 2005.¹⁹³ The 2030 General Plan, however, requires the City to utilize the VCAPCD Air Quality Assessment Guidelines (AQAG) in preparing its environmental review¹⁹⁴—a policy requirement the DEIR simply ignores. In doing so, the DEIR fails to compare the excess health risk impact of the Project to VCAPCD's specific numeric threshold of 10 in one million.¹⁹⁵

Under CEQA, the DEIR must go further in assessing air quality impacts on health. A Friant Ranch-type analysis that connects pollution levels with actual human health impacts¹⁹⁶ can and must be done for this Project. Under this type of analysis, a study of the Project's NO_x emissions on ozone formation in the South Central Coast Air Basin and the resulting cumulative impact of these air emissions on human health is vital to the analysis.¹⁹⁷ No such analysis was done for this Project.

The DEIR erroneously concludes that the land use does not involve TAC emissions, and therefore no health risk assessment is required.¹⁹⁸ Had the AQAG been followed, however, the DEIR would reflect that a sufficient inquiry was conducted into the types and amounts of toxic

¹⁹¹ DEIR, p. 5.3-14

¹⁹² *Id.*

¹⁹³ DEIR, p. 5.3-3

¹⁹⁴ City of Oxnard, 2030 General Plan (amended June 2017) [hereinafter "Oxnard 2030 General Plan"], Policy ER-14.12, p.9-24, available at <https://www.oxnard.org/wp-content/uploads/2017/06/Oxnard-2030-General-Plan-Amend-06.2017-SM.pdf>; See also, DEIR, p. 5.3-6

¹⁹⁵ Ventura County Air Quality Assessment Guidelines." Ventura County Air Pollution Control District (VCAPCD), October 2003, available at: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>, p. 3-5 (hereinafter "October 2003 VCAPCD Guidelines"); See also, Hagemann & Rosenfeld, p. 17.

¹⁹⁶ *Sierra Club v. County of Fresno (Friant Ranch)* (2018) 6 Cal.5th 502, 510 (the California Supreme Court found that CEQA requires analysis correlating increased project air emissions to the probable resulting human health effects).

¹⁹⁷ *Id.* at 519-522

¹⁹⁸ DEIR, p. 5.3-3

substances the Project may end up using or emitting into the atmosphere at different stages.¹⁹⁹ The AQAG also requires that projects proposed within one-quarter mile of an existing source (or sources) of TAC's should be evaluated for the potential to be impacted by those TACs.²⁰⁰ There is no evidence that such an inquiry was made here. Furthermore, the CARB Air Quality and Land Use Handbook, which the DEIR relies upon for its assessment, refers to projects having to consult with local air districts to determine whether a health risk assessment must be performed.²⁰¹ The DEIR does not show that this inquiry was made.

By failing to prepare a quantified construction and operational HRA, the Project precludes the requisite *Friant Ranch*-type analysis of the Project's potential adverse impacts on human health. The DEIR, for example, fails to address how the Project's use of equipment producing diesel particulate matter ("DPM") emissions during a construction phase lasting over 180 to 200 days²⁰², will impact the region's air quality and public health. The Project will also result in approximately 316 daily vehicle trips²⁰³, each generating additional emissions in the region. The DEIR, however, does not attempt to evaluate Project-generated TACs or indicate the concentrations at which the pollutants would trigger adverse health effects to the surrounding communities.²⁰⁴ The DEIR is therefore inconsistent with CEQA requirements to correlate increased emissions with the potential for human health impacts.

The Office of Environmental Health Hazard Assessment's (OEHHA) recent *Risk Assessment Guidelines* published in February 2015²⁰⁵ recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.²⁰⁶ The Construction of this project will go well beyond the 2-month threshold set forth under the OEHHA Risk Assessment Guidelines. Therefore, a quantified HRA may be warranted in this case.²⁰⁷ An analysis of health risk impacts posed to nearby sensitive receptors from the Project-generated DPM emissions must be included in an EIR for the Project as recommended under OEHHA guidelines.²⁰⁸

2. The DEIR should Examine Cumulative Health Risks from Increased Air Quality Impacts

The DEIR must also assess the health impacts of the project's air quality impacts on impacted residents as an indirect impact from expanded operations.²⁰⁹ The clustering and centralization of

¹⁹⁹ October 2003 VCAPCD Guidelines, p. 6-6.

²⁰⁰ *Id.* at 6-8

²⁰¹ CARB Air Quality and Land Use Handbook (2005), available at <https://ww3.arb.ca.gov/ch/handbook.pdf>

²⁰² DEIR, p. 5.3-10

²⁰³ See Traffic Study, p. 9, Table 2)

²⁰⁴ Hagemann & Rosenfeld, p. 6.

²⁰⁵ Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, Office of Environmental Health Hazard Assessment (OEHHA), February 2015, available at: http://oehha.ca.gov/air/hot_spots/hotspots2015.html

²⁰⁶ *Id.* at 8-17 through 8-18

²⁰⁷ Hagemann & Rosenfeld, p.17.

²⁰⁸ *Id.*

²⁰⁹ *Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal. App. 4th 1344, 1364, 1367, 1371. (Holding that the Port of Oakland's EIR was insufficient because it did not analyze the health effects of toxic air contaminants from mobile sources on residents near the airport)

container vessels, yard equipment, rail operations, and truck traffic along freight transportation corridors places a heavy health burden on adjacent communities. Internal combustion vehicles create highly localized health hazards near busy roadways, including high levels of particulate matter and TAC exposures. The short- and long-term effects of exposure to high levels of ambient air pollution on children, and adults, is a major concern based on a large body of research documenting associations between exposure to pollution from traffic-related sources and illness.²¹⁰

A “good faith reasoned analysis” of the health effects of any increase in TAC’s caused by the Project is required.²¹¹ This analysis should include a discussion of the health impact of TACs that would result from the combustion of diesel and gasoline engines associated with the entire car storage complex- including the 34-acres and the 250-acre sites, increased Port-related emissions due to augmented cargo throughput, and construction related to both sites. Furthermore, as discussed above, the City should recognize that the Port’s proposed 34-acre storage site will likely shift Port emissions towards Oxnard populations adjacent to the Port-serving freight corridors like Hueneme Rd. and may lead to an increase in traffic volume and vehicle emissions in these areas. The 250-acre project would only serve to shift Port emissions further inland and increase the magnitude of those emissions.

The analysis of health impacts to sensitive receptors- including those tied to all port expansion and infrastructure projects, was specifically requested as part of the commenters previous comments in response to the Notice of Preparation.²¹² Rather than address these concerns, the DEIR summarily dismisses them, stating that the Project is unrelated to the Ports.²¹³ In doing so, the DEIR fails to adequately analyze the potential harms associated with the increased traffic and pollution that the Project will trigger and is therefore flawed.

Health Impacts Assessment should, at a minimum, address the following:

- **Particulate matter.** Numerous studies have documented a wide range of adverse health impacts from PM exposure, including increased rates of respiratory illness and asthma, cardiovascular disease, heart attacks, strokes, emergency room visits, and premature death.²¹⁴ Exposure to PM has also been linked to birth defects, low birth weights, and

²¹⁰ See, e.g., Univ. S. Cal., *USC Children’s Health Study: Study Findings*, <https://healthstudy.usc.edu/study-findings/> (last accessed Oct. 1, 2019); “The Children’s Health Study,” <https://ww3.arb.ca.gov/research/chs/chs.htm> (last accessed Oct. 1, 2019); John M. Peters, Univ. S. Cal., *Epidemiologic investigation to identify chronic effects of ambient air pollutants in Southern California* (2004), available at https://ww3.arb.ca.gov/research/single-project.php?row_id=60245; Andrea Hricko, Glovioell Rowland, Sandra Eckel, Angelo Logan, Maryam Taher, and John Wilson, *Global Trade, Local Impacts: Lessons from California on Health Impacts and Environmental Justice Concerns for Residents Living near Freight Rail Yards*, INT. J. ENVIRON. RES. PUBLIC HEALTH (2014), available at <https://doi.org/10.3390/ijerph110201914>.

²¹¹ See *Berkeley Keep Jets Over the Bay*, *Supra*, 19 Cal.App.5th at 1371 (quoting *Laurel II*, 6 Cal. 4th at 1124); compare with *City of Long Beach*, 19 Cal.App.5th at 487.

²¹² See Letter from CAUSE, *et al.*, to the City of Oxnard Planning Department (July 24, 2020), p.2.

²¹³ DEIR, p. 2-9

²¹⁴ See Nino Künzli *et al.*, *Ambient Air Pollution and Atherosclerosis in Los Angeles*, 113 ENVTL. HEALTH PERSP. 201, 201–06 (2005); Kristin A. Miller *et al.*, *Long-Term Exposure to Air Pollution and Incidence of Cardiovascular Events in Women*, 356 NEW ENG. J. MED. 447, 447–58 (2007); B. Hoffman *et al.*, *Residential Exposure to Traffic Is*

premature births.²¹⁵ Recent studies have shown a potential connection between exposure to fine PM and diabetes, cognitive decline, and other serious impacts on the brain.²¹⁶ Exposure to particulate matter, even for a short period, can elevate the risk of death.²¹⁷ Here, particulate matter must be analyzed not only for the construction and operation of the project, but in connection with the larger expansion efforts that include port capacity-building projects and the Multimodal Logistics Park that this Project is a part of.

- **Diesel exhaust.** Of special concern is the soot in diesel exhaust—diesel PM,²¹⁸ which is especially toxic, not only because of its very small size, but also because the soot particles contain roughly forty different TACs, fifteen of which are recognized carcinogens.²¹⁹ In 2013, the International Agency for Research on Cancer, a branch of the World Health Organization, concluded that diesel engine exhaust is “carcinogenic to humans.”²²⁰ Dozens of studies have shown high risks of lung cancer in occupations with high diesel exposures, including rail workers, truck drivers, and miners. Not only do the risks of lung cancer approach that of heavy smokers for the most exposed workers, but the elevated risks of lung cancer apply to the general population in areas with high levels of diesel PM (e.g., communities near freeways and busy freight corridors).²²¹ Other studies have also documented the health hazards of living near busy roadways heavily

Associated With Coronary Atherosclerosis, 116 CIRCULATION 489 (2007); C. Arden Pope III et al., *Ischemic Heart Disease Events Triggered by Short-Term Exposure to Fine Particulate Air Pollution*, 114 CIRCULATION 2443 (2006); Michael Jerrett et al., *Spatial Analysis of Air Pollution and Mortality in Los Angeles*, 16 EPIDEMIOLOGY 727, 727–36 (2005); Hazrije Mustafic et al., *Main Air Pollutants and Myocardial Infarction: A Systematic Review and Meta-Analysis*, 307 J. AM. MED. ASS’N 713 (2012); Gregory A. Wellenius et al., *Ambient Air Pollution and the Risk of Acute Ischemic Stroke*, 172 ARCHIVES INTERNAL MED. 229 (2012).

²¹⁵ See Beate Ritz et al., *Air Pollution and Infant Death in Southern California, 1989–2000*, 118 PEDIATRICS 493, 493–502 (2000); Michelle Wilhelm & Beate Ritz, *Residential Proximity to Traffic and Adverse Birth Outcomes in Los Angeles County, California, 1994–1996*, 111 ENVTL HEALTH PERSP. 207, 207–16 (2003); Michelle Wilhelm & Beate Ritz, *Local Variations in CO and Particulate Air Pollution and Adverse Birth Outcomes in Los Angeles County, California, USA*, 113 ENVTL. HEALTH PERSP. 1212, 1212–21 (2005).

²¹⁶ See Heather E. Volk et al., *Residential Proximity to Freeways and Autism in the CHARGE Study*, 119 ENVTL. HEALTH PERSP. 873 (2011); Zorana J. Anderson et al., *Diabetes Incidence and Long-Term Exposure to Air Pollution: A Cohort Study*, 35 DIABETES CARE 92 (2011); Lilian Calderón-Garcidueñas et al., *Neuroinflammation, Hyperphosphorylated Tau, Diffuse Amyloid Plaques, and Down-Regulation of the Cellular Prion Protein in Air Pollution Exposed Children and Young Adults*, 28 J. ALZHEIMER’S DISEASE 93 (2012); Jennifer Weuve et al., *Exposure to Particulate Air Pollution and Cognitive Decline in Older Women*, 172 ARCHIVES INTERNAL MED. 219 (2012).

²¹⁷ U.S. Environmental Protection Agency, *How Does PM Affect Human Health?* <https://www3.epa.gov/region1/airquality/pm-human-health.html> (last visited Jan. 27, 2020)

²¹⁸ Diesel PM is generally more harmful than non-diesel forms of particulate matter. See State of New Jersey, Department of Environmental Protection, Bureau of Mobile Sources, Health Concerns of Diesel, <http://www.state.nj.us/dep/stopthesoot/dieselhealthconcerns.htm> (last visited Sept. 15, 2019); Krivoshto, et al., *The Toxicity of Diesel Exhaust: Implications for Primary Care*, J AM BOARD FAM MED, , vol. 21, no. 1, at 55–62 (Jan–Feb. 2008), available at <http://www.jabfm.org/content/21/1/55.full>.

²¹⁹ See, *Air: Health Effects of Diesel Exhaust*, Cal. Off. Env’tl Health Hazard Assessment, <https://oehha.ca.gov/air/health-effects-diesel-exhaust> (last visited Sept. 15, 2019); *The Report on Diesel Exhaust*, Cal. Air Res. Bd., <http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm> (last visited Sept. 15, 2019).

²²⁰ Press Release, International Agency for Research on Cancer, World Health Organization, IARC: Diesel Engine Exhaust Carcinogenic (June 12, 2012), available at https://www.iarc.fr/wp-content/uploads/2018/07/pr213_E.pdf (last visited Jan. 31, 2020)

²²¹ See Debra T. Silverman et al., *The Diesel Exhaust in Miners Study: A Nested Case–Control Study of Lung Cancer and Diesel Exhaust*, 104 J. NAT’L CANCER INST. 1 (2012).

traveled by diesel trucks.²²² In California, diesel emissions are responsible for about 70 percent of California's cancer risks related to air toxins.²²³ These health impacts are of particular concern for residents who live near roadways used by diesel trucks serving the Port of Hueneme. While the DEIR claims that the project will eliminate the use of diesel trucks, this does not provide sufficient analysis of potential impacts of the Project when viewed as a whole. As stated previously, this Project must be analyzed in context with its role in facilitating the larger Multimodal Logistics Park that it will help support as well as OHD's port expansion endeavors. Even the limited analysis provided, however, is flawed in that it is narrowly focused on only certain construction-related equipment and fails to include the broad inventory of equipment that will be utilized at the Project, including potentially diesel-powered water trucks likely to become part of routine operations.

- **Nitrogen oxides and ground-level ozone.** NOx also has a toxic effect on human airways, leading to inflammation, asthmatic reactions, and worsening of allergies and asthma symptoms.²²⁴ In addition, NOx reacts with VOCs in the sunlight to form ozone—also known as smog. This layer of brown haze contributes to decreased lung function, increased respiratory symptoms, asthma, emergency room visits, hospital admissions, and premature deaths.²²⁵ Ozone can also cause irreversible changes in lung structure, eventually leading to chronic respiratory illnesses, such as emphysema and chronic bronchitis.²²⁶ The Project's potential health impacts to the surrounding community must be examined as a whole to include the larger Multimodal Logistics Park and Port expansion as described above.

²²² Nino Kunzli et al., *Ambient Air Pollution and the Progression of Atherosclerosis in Adults*, PLOS ONE, vol. 5, issue 2 (Feb 2010), available at <http://www.plosone.org/article/related/info%3Adoi%2F10.1371%2Fjournal.pone.0009096;jsessionid=46505FD078D22F6B9543D5BB5C4BDF0D>; W James Gauderman et al., *Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study*, THE LANCET (Jan. 26, 2007); *Living Close to Freeways Decreases Lung Development*, AAP GRAND ROUNDS, Vol 18, No. 6 (Dec. 2007), available at <http://aapgrandrounds.aapublications.org/content/18/6/67.extract>; Laura Perez et al., *Global Goods Movement and the Local Burden of Childhood Asthma in Southern California*, AM J PUB HEALTH, Vol. 99, No. S3 (2009), available at

<http://ajph.aphapublications.org/doi/full/10.2105/AJPH.2008.154955?prevSearch=mcconnell&searchHistoryKey=>.

²²³ Cal. Air Res. Bd., "Overview: Diesel and Health," (last accessed: Dec. 30, 2019), <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

²²⁴ See R.J. Davies et al., *Allergen-Irritant Interaction and the Role of Corticosteroids*, 52 ALLERGY 59, 59–65 (1997); R.J. Davies et al., *Why is Allergy Increasing?—Environmental Factors*, 28 CLINICAL & EXPERIMENTAL ALLERGY 8, 8–14 (1998).

²²⁵ See U.S. Env'tl. Protection Agency, *Provisional Assessment of Recent Studies on Health and Ecological Effects of Ozone Exposure* (2009).

²²⁶ See J.E. Hodgkin et al., *COPD Prevalence in Nonsmokers in High and Low Photochemical Air Pollution Areas*, 86 CHEST 830, 830–38 (1984); David E. Abbey et al., *Long-Term Ambient Concentrations of Total Suspended Particulates, Ozone, and Sulfur Dioxide and Respiratory Symptoms in a Nonsmoking Population*, 48 ARCHIVES OF ENVTL. HEALTH 33, 33–46 (1993).

VIII. The DEIR Underestimates the Impact to Biological Resources

An EIR must provide sufficient analysis to allow decision-makers to make informed choices based on a full account of the environmental consequences.²²⁷ CEQA does not require perfection, but it does call on lead agencies to “use its best efforts to find out and disclose all that it reasonably can.”²²⁸

Here, the City has failed to carry out the best efforts in evaluating the special-status species that could depend on the site as habitat or for movement. Therefore, the DEIR contains deep gaps and lacks the information necessary to allow the City to make an informed decision on how the Project could impact biological resources. Based on the report and analysis of Dr. Shawn Smallwood, “essential steps remain incomplete and insufficiently informative in the DEIR.”²²⁹ Due to this incomplete analysis, the DEIR does not (and cannot until a new draft EIR is recirculated) fully evaluate the potential impacts, must less whether the impacts exceed the significant thresholds for habitat loss (BIO-1, BIO-2), wildlife movement (BIO-4), conflicts with protective policies, ordinances, and/or plans (BIO-5, BIO-6), or cumulative impacts.²³⁰ Furthermore, where the DEIR does acknowledge significant impacts, the described mitigation measures are inadequate to address even the limited impacts identified.

A. DEIR underestimates the impact of the Project on sensitive or special status biological resources (BIO-1, BIO-2)

The DEIR identifies a “Potentially Significant Impact” to ground-nesting species such as the western meadow lark, burrowing owl, and the California horned lark, and “Potentially Significant Impact” to suitable habitat for the latter two species of birds.²³¹ The City acknowledges that migratory birds, bird species with protected status, and birds of prey are all protected under California or federal laws from having their nesting sites disturbed or destroyed in any way.²³² The DEIR further acknowledges that construction activities with the proposed Project would adversely affect nesting birds through either mortality or abandonment of nests.²³³

The DEIR fails to analyze impacts from the destruction of habitat for the burrowing owl and the California horned lark- two species identified as potentially impacted by the Project construction and activity. Instead, the DEIR focuses exclusively on construction-related activity without considering the potential impact of long-term destruction of habitat and activity at the site, even if temporary. Furthermore, the DEIR severely underestimates the wildlife, including special-status species, that use the site.

²²⁷ Cal. Code Regs., tit. 14 §15151; see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712, reh'g denied and opinion modified (July 20, 1990) (“A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision making and informed public participation, thereby thwarting the statutory goals of the EIR process.”).

²²⁸ Cal. Code Regs., tit. 14, §15144.

²²⁹ Letter from Shawn Smallwood, PhD. To Jay Dobrowalski (February 9, 2022) [hereinafter “Smallwood”] p. 14.

²³⁰ DEIR, p. 5.4-1.

²³¹ DEIR, pp. 5.4-20 to 5.4-22.

²³² *Id.*

²³³ *Id.*

1. DEIR fails to analyze the impact of permanent habitat loss

The DEIR does not address the impact of permanent habitat loss on wildlife that depends on the site, including special-status species like the burrowing owl.²³⁴ Dr. Smallwood estimates that the GLOVIS project could deny California approximately 190,720 birds over the next century due to habitat loss.²³⁵ Despite the “temporary” nature of this project, the habitat loss impacts would likely be permanent as grading and packing of the soils over a five-year period would permanently degrade the soil and reduce the habitat values of the property.²³⁶ The DEIR should be revised to assess the impacts from this habitat loss, including the impact on the neighboring wetland restoration project, and study alternatives or develop mitigation measures as necessary.

2. DEIR relies on incomplete biological resources reports and incorrectly states that no special-status species rely on the site

DEIR relies solely on flawed biological resources inventories that present an incomplete and incorrect assessment of the special-status species that could use the site. The biological resources report carried out by consultant Rincon Consultants is based on two field surveys of only three person-hours total in 2018 and 2020.²³⁷ The surveys and literature review conducted by Rincon Consultants are inadequate in multiple ways, as described at more length in Dr. Smallwood’s report, such as the failure to discuss wildlife on adjacent properties like The Nature Conservancy property undergoing wetland restoration.²³⁸ Furthermore, Rincon Consultants were not provided with a project description to inform their analysis.

The DEIR also improperly relies solely on the California Natural Diversity Data Base (CNDDDB) to establish the environmental baseline of the site.²³⁹ While the CNDDDB “can be helpful for confirming occurrences of special-status species where they have been reported, it cannot be relied upon for determining absences of species.”²⁴⁰ Instead of using the CNDDDB as a starting point, the DEIR assumes that because none of the special-status species listed in the CNDDDB within a 5-mile radius were detected, no special-status species must use the site. If the DEIR had also consulted with other wildlife occurrence data sources, such as eBird and iNaturalist, several more special-status species occurrences at and near the project could have been incorporated into the biological report.²⁴¹ Furthermore, their conclusion that no special-status species use the site is not only an improper use of the CNDDDB, but also incorrect based on Rincon’s own 2018 survey, and Dr. Smallwood’s more comprehensive surveys.

The biologists who carried out the surveys only identified 7 wildlife species in total and stated that no special-status species were detected.²⁴² However, despite the very low number of species

²³⁴ Smallwood, p. 17-22.

²³⁵ Smallwood, p. 22.

²³⁶ Smallwood, p. 17.

²³⁷ DEIR, Vol II, Appendix E (2018) and Appendix F (2020).

²³⁸ Smallwood, pp. 14-17.

²³⁹ DEIR, pp. 5.4-17 to 5.4-19.

²⁴⁰ Smallwood, p.15.

²⁴¹ *Id.* at p. 15

²⁴² DEIR, pp. 5.4-17, 5.4-20; see also DEIR Vol II, Appendix E, pp. 6-7; Appendix F, p. 2;

they detected, the biologists did, in fact, detect two special-status species: red-tailed hawk and double-crested cormorant.²⁴³ The red-tailed hawk is protected by California Fish and Game Code § 3503.5, which prohibits the taking, possession, or destruction of birds of prey.²⁴⁴ The double-crested cormorant is on the Department of Fish and Wildlife's (CDFW) Special Animals List as a species with an extensive range and/or sizeable population, but with cause for concern as a result of recent local declines, threats, or other factors.²⁴⁵ The CDFW Special Animals List states that the list "is also referred to as the list of 'species at risk' or 'special status species.'" The DEIR applies an improperly narrow definition of "special-status species," leaving out species protected by the CDFW Special Animals List.²⁴⁶

Dr. Smallwood conducted two biological surveys on January 27 and 28, 2022, and detected 47 vertebrate wildlife species, including 12 special-status species.²⁴⁷ However, as his report makes clear, the survey results can only be a starting point toward a full characterization of the wildlife that depend on a site.²⁴⁸ Based on his statistical analysis and data from over 150 previous surveys, Dr. Smallwood estimated that he had a 64% chance of detecting a listed species, whereas Rincon Consultants had a 10.5% chance based on their survey methods.²⁴⁹ The fact that Rincon Consultants only detected 16% of the number of species Dr. Smallwood did over the same person-hours is further evidence of the inadequacy of their survey methods.²⁵⁰

3. There is evidence special-status species use the site

Overall, while the DEIR does acknowledge potentially significant impacts to the burrowing owl, the California horned lark, and the western meadow lark from construction activities,²⁵¹ there is ample evidence to suggest that this falls short of a full assessment of the range of special-status species that could be significantly impacted by the GLOVIS project.²⁵² Dr. Smallwood is confident listed species use the site and believes that with another 4 or 5 survey hours, he would have detected one, and in fact, may have detected at least one.²⁵³

The DEIR incorrectly states that due to "the high degree of urbanization surrounding the project site coupled with no suitable habitat available, other special-status species are not likely to occur."²⁵⁴ Not only is there evidence that several special-status species do use the site, but this

²⁴³ DEIR p. 5.4-16.

²⁴⁴ Cal. Fish & Game Code §3503.5.

²⁴⁵ See, Department of Fish and Wildlife, Special Animals List (Jan. 2022),

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>

²⁴⁶ DEIR p. 5.4-17. DEIR only defines "special status species" as those listed, proposed for listing, or candidates for the ESA, those listed or candidates for listing under the CESA, those identified as Fully Protected under California Fish and Game Code Sections 3511, 4700, 5050, and 5515; Species of Special Concern (SSC) identified by the CDFW; and plants occurring on Ranks 1 and 2 of the California Native Plant Society's California Rare Plant Rank system.

²⁴⁷ Smallwood, pp. 1-9

²⁴⁸ *Id.* at pp. 13-17.

²⁴⁹ *Id.* at p. 13.

²⁵⁰ *Id.* at p. 14.

²⁵¹ DEIR, p. 5.4-21.

²⁵² Smallwood, pp. 2-17.

²⁵³ *Id.* at pp. 4-13 (noting that savannah sparrow may have been a listed species).

²⁵⁴ DEIR, p. 5.4-20.

statement also mischaracterizes how special-status species depend on even degraded habitat. Dr. Smallwood describes how “most special-status species will make sure of whatever remains of the environment in which they evolved, so long as soils have not been covered by impervious surfaces and vegetation can grow to provide forage and cover and nest sites.”²⁵⁵ Furthermore, this characterization ignores that most of the southern border of the property is directly adjacent to an active wetland restoration project. It also downplays this project’s own role in intensifying urbanization and industrialization in this area by further degrading almost 34-acres of grasslands.

There is evidence that suggests that the property, despite its previous uses, historical disturbances, and possible contamination, maintains high ecological value.²⁵⁶ In addition to the special-status species detected at and near the site, Dr. Smallwood also detected an ecological keystone species, the California ground squirrel, which increases the likelihood of species that rely on ground squirrels for forage or on their burrows as refuge, such as burrowing owls.²⁵⁷ Furthermore, based on a review of publicly available data, Dr. Smallwood determined that 87 special-status species of wildlife have the potential to occur at the project site and that there was ample evidence to believe the proposed project as described in the DEIR would have significant impact on special-status species.²⁵⁸

As stated above, survey results alone cannot present a full characterization of a site’s use by wildlife, but the amount of wildlife Dr. Smallwood detected during his surveys presents undeniable evidence that the site’s ecological value is much higher than articulated by the DEIR. In addition to the double-crested cormorant and the red-tailed hawk, Dr. Smallwood detected several special-status species on the property or just off the site.²⁵⁹

Species Name	Status
Large-billed savannah sparrow <i>or</i> Belding’s savannah sparrow	S2* (Imperiled) (large-billed) / S3* (Vulnerable) and California Endangered* (Belding’s)
Vaux’s swift	S2S3* (between Imperiled and Vulnerable)
Northern harrier	S3* (Vulnerable)
Merlin	S3S4* (between Vulnerable and Apparently Secure)
Double-crested cormorant	S4* (Apparently Secure)
Great blue heron	S4* (Apparently Secure)
Great egret	S4* (Apparently Secure)
Loggerhead shrike	S4* (Apparently Secure)
California gull	S4* (Apparently Secure), Bird of Conservation Concern#
Allen’s hummingbird	Bird of Conservation Concern#
Western gull	Bird of Conservation Concern#
Turkey vulture	Taking prohibited by CA Fish and Game Code 3503.5

²⁵⁵ Smallwood, p. 15.

²⁵⁶ It should be noted that the site has not been disturbed since 2013, but even before then only portions of the property were graded or compacted due to stockpiling. DEIR p. 5.4-10.

²⁵⁷ Smallwood, p. 16.

²⁵⁸ *Id.*

²⁵⁹ *Id.*, pp. 2-4.

Red-tailed hawk	Taking prohibited by CA Fish and Game Code 3503.5
American kestrel	Taking prohibited by CA Fish and Game Code 3503.5

* - listed by the California Department of Fish and Wildlife

- listed by U.S. Fish and Wildlife Service

4. DEIR fails to consider the impact from artificial lights, fence mortality, and car collisions

Nineteen security lights will be installed on the perimeter of the property, which will not only illuminate the property itself, but also the Ormond Beach wetlands directly to the south. These lights would likely disturb nocturnal wildlife on the adjacent property that rely on darkness for stealth or that will be confused by stark light/shadow contrasts.²⁶⁰ These disturbances can disrupt foraging activity, movement patterns, navigation, development of eggs and juveniles, or even lethally attract flying birds.²⁶¹ The DEIR fails to analyze this impact.

The DEIR also fails to study the impact of the 6-foot security fences on wildlife. Based on studies on bird-fence collision mortality, an estimated 26.5 birds may be killed annually by the fence.²⁶² Since the DEIR describes that the fence will remain beyond the five-year permit, these impacts will continue as long as the fence is up.

Lastly, the DEIR fails to study how the project will contribute to wildlife-automobile mortality.²⁶³ Based on projections carried out by Dr. Smallwood based on the VMT estimates for the project, he estimated that over the five-year period the project would accumulate 1,030 wildlife fatalities.²⁶⁴ As such, project-generated traffic would result in significant impact to wildlife using the site and the surrounding areas, including the Ormond Beach wetland restoration project.

The DEIR should be revised to assess these impacts and study alternatives or develop mitigation measures as necessary.

B. DEIR fails to consider the full impacts of the Project on wildlife movement (BIO-4)

The DEIR does not adequately analyze the impact of the Project on wildlife movement. First, it too narrowly focuses on whether the site itself could be used as a wildlife movement corridor. However, the CEQA guidelines define significant impact on wildlife movement as to whether an action would “interfere significantly with the movement of any native resident or migratory fish or wildlife species or with establish native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site.”²⁶⁵ A broader understanding of how wildlife use habitats to

²⁶⁰ Smallwood, p. 21

²⁶¹ *Id.* at p. 21.

²⁶² *Id.* at p. 22.

²⁶³ *Id.* at pp. 23-24

²⁶⁴ *Id.* at p. 26.

²⁶⁵ CEQA Guidelines, Cal. Code. Regs., tit.14, 15000 *et seq.*, App. G, Section IV

move and migrate is necessary to adequately assess whether the project will have a significant impact on wildlife movement.

Second, since the DEIR largely ignores the value of this property for wildlife, it also assumes wildlife is unlikely to use the site for regional movement.²⁶⁶ However, Dr. Smallwood disputes this assertion based on his biological surveys; he witnessed birds using the site to gain lift for long-distance glides and use the thermals generated by the natural soils of the site to circle.²⁶⁷ Furthermore, based on the types of species that are likely to use the site, Dr. Smallwood determined that many species likely use the site for movement across the region.²⁶⁸

The DEIR must be revised to include a complete study of how converting 34-acre of undeveloped land into car storage with a 6-foot fence and 24-hour security lights could impact the wildlife that may use the site for stopover or staging opportunities. If a significant impact is identified, appropriate alternatives and mitigation measures should also be developed and studied.

Lastly, the DEIR ignores the impact that the project could have on wildlife in the neighboring wetlands. Instead, the DEIR merely names that the land is “vacant and undeveloped” and slated for restoration.²⁶⁹ This is an incorrect characterization of the neighboring land, which is the most important coastal wetland restoration opportunity in California, and a critical and sensitive habitat home to many species.²⁷⁰

As noted by UCLA researcher Brenton Spies, who serves on U.S. Fish and Wildlife Service (USFWS) Tidewater Goby Recovery Team, the Project may pose additional threats to the northern tidewater goby (*Eucyclogobius newberri*)— a federally endangered species. According to Mr. Spies, the DEIR does not thoroughly address the Project’s potential impacts to the northern tidewater goby “suitable occupied habitat” in the Ormond Lagoon Waterway that runs directly south and southeast of the proposed 34-acre site. Mr. Spies has documented numerous northern tidewater gobies in the Ormond Lagoon Waterway channel during surveys conducted between 2014 and January 2020. The channel was not included in surveys done for the DEIR’s Biological Resource Inventory. In failing to do so, the DEIR does not properly assess whether the proposed construction and operation at the site will cause indirect effects to the Ormond Lagoon Waterway aquatic habitat and biota. Full analysis, conclusions, and recommendations by Mr. Spies can be found in Addendum C to these comments. The City must respond to each of the points raised in his comment letter.

²⁶⁶ DEIR, p. 5.4-25.

²⁶⁷ Smallwood, p. 23.

²⁶⁸ *Id.* at p. 23.

²⁶⁹ DEIR, p. 5.4-25.

²⁷⁰ Ormond Beach Restoration and Public Access Project Plan, p. ES-1.

C. DEIR fails to consider conflict with local policies or ordinances and improperly finds no impact (BIO-5, BIO-6)

The DEIR incorrectly states that there are no biological resources on-site that would be subject to policies or ordinances.²⁷¹ As discussed above, there is substantial evidence that the property is an important wildlife habitat, including for special-status species. Therefore, there are a number of local policies and ordinances in the Oxnard General Plan, the Oxnard Local Coastal Plan, the Ventura Local Coastal Plan, among others, that apply to this property that either were not referenced or studied in the DEIR. For example, the Oxnard General Plan calls for the protection of “City’s natural resource areas, fish and wildlife habitat, scenic areas, open space areas, parks, and cultural and historic resources from unnecessary encroachment or harm and if encroachment or harm is necessary, fully mitigate the impacts to the maximum extent feasible.”²⁷² As discussed in detail above, there is substantial evidence that this project would have such impacts on the City’s biological resources and so a recirculated DEIR would need to develop and include mitigation measures.

The DEIR does reference the Ormond Beach Restoration and Public Access Project but finds that the project does not conflict with this Plan.²⁷³ There is evidence, described above as well as in other comments to their DEIR, that the project would in fact conflict with the goals of the Ormond Beach restoration plan by further degrading (at best) or permanently destroying (at worse) habitat necessary for species living in the adjacent property.

D. The cumulative impacts assessment for biological resources is flawed and incomplete

As discussed above, the DEIR provides an incomplete list of other projects that cause or will cause related impacts, and therefore provides a deficient analysis of the cumulative impacts from the project.²⁷⁴ Due to this deficiency, the DEIR fails to consider how these cumulative impacts may further degrade the habitat on this property, which is important for the connectivity of the surrounding wetland restoration project. These include the cumulative impact on wildlife mortality from an increase in VMT from housing, industrial and port expansion projects, among other impacts described by Dr. Smallwood in his report.²⁷⁵

DEIR finds that cumulative impacts are less than significant based on the assumption that all future development will comply with all applicable federal, state, and city regulation regarding the preservation of biological resources.²⁷⁶ This flies in the face of how CEQA defines cumulative impacts. CEQA requires that a lead agency must issue a finding of significant impacts if the project “has possible environmental effects that are individually limited but cumulatively considerable. ‘Cumulatively considerable’ means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the

²⁷¹ DEIR, p. 5.4-25

²⁷² Oxnard 2030 General Plan, Policy ER-1.1, p. 9-21

²⁷³ DEIR, pp. 5.4-25 to 26.

²⁷⁴ See Cal. Code Regs., tit. 14, §15130(a)(1).

²⁷⁵ Smallwood p. 27.

²⁷⁶ DEIR, p. 5.4-29.

effects of other current projects, and the effects of probable future projects.”²⁷⁷ As discussed in more detail above, the DEIR has failed to adequately characterize the Project itself by piecemealing this 34-acre project from reasonably foreseeable projects. But even viewing the GLOVIS project in isolation, CEQA requires that a lead agency evaluate how the project at issue may cumulatively contribute to significant impacts. The DEIR fails to do so here.

The full analysis and conclusions reached by Dr. Smallwood can be found in the expert comment letter attached hereto and incorporated by reference as Addendum B. The City must provide responses to each of the points raised in the Smallwood comment letter.

IX. Cultural Impact Assessment: Fails to properly consider Tribal Cultural Resources in the area

As stated above, we join the Wishtoyo Chumash Foundation in its criticism of the DEIR for failing to properly account for the Project’s potential impacts on Tribal Cultural resources and ancestral remains.²⁷⁸ Not only does the City inappropriately conflate the meaning of “cultural sites” with “archeological sites,” but it also failed to conduct the proper analysis and use of best available technology and methods for identifying Tribal Cultural Resources. The Project site is in a region replete with examples of sensitive cultural sites found using more rigorous methods than those proposed in the DEIR. The DEIR’s analysis of the potential impact on Cultural Resources is therefore flawed, unreliable, and should be rejected.

X. DEIR Presents Insufficient Analysis of Land Use Impacts from the Proposed Project

All counties and cities in California must adopt comprehensive general plans²⁷⁹ for future physical development, and all land use decisions must be consistent with the policies expressed in those plans.²⁸⁰ The general plan is “located at the top of the hierarchy of local government law regulating land use.”²⁸¹ It serves as a “constitution” or “charter” for all future development in the region.²⁸² State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan.²⁸³

Courts recognize that not every decision will be in perfect conformity with every policy expressed in adopted plans, but land use decisions must be compatible with the objectives, policies, general land uses, and programs specified in applicable plans.²⁸⁴ Therefore, CEQA

²⁷⁷ Cal. Code Regs., tit. 14, §15065(a)(3).

²⁷⁸ See Letter from Wishtoyo Chumash Foundation to Jay Dobrowalski (February 14, 2022) (submitted as comment to the DEIR for this Project).

²⁷⁹ Cal. Pub. Res. Code §30500(a) (In addition to General Plans, municipalities within the Coastal Zone must also develop Local Coastal Plan to guide coastal development).

²⁸⁰ See Gov. Code § 65300; see also *Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal.App.4th 807, 815.

²⁸¹ See *DeVita v. County of Napa* (1995) 9 Cal.4th 763,773 (internal quotations omitted)

²⁸² *Leshner Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531,540.

²⁸³ See Gov. Code §65860(a)(2); See also, *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal.App.3d 1176,1184.

²⁸⁴ *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1511.

requires agencies to discuss inconsistencies between the proposed project and applicable plans, including land use plans.²⁸⁵ A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is “fundamental, mandatory, and clear,” regardless of whether it is consistent with other general plan policies.²⁸⁶ Even in the absence of such a direct conflict, an ordinance or development may not be approved if it interferes with or frustrates the general plan’s policies and objectives.²⁸⁷

Here, despite the assertion that the Project is consistent with land use policy, the DEIR provides only cursory analysis of City of Oxnard Threshold LU-1— to determine whether the proposed project could conflict with the City of Oxnard General Plan. The rationale provided by the City for claiming that the proposed project is consistent with the General Plan is that 1) it is consistent with the Light Industrial²⁸⁸ Designation, and 2) that the proposed temporary use for the site for outdoor vehicle storage does not preclude other uses in the future.²⁸⁹ This does not address the incompatible use for which the site will be altered and completely ignores the portion of the site designated as “Park” (PRK) in the 2030 General Plan. The DEIR, therefore, fails to adequately assess land use impacts.

Regarding the General Plan land use designations, the DEIR claims that they are Industrial Limited (ILM) and Park (PRK) and claims that the proposed Project is “consistent with the General Plan Industrial Limited designation” because the project is temporary and does not include any permanent structures or preclude future development. The actual 2030 General Plan designation for the site includes “Industrial Light” and “Park” use.²⁹⁰ “Light Industrial” is defined as “[m]anufacturing uses where the principal activity occurs within a building [with] outdoor assembly, fabrication, work/live, public services, and storage.”²⁹¹

While it is conceivable that certain vehicle storage sites might fall under the “Light Industrial” designation, it is inconsistent with the “Park” designation that applies to over four acres of the proposed site. In determining whether the Project is consistent with the 2030 General Plan land use designation, the DEIR simply ignores the fact that the current proposal takes the portion of the project site designated as a park on the General Plan Map and unilaterally converts it to industrial uses.

The DEIR attempts to justify this inconsistency by arguing that the City’s Zoning designation of M-1-PD (Light Manufacturing Zone with Planned Development Additive Zone) applies to both parcels of the site and should therefore govern even if part of the site is designated for park use

²⁸⁵ Cal. Code Regs., tit. 14 § 15135(d), (e); see also *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1566.

²⁸⁶ See *Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. Of Supervisors* (1998) 62 Cal.App.4th 1332, 1341-42.

²⁸⁷ See *Napa Citizens for Honest Gov. v. Napa County Bd. Of Supervisors* (2001) 91 Cal.App.4th at 378-79.

²⁸⁸ The DEIR erroneously refers to the Project site being designated as “Industrial Limited” (ILM) when it is actually designated as “Light Industrial”(ILT) in the Oxnard 2030 General Plan; See, Oxnard 2030 General Plan Map available at <https://www.oxnard.org/wp-content/uploads/2016/06/2030-GENERAL-PLAN-11x17-04.16.pdf>

²⁸⁹ DEIR, Sections 5.11, P. 5.11-15

²⁹⁰ Oxnard 2030 General Plan Map, available at <https://www.oxnard.org/wp-content/uploads/2016/06/2030-GENERAL-PLAN-11x17-04.16.pdf>

²⁹¹ Oxnard 2030 General Plan at 3-17.

under the 2030 General Plan.²⁹² However, where a city’s zoning ordinance is inconsistent with the general plan, the city must enact a consistent zoning ordinance that conforms to the general plan within a “reasonable time.”²⁹³ Moreover, although Oxnard’s Zoning Ordinance has designated the Project site to exist in a Light Manufacturing Zone, it is also distinguished by a “planned development additive zone” designation.²⁹⁴ The P-D designation permits departures from the restrictions imposed within the basic zones as specified in the Zoning Ordinance, especially in instances when it offers advantages to protect nearby uses such as areas of natural beauty, natural resources, and public parks.²⁹⁵ The DEIR acknowledges that “the purpose of zoning is to implement the policies of the General Plan.”²⁹⁶ Therefore, the DEIR cannot avoid reconciling the designation of part of the Project site as park land, even if it is zoned for “light industrial.”

A. The DEIR Severely Underestimates Land Use Impacts and Fails to Adequately Assess Conformity with the City of Oxnard 2030 General Plan

Contrary to the DEIR findings, the Project will likely cause significant land use impacts. Inconsistency with just a single policy or goal of a general plan can be the basis for a finding of significant impacts under CEQA.²⁹⁷ The land use impact analysis is deficient in several respects. First, under LU-3, the DEIR fails to address how the Project has the potential to disrupt and divide the communities of South Oxnard immediately adjacent to the site. Second, under LU-1, the DEIR understates the land use impacts created by expanding traffic onto local streets, and into the community and the conflicts this creates with the City of Oxnard 2030 General Plan. Finally, the DEIR does not adequately address the cumulative impact of existing and planned future projects on land uses in the region.

B. The Project will Disrupt or Divide Communities

The City’s 2030 General Plan Goal- CD-3, aims to create a city of stable, safe, attractive, and revitalized neighborhoods with adequate parks, schools, infrastructure, and community identity and pride.²⁹⁸ To implement this goal, the 2030 General Plan sets out CD-3.1— a policy for neighborhood preservation designed to protect existing residential neighborhoods from the encroachment of incompatible activities and land uses. The 2030 General Plan also sets out a goal to ensure appropriate industrial development that will allow industrial activity in “appropriate areas” with a policy of encouraging “adequate separation between sensitive land uses (residential, educational, open space, healthcare) to minimize land use incompatibility with noise, odors, and air pollutant emissions” to ensure appropriate land use.²⁹⁹

²⁹² DEIR, Section 3.2, pp. 3-1 through 3-2

²⁹³ See Gov’t Code Section 65860(c).

²⁹⁴ City of Oxnard Zoning Map, available at <https://www.oxnard.org/wp-content/uploads/2017/01/ZoneMap-01.17-AH11x17.pdf>

²⁹⁵ See City of Oxnard Zoning Code Section 16-270, available at https://codelibrary.amlegal.com/codes/oxnard/latest/oxnard_ca/0-0-0-39746

²⁹⁶ DEIR, Section 3.2, p. 3-1

²⁹⁷ See *San Bernardino Valley Audubon Soc’y v. County of San Bernardino* (1984) 155 Cal.App.3d 738,753.

²⁹⁸ Oxnard 2030 General Plan, p. 3-23.

²⁹⁹ *Id.*, pp. 3-25, 3-26, Policy CD-5.2 Compatible Land Use.

In analyzing the compatibility of the Project with these goals, the DEIR fails to acknowledge the heightened impact of increased traffic to and from the Project site and the long-term effects that even temporary development of the site will have on the surrounding ecosystem. Moreover, as previously mentioned, the DEIR simply ignores the Project's larger role in expanding Port activity by augmenting off-port storage, including its role in facilitating the 250-acre site that the City has long planned in order to accommodate GLOVIS in storing an additional 60,000 new vehicles.³⁰⁰

The DEIR also underestimates the impacts of substantially increased throughput from the Port and the impact that an increased number of cars on the road have on surrounding neighborhoods trying to access the Ormond Beach Wetlands and Ormond Beach, including safety implications. The Ventura County Freight Corridors Study, for example, identified the need to create a crossing at Hueneme Road to protect residents of the neighborhoods in South Oxnard attempting to access Ormond Beach.³⁰¹ As described in further detail below, public access opportunities were also identified close to the northeast corner of the Project site on W. Hueneme Rd., as well as other points along the perimeter of the site.³⁰² The DEIR does not address the incompatibility that increased traffic on Hueneme and Perkins Roads will have on safety and the City's desire to preserve public access to natural areas.

In doing so, the DEIR fails to acknowledge the heightened impacts and disruptive effects that the entire Project will have on the South Oxnard residential neighborhoods that surround the Project site. Worse still, the DEIR offers no mitigation for land use impacts. Instead, the DEIR dismisses any inconsistency by claiming that for the residences closest to the site, "there is a minimum 30-foot setback from Hueneme Road with a sidewalk and landscaping to the back wall of the residences."³⁰³ In response to the neighborhood preservation policy, CD-3.1, the DEIR concludes that the Project remains compatible because "the proposed project does not introduce industrial uses north of Hueneme Road, thus, the existing residential neighborhoods north of Hueneme Road would not be subject to encroachment of industrial uses."³⁰⁴ This dismissal of the land use impact not only ignores the effect that nearly 240 additional cars driven daily³⁰⁵ on local roads will have on surrounding residential neighborhoods, but also ignores the linkages to larger off-port expansions will have on the region overall³⁰⁶. The DEIR, for example, does not address the traffic and safety implications of having the proposed site directly across Hueneme Road from existing logistics and freight-related operations with outdoor vehicle storage.³⁰⁷

³⁰⁰ 2017 Letter from Kristin Decas to Greg Nyhoff at 3.

³⁰¹ Ventura County Freight Corridors Study at 16.

³⁰² *Id.* at 4-17

³⁰³ DEIR, Table 5.11-1, p. 5.11-16- 5.11-17

³⁰⁴ *Id.*

³⁰⁵ DEIR, Section 1.3, p. 1-5 (description of operations)

³⁰⁶ Project objectives include providing operational flexibility for the transport of goods already flowing through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships. DEIR, Section 1.2, p. 1-1

³⁰⁷ DEIR, p. 4-2, Table 4-1 (listing Cumulative Projects- including Pantoja Trucking- a warehouse shipping facility with outdoor vehicle storage and offices located on Hueneme Road).

C. The Project will Substantially Affect Existing Types of Land Uses in the Area

This Project is unique in several ways, not the least of which is the fact that the site lies immediately adjacent to the Ormond Wetlands Restoration area. The Coastal Conservancy is currently undergoing a restoration effort of over a thousand acres of what is considered by wetland experts to be the most important wetland restoration opportunity in southern California.³⁰⁸ The Project is also near the Ormond Lagoon Waterway, which feeds into the wetlands.³⁰⁹ In the vicinity of the Project site, the Ormond Lagoon Waterway is an open channel.³¹⁰ The site is also bordered by Perkins Road, which provides the limited access that adjacent neighborhoods have to Ormond Beach.³¹¹

The 2030 General Plan describes the City's clear goal to "transition of the area south of the Oxnard Transit Center from industrial to mixed use (Downtown East Transit Oriented District)" and "participation in the restoration of the Ormond Beach wetlands."³¹² It also sets the City's policy to "ensure that harbor-related activities are compatible with adjacent land uses and activities, **especially the restoration of Ormond Beach wetlands.**"³¹³

The DEIR, at best, provides an incomplete analysis of the Project's compatibility with the 2030 General Plans Policy 20.1 as it focuses exclusively on the Project's role in enhancing port trade by providing temporary outdoor vehicle storage, while saying nothing about how the Project would harmonize with the Ormond Beach Wetlands Restoration currently underway.³¹⁴ The DEIR, at a minimum, should analyze whether expanding vehicle storage off-port, as this project will do, is compatible with the adjacent land uses and wetlands restoration activities currently underway to its south.

The DEIR also misses several other important goals and policies from the 2030 General Plan that are central to this project—especially as they relate to compatibility with Ormond Beach Wetland Restoration and residential access to the wetlands. Under Policy CD-22.2, Development of Ormond Beach Visitor Access, the City committed to "develop and implement, as resources allow, an Ormond Beach visitor access plan that includes a gateway park and visitor center near the southern terminus of Saviers Road," including trails and walkways and other appropriate facilities.³¹⁵ The Project presents several challenges to this policy given its location as a gateway to the Ormond Wetlands and Ormond Beach and the activities it proposes.

³⁰⁸ The Coastal Conservancy Webpage, <https://scc.ca.gov/ormond-beach/> (Last visited February 12, 2022).

³⁰⁹ DEIR, Exhibit 5.4-6

³¹⁰ *Id.*

³¹¹ See, Ormond Beach Restoration and Public Access Project: Preliminary Restoration Plan (hereinafter "Ormond Beach Restoration and Public Access Plan"); Figure 6-17 "Preferred Alternative of Ormond Beach Restoration and Public Access", at 6-83; available at <https://oxnard.org/wp-content/uploads/2019/06/ORMOND-BEACH-RESTORATION-AND-PUBLIC-ACCESS-PROJECT-Preliminary-Restoration-Plan-Final.pdf>

³¹² Oxnard 2030 General Plan, p. 3-2.

³¹³ Oxnard, 2030 General Plan, Policy 20.1, p. 3-39.

³¹⁴ DEIR, Table 5.11-1, p. 5.11-19

³¹⁵ *Id.* at 3-41

Perkins Road, for example, provides bike access through bike trails leading to Ormond beach and Ormond Lagoon.³¹⁶ Public access opportunities were also identified close to the northeast corner of the Project site on W. Hueneme Rd., west of Saviers Rd. and east of Cypress Road³¹⁷, and several opportunities for new and enhanced entrances, including a northwest entrance that utilizes Perkins Rd. as a route to both the wetlands and the beach.³¹⁸ Protecting crossings at Hueneme Road to provide access for the neighborhoods in Oxnard and the Southwinds community, was also identified as essential for Ormond Beach access.³¹⁹ The park designation for the northeast portion of the proposed Project site is closest to the area currently being considered as an ideal entry point to the wetlands restoration area.

In contrast, the Project would call for vehicles to enter through Perkins Road with an emergency access point on Saviers Road at Hueneme Road.³²⁰ Both of these access points are in close proximity to those also contemplated for the wetlands area and trails. The DEIR should consider how the Project might impact this land use goal and address this conflict either through mitigation or a project alternative. Similarly, through Policy ER-9.4 (Human Scale Development), the City commits to ensuring that all new development emphasizes a human, pedestrian scale and minimizes the effect on the area's sensitive visual resources. The Project site is at the nexus of several proposed trails, bike paths, and proposed pedestrian pathways to provide residents of South Oxnard an opportunity to access Ormond Beach and the wetlands.³²¹ The DEIR must analyze the Project's impact on these opportunities and the impediments it may cause to the City's human-scale development policy.

The City also commits to preserving species of significant small-scale plant communities, including wetlands.³²² The proposed Project proposes erecting a six-foot-high chain-link fence along the perimeter to "screen potential visual character impacts of the site," and the fence would remain as a permanent feature.³²³ At a minimum, the DEIR should assess whether this proposed mitigation measure would also run afoul of Policy ER-6.3 of the 2030 General Plan by disrupting views of the wetlands and other flora in the area. The fence, which is proposed to be permanent³²⁴, will have the further effect of creating additional barriers to wetland and beach access for local residents.

Once a project is determined to be inconsistent with land use policies, an agency is required to discuss the impacts of those inconsistencies and analyze all feasible mitigation measures.³²⁵ The DEIR should discuss and evaluate the impacts to air quality, public health, traffic (among others)

³¹⁶ See, Ormond Beach Restoration and Public Access Plan; Figure 6-17 at 6-83; available at <https://oxnard.org/wp-content/uploads/2019/06/ORMOND-BEACH-RESTORATION-AND-PUBLIC-ACCESS-PROJECT-Preliminary-Restoration-Plan-Final.pdf>

³¹⁷ *Id.* Figure 4-1, at p. 4-13

³¹⁸ *Id.* at 4-17

³¹⁹ Ventura County Freight Corridors Study, p.15, (citing to the Ormond Beach Restoration Public Access Plan)

³²⁰ DEIR at 3-17.

³²¹ See, Ormond Beach Restoration and Public Access Plan, *supra*, Figure 6-17

³²² Oxnard 2030 General Plan, Policy ER-6.3, p. 5-7

³²³ DEIR, p. 5.1-9

³²⁴ DEIR, p. 3-23

³²⁵ Cal. Code Regs., tit. 14, § 15135(d).

that would result from the proposed inconsistent land use. We discuss proposed mitigation measures to consider later in this comment letter.

Finally, the proposed project will call for cars to be driven individually from the Port Naval Base Ventura County (NBVC) property, exiting through the NBVC Pleasant Valley gate and heading south on Ventura Road and then East on Hueneme Rd until the vehicles reach the Project site.³²⁶ Once the vehicles reach Perkins Road, they will turn south and access the vehicle storage facility through driveways off of Perkins.³²⁷ Vehicles leaving would follow the same path to return to NBVC.³²⁸ Because the Project site is located at the border with the coastal zone³²⁹, the Project's operations call for much of this traffic to occur within the coastal zone with trips starting and ending at the NBVC. "All public agencies carrying out or supporting activities outside the coastal zone that could have a direct impact on resources within the coastal zone shall consider the effect of such actions on coastal zone resources in order to assure that these policies are achieved."³³⁰ The DEIR fails to conduct any analysis of the impact that the Project will have within the coastal zone in light of operations that will cause thousands more cars to travel daily through that area.

D. The DEIR fails to Address the Secondary Impacts that the Project will have on Surrounding Areas

The DEIR makes the reference to secondary impacts in connection with CEQA Guidelines Sections 151269(c) and 15126.2(c) requires all projects to evaluate uses of nonrenewable resources as well as secondary impacts that "commit future generations to similar uses" or cause "irreversible environmental changes."³³¹ In analyzing this requirement, the DEIR simply runs through the resources that would be consumed during the construction of the Project without analyzing secondary impacts to the surrounding communities.³³² This Project proposes to change the landscape. As Dr. Smallwood reports, despite past disturbances at the site, the current pattern of species detections indicates that the site is relatively rich in wildlife and maintains high ecological integrity.³³³ Whether temporarily or permanently, the DEIR should not ignore the connection to the expansion of storage facilities proliferating throughout the region or the fact that the changes made to the 34 acres may be irreversible, despite the plan to remove gravel.

CEQA defines "secondary effects" or "indirect effects" much more broadly to include "effects related to induced changes in the pattern of land use" in neighboring communities.³³⁴ This is an important inquiry- especially for projects that involve expanding the functions of a port off-site, as is the case here where the Project literally seeks "off-port" capacity to store vehicle imports. As this Project unfolds, it will add to the increasing concentration of off-port areas of operation in places not immediately within the Port's boundaries. The DEIR must analyze this

³²⁶ DEIR, p. 3-22.

³²⁷ *Id.*

³²⁸ *Id.*

³²⁹ DEIR, Exhibit 3-4

³³⁰ Cal. Pub Res. Code §30200(a)

³³¹ Cal. Code Regs., tit. 14§15126.2(c)

³³² DEIR, Section 7.2, p. 7-4.

³³³ Smallwood, p. 16.

³³⁴ Cal. Code Regs., tit. 14 § 15358; 40C.F.R. §1508.8(b).

encroachment of Port activity into the residential neighborhoods of South Oxnard. Increasingly, these industrial land uses intended to support OHD's plan to keep important customers (GLOVIS) and solidify the Port's place in the national goods movement industry, are found near homes, playgrounds, and schools. Should the City decide to move forward, revisions to the DEIR must evaluate these secondary impacts and propose feasible mitigation measures for the adverse effects this will have on community land use.

XI. The DEIR's Analyses of Other Relevant Impacts are Also Flawed and Should be Redone

A. Greenhouse gas impacts

As explained in detail in prior sections of these comments, the City based much of its emissions analysis on a flawed process that calls into question the conclusions reached in the DEIR. As Hagemann and Rosenfeld further explain in their report, the DEIR estimate that the Project will fall below the South Coast Air Quality Management District (SCAQMD) thresholds of 3,000 MT CO₂e/year for Greenhouse Gas (GHG) emissions is equally flawed.³³⁵ Hagemann and Rosenfeld's assessment of the many problems with the DEIR's treatment of GHG is summarized here:

- The DEIR's quantitative GHG analysis relies on an incomplete and unsubstantiated air model. The Project's CalEEMod output files (available in the Air Quality and Greenhouse Gas Study³³⁶) show that several values were inputted into the model that are inconsistent with the information disclosed in the DEIR. An updated DEIR needs to be prepared to adequately assess the potential GHG impacts for both construction and operation.
- The DEIR incorrectly relies on an outdated quantitative GHG threshold. The threshold used was developed under AB 32. Post 2020, the thresholds were to be revised based on a new gap analysis. The SCAQMD threshold of 3,000 MT CO₂e/year used in the DEIR is outdated and inapplicable to the proposed Project. Therefore, the DEIR's "less-than-significant" GHG impact conclusion cannot be relied on. Instead, the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year would provide a more accurate marker. Under that threshold, the DEIR's "less-than-significant" conclusion does not hold.
- The DEIR fails to identify a potentially significant GHG impact. The DEIR estimates that the Project would generate net annual GHG emissions of 62.3 MT CO₂e/year.³³⁷ Based on the service population for the Project comprised of the estimated number of employees at the site, the Project is projected to emit approximately 4.45 MT CO₂e/SP/year—an amount higher than the target of 3.0 MT CO₂e/SP/year.
- The DEIR relies on the Project's consistency with the City's Energy Action Plan (EAP) to determine GHG significance, even as it fails to demonstrate consistency with the EAP. Without including Project Design Features as a formal mitigation measure with a commitment to implementation, monitoring, and enforcement at the Project, the DEIR's basis for asserting conformity with the EAP is flawed and cannot be relied on.

³³⁵ Hagemann & Rosenfeld, p.17.

³³⁶ DEIR, Appendix D, Air Quality and Greenhouse Gas Study

³³⁷ DEIR, p. 5.8-13

In addition, the DEIR fails to offer any mitigation measure to account for GHG emissions at the site during construction and operation. Once the calculation of GHG emissions is revised to more accurately assess the Project's impact, the DEIR should include an assessment of potential mitigation measures including, but not limited to, forgoing construction, and using existing sites while deploying zero-emissions strategies for new vehicle transport to existing locations.

Full analysis, conclusions, and recommendations by Hagemann and Rosenfeld can be found in Addendum A to these comments. The City must respond to each of the points raised in their comment letter. In short, Hagemann and Rosenfeld conclude the Project has the potential to result in significant GHG impacts, and the DEIR must conduct a full and transparent GHG analysis and propose viable mitigation measures to any impacts identified.³³⁸

B. Noise

CEQA requires a discussion of the type and level of noise impacts both from construction and operations of the project.³³⁹ The DEIR cannot merely consider only maximum noise levels at the site and ignore increases in noise relative to existing conditions. In examining noise thresholds, the City must consider both the "absolute noise level" associated with the Project as well as increases in noise levels overall that will result from the project.³⁴⁰ Particularly if there will be increased diesel truck or rail travel, it is likely there will be noise impacts to the surrounding community, which includes residential areas, local businesses, and facilities such as clinics and schools.

Noise is a serious, and often dismissed, public health problem, which causes numerous health and social effects, ranging from hearing loss to cardiovascular problems, and from learning problems in school to sleep disturbances at home. For example, noise above 60 decibels ("db") has been shown to have psychological impacts, such as worsening children's mental health, concentration, and classroom behavior at school.³⁴¹ It can also result in noise-induced hearing loss for workers and chronic noise exposure may even contribute to the progression of heart disease and increased risk of stroke, even when accounting for associated air pollution.³⁴²

The DEIR offers no mitigation for noise impacts, with one exception related to noise exposure to non-human species.³⁴³ It concludes that the Project will have "less than significant" impacts related to temporary, periodic, or permanent increases in noise as well as ground-borne vibrations.³⁴⁴ It makes this conclusion for both the construction and operation phases, while acknowledging that sensitive receptors may be just feet away from the Project in some

³³⁸ Hagemann & Rosenfeld, pp. 18-19.

³³⁹ Cal. Pub. Res. Code §21001(b)

³⁴⁰ See *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 887 and 893.

³⁴¹ Martha Matsuoaka, Andrea Mricko, Rovert Hottlieb and Juan DeLara, Occidental College and University of Southern California, *Global Trade Impacts: Addressing the Health, Social and Environmental Consequences of Moving International Freight through Our Communities*, at 18-19 (2011), available at https://scholar.oxy.edu/cgi/viewcontent.cgi?article=1410&context=upep_faculty.

³⁴² Ibid.

³⁴³ DEIR, pp. 5.13-9 through 5.13-12.

³⁴⁴ DEIR, pp. 5.13-8 through 5.13-11.

instances.³⁴⁵ To justify the conclusion of a “less than significant” impact for construction, the DEIR states:

Grading and construction for the proposed project would comply with the Noise Ordinance requirement that no construction occur at night, on Sundays, or on federal holidays, and would take place during the daytime hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday. Thus, noise level increases would occur sporadically when construction equipment is operated in the proximity of sensitive receptors.³⁴⁶

For project operations, the DEIR claims that while “on-site ambient noise levels” are likely to increase during the hours of operation, 7:30 a.m. to 3:30 p.m., the noises would “likely be masked” by adjacent roadway and ambient noises.³⁴⁷ The DEIR’s assessment of noise impacts is flawed for three reasons.

First, OHD claims that its project will not cause an increase in the number of heavy-duty truck or rail trips in the area.³⁴⁸ Even if this were true, the DEIR must analyze how shifting traffic patterns towards the new storage site, away from the existing Ventura site, will impact traffic noise in the vicinity of the Project.³⁴⁹ The DEIR states that the hours of operation will be 7:30 a.m. to 3:30 p.m., which coincides roughly with the same hours that children in most school districts are in school during weekdays. Despite the assertion that noise levels will be contained to the Project site, the DEIR offers no evidence to support this claim. It is equally probable that the ambient noise that the City is counting on to “mask” increased noise from the Project’s operations will be caused by increased traffic generated by Port-expansion endeavors that the Project itself is a part of. Moreover, the DEIR offers no evidence that increased noise levels will become “masked” by existing traffic. In failing to do so, the DEIR lacks an adequate inquiry into whether both the increase in noise level and the absolute level associated with the Project exceeded maximum levels.³⁵⁰

Second, simply stating that the proposed Project will not result in ground-borne vibrations or noise during the 180-200 days of construction does not make it so. The DEIR baldly asserts that the off-road equipment slated to import soil, grade the land, and construct the Project site—including “dozers, tractors/loaders/backhoes, excavators, forklifts, paving equipment, or rollers”³⁵¹—are not sources of ground-borne vibration requiring mitigation. The DEIR offers no evidence to support this conclusion. Instead, the DEIR simply asserts that the Project construction will not involve “pile driving” or “other vibratory activities.”³⁵² To protect the

³⁴⁵ *Id.*

³⁴⁶ *Id.* at Pp. 5.13-9 through 5.13-10.

³⁴⁷ *Id.* at P. 5.13-10.

³⁴⁸ See OHD 34-acre Site FAQs at 1

³⁴⁹ See *Keep Jets over the Bay*, *supra*, 91 Cal. App. 4th at 1381 (holding lead agency’s EIR insufficient for failing to analyze how overhead flights could raise noise levels in communities surrounding airport to unacceptable levels at certain time periods); see also *City of Long Beach*, 19 Cal. App. 5th at 487 (holding an EIR insufficient in part for failing to analyze how project’s effect on traffic patterns would shift areas of high air pollution to areas containing homes and schools).

³⁵⁰ *King and Gardiner Farms, LLC v. County of Kern*, *supra*, 45 Cal.App.5th at 887.

³⁵¹ DEIR, p. 5.13-11

³⁵² *Id.*

sensitive receptors such as schools and residences within feet of the Project site, the DEIR must include a robust and thorough assessment of construction-related noise impacts.

Finally, the DEIR performs only a cursory analysis of cumulative impacts for noise. To justify its conclusion of “less-than-significant” impact, the DEIR asserts the Project’s “adherence to the City’s Noise Ordinance” and assumes that “related projects” will likely have to comply with applicable City Municipal Code and/or Noise Ordinances and implement mitigation measures.³⁵³ However, simply stating that the proposed Project and related projects will adhere to local laws does not guarantee that the Project will result in “less-than-significant” cumulative impacts. Each of these projects could very well comply with limited hours and still trigger excessive noise levels, whether acutely or over time. Without conducting the proper analysis, the DEIR fails to offer the proper alternatives or mitigation measures to address this potentially serious impact.

As stated throughout these comments, the impact of this Project cannot be assessed in a vacuum. The Project is intended to increase cargo throughput and will likely contribute to larger volumes of new vehicle cargo being processed at the Port.³⁵⁴ Despite these connections to Port expansion, which the City has acknowledged, the DEIR ignores the potential added impact of noise from increased activity flowing from the Ports and extending into surrounding communities, including South Oxnard.

The DEIR must also address the indirect noise impacts that result from any increases in vehicle and ship traffic that the project causes.³⁵⁵ Heavy-duty trucks, rail cars, and ships used to transport cars present the biggest problem, as they often have particularly noisy engines and use loud, blaring horns to warn surrounding traffic of their presence. The City’s analysis must account for the possibility of “single-event” noise levels (e.g., a ship or large truck’s horn blaring) disturbing surrounding communities.³⁵⁶

As with air quality, the DEIR should also analyze the cumulative noise impacts the project will have when considered in concert with other past, present, and reasonably foreseeable projects with similar noise impacts.³⁵⁷ This analysis must also consider expected growth projections for the Port as this Project will occur while Port expansion endeavors are underway. The DEIR must account for larger shipping volume resulting from the increased Port capacity this Project is intended to facilitate. So, while the ships and trucks associated with moving the new vehicles are not at the site, the Project’s relationship to the Port and its role in increasing capacity, and therefore noise levels, cannot be ignored.

In failing to adequately assess the Projects contribution to noise levels and account for cumulative noise impacts that may arise, the DEIR overlooks significant environmental effects that the Project will have on surrounding communities in violation of CEQA.

³⁵³ DEIR, P. 5.13-15

³⁵⁴ See, FY2018 Port Performance Analysis- Oxnard Harbor District, Page. 7

³⁵⁵ See *Keep Jets over the Bay*, *supra*, 91 Cal. App. 4th at 1372; *Pfeiffer*, *supra*, 200 Cal. App. 4th at 1574.

³⁵⁶ See *Keep Jets over the Bay*, *supra*, 91 Cal. App. 4th at 1381.

³⁵⁷ See Cal. Code Regs., tit. 14 § 15130(b)(1); *City of Long Beach*, 19 Cal. App. 5th at 488–89.

C. Energy conservation

The DEIR should also conduct a more detailed analysis of the project's impacts on energy conservation, following Appendix F of the CEQA Guidelines,³⁵⁸ especially as they relate to cumulative impacts. Appendix F states that CEQA "requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy."³⁵⁹ CEQA sets out a goal of energy conservation, and states that means of achieving energy conservation include decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy resources.³⁶⁰ An analysis of energy conservation impacts should include, among others, total estimated daily trips generated by the project and the additional energy consumed per trip; energy used during construction, grading, and removal phases of the Project; mitigation measures including alternate and renewable fuels; and discussion of estimated energy consumption of growth induced by the project.³⁶¹

The DEIR recognizes that short-term energy demands will result from construction activities, and long-term demands will result from operation of the Project.³⁶² Yet, its conclusion of "less than significant impact" is flawed for three key reasons.

First, despite acknowledging that the Project would commit energy and water resources as a result of construction, operation, and maintenance, and that much of the energy would be generated through combustion of fossil fuels, the DEIR erroneously concludes that the Project will not have a significant impact based on the assumption that "market-rate conditions" encourage efficiency and that regional utility purveyors already participate in conservation programs.³⁶³ This dismissal of potential impacts lacks even the minimal review of energy impacts required under CEQA. The DEIR's analysis should assess all relevant construction, transportation, and operational energy impacts that may be potentially significant along with other relevant criteria in Appendix F of the CEQA Guidelines.³⁶⁴

Under CEQA, the DEIR is "fatally defective" when it fails to "include a detailed statement setting forth the mitigation measures proposed to reduce wasteful, inefficient, and unnecessary consumption of energy."³⁶⁵ Here, the DEIR fails to even get to the inquiry of proper mitigation because it does not follow the guidelines under Appendix F. Rather than conduct the necessary inquiry into the potential for waste, the DEIR merely assumes energy conservation based on the theory that market forces will push for the highest efficiency standards. This approach avoids even the basic inquiry required under the Appendix F guidelines to assess wasteful, inefficient, and unnecessary energy consumption. A proper analysis of energy consumption for this Project must also look at the impact of the Project as a whole- including its role in facilitating the

³⁵⁸ CEQA Guidelines Appendix F, available at

https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2016_CEQA_Statutes_and_Guidelines_Appendix_F.pdf.

³⁵⁹ *Id.* at § I.

³⁶⁰ *Ibid.*

³⁶¹ *Id.* at § 2.

³⁶² DEIR, p. 5.6-9

³⁶³ *Id.*

³⁶⁴ See, *California Clean Energy Comm. V. City of Woodland* (2014) 225 Cal.App.4th 173, 208.

³⁶⁵ *Id.* at 209.

creation of the larger Multimodal Logistics Park and the expansion of Port operations. Without this level of analysis, the DEIR remains flawed and cannot support a finding of less-than-significant impact on energy use.

Second, the DEIR analysis relies on flawed modeling and unsupported assumptions about energy use reductions that do not support the conclusion of less-than-significant impact. The DEIR relies on estimates derived from the Traffic Study (Appendix J) and the Air Quality and Greenhouse Gas Study (Appendix D) using CalEEMod Model.³⁶⁶ As mentioned in the Hagemann and Rosenfeld letter, the DEIR's modeling for these calculations is deeply flawed and cannot be relied on.³⁶⁷ The DEIR and supporting documents fail to provide substantial evidence to support the conclusion that the Project would reduce energy consumption by 75% merely by installing solar lights at the Project site.³⁶⁸ Similarly, the DEIR fails to demonstrate consistency with the City of Oxnard's Energy Action Plan.³⁶⁹

Finally, the DEIR states that "the proposed project would comply with *California Code of Regulations* Title 24 for energy efficiency, ensuring that the proposed project would not result in the wasteful or inefficient use of energy resources."³⁷⁰ The DEIR, however, cannot rely solely on compliance with Title 24 standards to mitigate construction and energy impacts and cannot assume that GHG emission mitigation will substitute for a full analysis of energy use impacts.³⁷¹

Also, as mentioned throughout these comments, the DEIR cannot simply confine the analysis for energy conservation impacts to the 34-acre site. The scope of the project is too narrow and does not include port expansion endeavors or the Multimodal Logistics Park that this Project is slated to be a part of. As such, the DEIR's analysis does not begin to encompass the totality of energy consumption issues that the Project presents- including that associated with transportation. The DEIR's conclusions of "less-than-significant" and "no impact" for each of the energy-related thresholds are flawed.

D. Hazards and Hazardous Materials

The City of Oxnard 2030 General Plan requires that new projects address hazardous material concerns through the preparation of Phase I and Phase II hazardous materials studies for each site identified as part of the design phase for a project.³⁷² The DEIR does not show that a Phase I Environmental Site Assessment (ESA) was prepared for the site, making the DEIR inconsistent with the City's 2030 General Plan.³⁷³ As Hagemann and Rosenfeld explain, the purpose of the Phase I ESA, which is often done during the preparation of CEQA documents, is to identify and

³⁶⁶ *Id.*

³⁶⁷ Hagemann & Rosenfeld, pp. 5-15

³⁶⁸ *Id.*, p. 15

³⁶⁹ *Id.*, p. 19.

³⁷⁰ DEIR, p. 5.6-9.

³⁷¹ See *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264; *California Clean Energy Comm. v. City of Woodland* (2014) 225 Cal.App.4th 173, 208.

³⁷² Oxnard 2030 General Plan, Policy SH-7.12, p. 9-27; Hagemann & Rosenfeld, p.2.

³⁷³ Hagemann & Rosenfeld, p. 2.

disclose hazardous waste issues that may impact the public, workers, or the environment and that may require additional investigation, including environmental sampling and cleanup.³⁷⁴

The Phase I ESA would help identify recognized environmental conditions (RECs) and develop recommendations to address those conditions at a site.³⁷⁵ If past land uses show signs of residual concentrations of contaminants in soils that are above regulatory screening levels, then further evaluation and clean-up must be done in coordination with regulatory agencies.³⁷⁶ This is vital for the current Project site as its past agricultural use very likely included the use of pesticides and other contaminants³⁷⁷ yet no such evaluation has been conducted for the site as part of this environmental review. Moreover, there is evidence that the site was once used to store materials and equipment as shown in a Google Earth image from 2011, which depicts material and equipment staging at the site with the potential for improper leakage or spills to have occurred.³⁷⁸ At a minimum, a Phase I ESA is necessary to determine whether these past uses resulted in contamination of the soil.



Source: Google Earth, April 2011

XII. The DEIR violates CEQA Because it Fails to Address Environmental Justice Impacts, Which Renders it Inconsistent with State law and Oxnard's 2030 General Plan

Despite calls from commenters to the MND and Notice of Preparation that the City must include an environmental justice analysis for the project given its proximity to a low-income, densely populated neighborhood in south Oxnard, without justification, the City simply dismisses that it has any obligation to look into environmental justice concerns. In response, the DEIR states that

³⁷⁴ *Id.*

³⁷⁵ *Id.*

³⁷⁶ *Id.*

³⁷⁷ *Id.* at p. 3

³⁷⁸ Hagemann & Rosenfeld, p.3.

“environmental justice is not required by CEQA.”³⁷⁹ The City lacks authority for such a claim. Because the DEIR does not include analysis of the environmental justice impacts of the Project, it is defective as an informational document and cannot be relied upon to approve the proposed Project until this error is corrected.

The DEIR must include an environmental justice analysis pursuant to CEQA and California’s anti-discrimination law, Government Code section 11135. According to a Report prepared by the California Office of Attorney General (OAG), provisions of CEQA and Section 11135³⁸⁰ require lead agencies to study the environmental justice impacts of projects and to mitigate those impacts.³⁸¹ Government Code section 11135 prohibits discrimination by any state agency and requires that Oxnard consider environmental justice impacts in its EIR.³⁸² CEQA separately requires that lead agencies “consider how the environmental and public health burdens of a project might specially [sic] affect certain communities.”³⁸³ Part of the discussion should include an evaluation of the location of the project because the significance of an impact on people and the environment may change based on the project’s setting.³⁸⁴ Moreover, as part of its climate action and adaptation plan, the City’s 2030 General Plan advises agencies to incorporate environmental justice in “City planning, policies, programs, projects and operations.”³⁸⁵ “An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment”.³⁸⁶ Here, the City must assess impacts in the full context of the environmental setting, including the current pollution burdens faced by the South Oxnard residents impacted by the build-out of storage lots, warehouses, and associated port expansion.³⁸⁷

In California, communities of color and low-income communities bear a disproportionate burden of the state’s diesel trucking emissions.³⁸⁸ Diesel exhaust contributes to disproportionately higher

³⁷⁹ DEIR, p. 2-8

³⁸⁰ Government Code § 11135, subdivision (a) provides in relevant part:

No person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state . . .

³⁸¹ Office of the California Attorney General, *Environmental Justice at the Local and Regional Level* (2012), p. 3, available at https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf [hereinafter “OAG Report”].

³⁸² *Ibid.*

³⁸³ *Ibid.*

³⁸⁴ *Ibid.* (“For example, a proposed project’s particulate emissions might not be significant if the project will be located far from populated areas, but may be significant if the project will be located in the air shed of a community whose residents may be particularly sensitive to this type of pollution, or already are experiencing higher-than-average asthma rates.”)

³⁸⁵ Oxnard 2030 General Plan, Policy SC-1.4, p. 2-11.

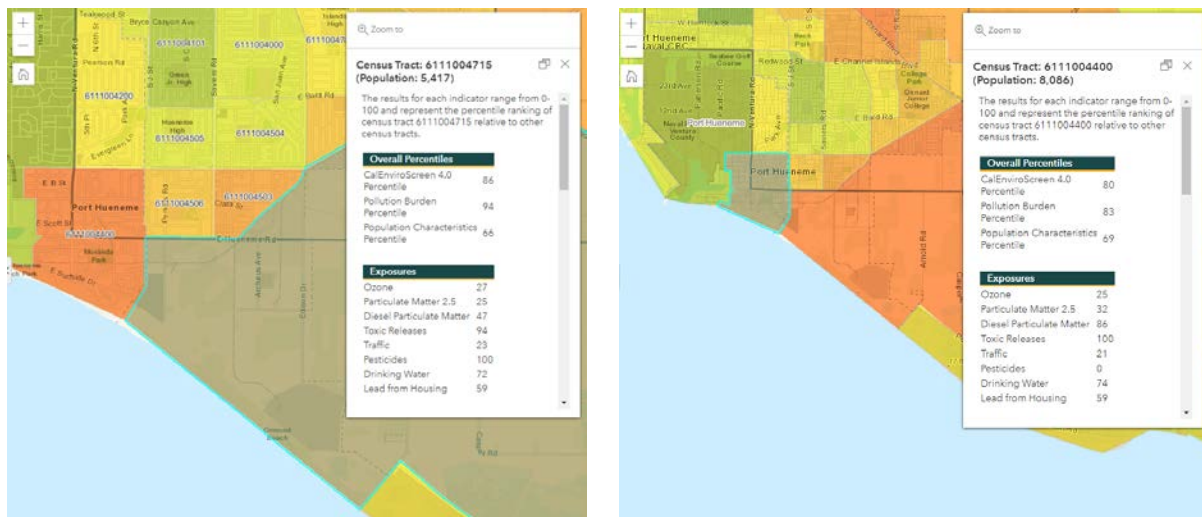
³⁸⁶ *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1562-63.

³⁸⁷ See Office of Env’tl. Health Hazard Assessment, *Cumulative Impacts: Building a Scientific Foundation, Exec. Summary* (Dec. 2010), at ix, <http://oehha.ca.gov/ej/cipa123110.html> (“[A] number of studies have reported increased sensitivity to pollution, for communities with low income levels, low education levels, and other biological and social factors. This combination of multiple pollutants and increased sensitivity in these communities can result in a higher cumulative pollution impact.”)

³⁸⁸ Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in California*, fact sheet (Feb. 2019), available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>.

risks of cancer in individuals who live and/or work near rail yards, ports, freeways with diesel trucks, and warehouses.³⁸⁹ In Oxnard, many of the neighborhoods adjacent to the proposed site, and those most impacted by the Port-adjacent goods movement, are low-income communities and communities of color. Thus, build-out of the car storage lots and associated port expansion could have a disproportionate impact on environmental justice communities.

The census tract data for the Project site shows that 77% of residents are identified as Hispanic or Latino, and 86% identify as people of color.³⁹⁰ The area is already in the 94th percentile of pollution burden in the state of California, according to the CalEnviroScreen mapping tool managed by the Office of Environmental Health Hazard Assessment.³⁹¹ Neighborhoods closest to the Port are also in the 86th percentile of diesel exhaust, which poses one of the highest cancer risks of any toxic air contaminants. Meanwhile, residents in the Project's specific census tracts endure a pollution burden heavier than most parts of the State of California.



Source: CalEnviroScreen 4.0 from OEHHA; available at <https://arcg.is/1bWPzO0>

The proposed Project site is surrounded by sensitive receptors, including schools and residences in nearly every direction. The nearest school is only 780 feet from the Project site.³⁹² The Proposed project would also be located just 360 feet from residences located to the northwest, south, and northeast of the Project site.³⁹³ Despite this close proximity to these sensitive receptors, the DEIR fails to analyze and mitigate the environmental justice impacts of this large vehicle storage site, much less its impact once expanded to the 250-acre Multimodal Logistics Park just east on Hueneme Road. Even with the paltry and ineffective mitigation measures

³⁸⁹ Univ. S. Cal., Env. Health Ctr., *References: Living Near Diesel Exhaust*, (last accessed: Dec. 30, 2019), <https://envhealthcenters.usc.edu/infographics/infographic-living-near-diesel-exhaust/references-living-near-diesel-exhaust>.

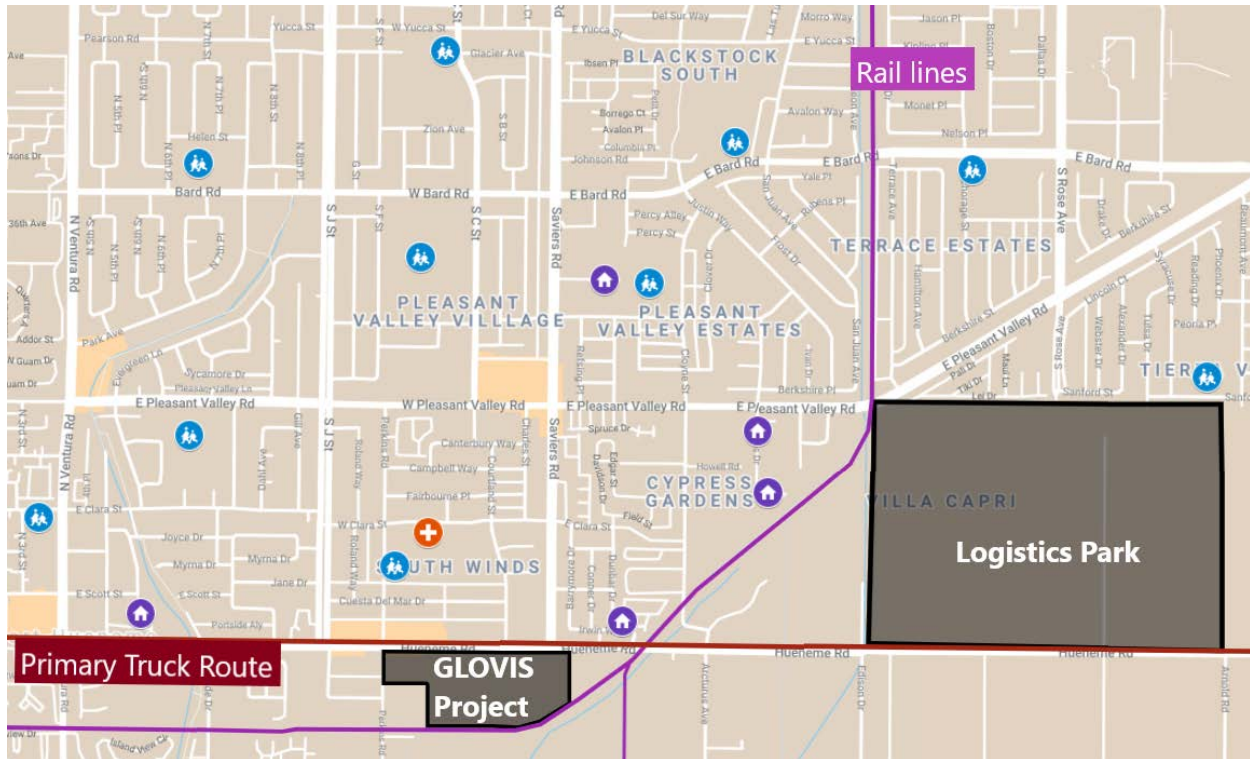
³⁹⁰ Office of Environmental Health Hazard Assessment- CalEnviroScreen 4.0, <https://arcg.is/14baii> (Last visited February 8, 2022)

³⁹¹ *Id.*

³⁹² DEIR, p. 5.3-9

³⁹³ *Id.*

proposed, the Project will expose sensitive receptors to substantial pollution concentrations—especially when placed in context with larger logistics operations that this Project will serve.



Source: From Google My Maps, annotations by Nataliz Ospina

Moreover, the DEIR must discuss and develop mitigation measures and alternatives to the project to address environmental justice impacts. According to the Office of the Attorney General, “[w]here a local agency has determined that a project may cause significant impacts to a particular community or sensitive subgroup, the alternative and mitigation analyses should address ways to reduce or eliminate the project’s impacts to that community or subgroup.”³⁹⁴ If the implementation of the project will affect communities that are disproportionately people of color and low-income people already overburdened with pollution and health risks, mitigation is required to address those environmental justice concerns. Pursuant to CEQA’s requirements and the OAG’s guidance, the City should work with the public and impacted community to develop mitigation measures.³⁹⁵

The DEIR must be revised once the City has conducted the proper analysis by examining the potential cumulative impacts to the communities in the immediate vicinity of the Project as well as those along the freight corridor that will serve the Port’s capacity-building endeavors and connect to the 250-acre Multimodal Logistics Park. It must also demonstrate that proper consideration of mitigation measures and alternatives was exhausted to reduce or eliminate the Project’s impact on these communities. Until it does so, the DEIR is flawed and cannot be relied on.

³⁹⁴ OAG Report at 4; see also CEQA Guidelines, Cal. Code Regs., tit. 14 § 15041 (a).

³⁹⁵ See OAG Report, at 5.

XIII. Mitigation measures that are offered in the DEIR are inadequate

Under CEQA, a public agency cannot approve a project as proposed if there are “feasible mitigation measures which substantially lessen the significant environmental effects” of the project.³⁹⁶ Feasibility is defined under CEQA as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.”³⁹⁷ The CEQA Guidelines add “legal” factors to this definition.³⁹⁸ A potential mitigation measures cannot be properly labeled mitigation measures unless they are at least partially effective in reducing the significance of the impacts at issue.³⁹⁹ Notably, of the 22 impact areas identified in the DEIR, only 6 are afforded mitigation measures.⁴⁰⁰

As mentioned throughout these comments, the DEIR fails to offer adequate mitigation measures for several impacts that will be significant given the true scope of the Project. Because the DEIR fails to embrace the true scope of the Project—one that reflects the Port expansion plans of OHD and the use of the proposed use of the 34-acre site as a “stop gap measure” for completing the 250-acre port logistics park,⁴⁰¹ the DEIR fails to analyze, much less address, the impacts that can be expected from a much larger project. For similar reasons, the few mitigation measures that are offered in the DEIR are inadequate and will not substantially lessen the significant environmental effects of the full scope of the Project.

A. Biological Resources

As mentioned in the previous section on biological resources impacts, the mitigation offered in the DEIR to protect identified species is woefully inadequate. The DEIR discusses only a narrow range of potential impacts from construction-related activity and ignores the impacts from the permanent removal of habitat, the full range of impacts from vehicles, and increasing VMT in the surrounding area, among other potential impacts on biological resources. However, even where mitigation measures are identified to address a narrow set of impacts, they fail in the following ways:

MM BIO-1 offers to avoid disturbance of nesting and special status birds by having activities related to the project, including “vegetation removal, ground disturbance, demolition, and construction” by scheduling these activities to occur outside of the bird breeding season (February 1 through August 31)- but only if “practicable.”⁴⁰² It further offers that a pre-construction survey would be conducted and if nesting sites are found, an un-defined avoidance “buffer” would be created to avoid disturbance and construction workers would be advised not to disturb the site. This “buffer” would be developed and demarcated by an unidentified biologist.

This mitigation measure is inadequate for several reasons.

³⁹⁶ Cal. Pub. Res. Code § 21002.

³⁹⁷ Cal. Pub. Res. Code §2106.1.

³⁹⁸ Cal. Code Regs., Tit. 14, §15364.

³⁹⁹ *Sierra Club v. County of Fresno*, (2018) 431 P.3d 1151,1166.

⁴⁰⁰ DEIR, pp. 1-10 through 1-28.

⁴⁰¹ Oxnard & POH Commercial Viability Report.

⁴⁰² DEIR, p. 5.4-21.

First, it simply does not address the destruction of habitat for the California horned lark or the burrowing owl, two species identified as having potential significant impact on habitat due to the proposed Project. The grading of the site, and the introduction of ongoing activity- in this case, the driving of cars on and off the site once it becomes a vehicle storage site- would remove the habitat, and make it unusable for the two species. No mitigation measure is proposed to address this issue. Instead, the DEIR concludes “less than significant impact with mitigation incorporated” to suitable habitat for the two species without any specific mitigation measure being proposed to address what happens during Project operation.

Second, the MM BIO-1 only speaks to construction-related activity when it comes to protecting nesting birds during the breeding season. It says nothing about the operation of the Project which would also have an impact on the special status species ability to nest in the area and could potentially result in the destruction or removal of future nests on the site after construction is completed.

Third, even the meager measures offered by the DEIR to mitigate impacts on biological resources will not meaningfully reduce the potential impact on special-status species from construction activity. Pre-construction surveys typically detect small fractions of wildlife actually present, particularly where wildlife (such as nesting birds) is taking great care to conceal their nests from predators.⁴⁰³ Therefore, there is evidence that nests would be missed, and the construction activity would destroy nests, including those of special-status species.

Finally, MM BIO-1 does not offer a clear measure for mitigation that will guide activities at the site in the long term. CEQA requires that an EIR describe the full actions taken to feasibly mitigate significant impacts and not defer the formulation of these measures unless it is impractical or infeasible to include those details.⁴⁰⁴ Even where the description of mitigation measures is deemed impractical or infeasible, the lead agency must also adopt specific performance standards the mitigation will achieve and the type of potential actions that can feasibly achieve that performance standard.⁴⁰⁵ While on the one hand it seems to suggest mitigation pre-construction, the proposal also seems to suggest that construction will commence and nests will be “buffered” even when construction is ongoing.⁴⁰⁶ This would make the measure even more unsuitable given the acknowledgment that construction-related activity will disrupt nesting. As mentioned previously, the mitigation measure does not meaningfully reduce the potential impact on special-status species and is improperly vague as it does not specify how it will be determined that construction must occur during the breeding season, nor does it describe what type of buffer would be used.⁴⁰⁷

⁴⁰³ Smallwood, p. 27.

⁴⁰⁴ CEQA Guidelines, Cal. Code Regs., tit. 14, § 15126.4(a)(1)(B); *see also Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 (finding that an EIR was deficient when “the success or failure of mitigating the project’s impacts . . . largely depends on what actions the approved habitat plan will require” and no justification was provided for why specifying performance standards or guidance in the EIR was impractical or infeasible).

⁴⁰⁵ *Ibid.*

⁴⁰⁶ DEIR, p. 5.4-21.

⁴⁰⁷ Smallwood, p.27.

Following a complete evaluation of the potential impacts from the project, if a substantially similar project were to move forward, the City must develop mitigation measures to address any significant impacts.⁴⁰⁸ Among these possible mitigation measures, the City could consider:

- compensatory mitigation such as protecting an equal and equivalent area of open space in perpetuity, funding research to identify roadway fatality patterns, investing in effective impact reduction measures such as wildlife crossings, or to wildlife rehabilitation facilities;
- a reduction in the number of lights; or
- use of fencing with gaps to support wildlife movement and that increases opacity and minimizes the risk of entanglement and mortality.

Full analysis of the shortcomings of these proposed mitigation measures is found in Dr. Smallwood's comment letter (see Addendum B). The City must provide responses to each of the points raised in Dr. Smallwood's letter.

B. Aesthetics

Proposed mitigation measure MM AES-1, MM AES-2 and MM AES-3- each having to do with the installation of a chain-link fence and/or gates around the perimeter of the proposed Project, conflict with the conclusion that the proposed Project would not interfere with wildlife species movement in response to Threshold BIO-2 as discussed above.⁴⁰⁹ There is no analysis of how erecting a fence around the Project would not impact wildlife movement by cutting off existing movement corridors or habitat linkages. Instead, the DEIR concludes that there is no impact on wildlife movement, and no mitigation measures are required.⁴¹⁰

The site is currently undeveloped, vacant⁴¹¹, and does not have a perimeter fence around it. The Ormond Lagoon Waterway is located next to the proposed Project site⁴¹² and adjacent to and north of the Ormond Beach Restoration and Public Access Project area.⁴¹³ The DEIR, at a minimum, should include some analysis on the impact that six-foot fencing around 34 acres immediately adjacent to these natural areas will likely have on the movement of wildlife in the region. The proposed mitigation measures to address aesthetics and the analysis of the impact on wildlife movement are therefore inadequate. A full critique of the problems posed to wildlife and natural resources by this proposed mitigation measure is found in Dr. Smallwood's comment letter (Addendum B).

⁴⁰⁸ Cal. Pub. Res. Code §§ 21002.1(a), 21061, 21100(b)(3); 14 Cal Code Regs § 15126.4(a)(1); CEQA Guidelines § 15126.4(a)(B)

⁴⁰⁹ DEIR, pp. 5.4-24 through 5.4-25.

⁴¹⁰ DEIR, p. 5.4-25

⁴¹¹ DEIR, p. 3-13

⁴¹² DEIR, p. 5.4-17

⁴¹³ DEIR, p. 5.4-25

C. Cultural and Tribal Cultural Resources

The DEIR offers just two mitigation measures in addressing the host of potentially significant impacts identified under thresholds CTC-2 through CTC-6.⁴¹⁴ Both measures fail to fully address issues previously raised by commenters in response to the Notice of Preparation. MM CUL-1 calls for OHD to contract with a “qualified archeologist” to be on-site during initial grading and excavation to determine whether any “historic or prehistoric” cultural resources are “discovered.”⁴¹⁵ Similarly, MM CUL-2 calls for contracting with a “Native American monitor” who will be present during the initial construction and grading phase of the Project and report any qualifying cultural materials found on the site.

The problem with both approaches is that it does not address how these consultants will be selected nor how their qualification will be vetted to ensure that they are capable of identifying qualifying cultural materials on this site. In the case of MM CUL-2, the DEIR does not provide any assurances that once items are determined to be of cultural significance, that they will actually be preserved. Instead, it merely calls for a meeting between the City and the hired monitor to determine the “appropriate course of action.”⁴¹⁶

This approach does not safeguard against the substantial adverse change in the significance of historical resources as called for by the CEQA Guidelines.⁴¹⁷ A project that causes a substantial adverse change in the significance of historical resources is one that has a significant effect on the environment.⁴¹⁸ MM CUL-2 does not even follow the recommendation by the Native American Heritage Commission (NAHC) to consult with California Native American tribes that are traditional and culturally affiliated with the geographic area of the proposed Project.⁴¹⁹ Instead, the mitigation measure proposed makes a vague reference to contracting a “Native American Monitor” without offering more detail as to the selection or unique qualifications of the contractor who will be asked to determine the cultural significance of materials found on this site.

The DEIR also claims that no tribe requested consultation for the project.⁴²⁰ There is no evidence, however, that the City properly issued notice pursuant to SB 52 or SB 18, or reached out to those listed in the Native American Tribal Consultation List from NAHC.

Finally, we join with the comments to the DEIR submitted by our colleagues at the Wisthoyo Chumash Foundation in calling for additional mitigation measures to ensure that vital cultural resources are not lost during the construction or operation of this proposed Project, should it go forward. The City must do better to locate Tribal Cultural Resources through the use of the best available technology and methods. The DEIR is flawed because it fails to identify those methods with a proven track record, such as canine forensics and ground-penetrating radar, that will preserve cultural resources before any construction takes place. Therefore, the DEIR’s finding of

⁴¹⁴ DEIR, pp. 1-15 through 1-17

⁴¹⁵ DEIR, Section 1.5, p.1-16.

⁴¹⁶ *Id.*

⁴¹⁷ Cal. Code Regs., tit. 14, §15064.5

⁴¹⁸ Cal. Code Regs., tit. 14, §15064.5 (a)(3).

⁴¹⁹ DEIR, Table 2-1, Notice of Preparation Comments Summary, p. 2-11

⁴²⁰ DEIR, pp. 3-1 and 5.5-17

“less than significant impact” on Tribal Cultural Resources, even with the mitigation proposed, must be rejected as unreliable.

D. Land Use

Because the DEIR fails to address several significant land use impacts, its evaluation of feasible mitigation of the off-port land use impacts of vehicle storage sites—whether temporary or permanent—is severely lacking. The DEIR is incomplete without taking into account the full scope of land use impacts that are triggered by the Project, and the mitigation required to address those impacts if applicable. Here, the DEIR proposes no mitigation measures in its analysis of each of the three threshold areas, including conflicts with the Zoning Code and the prospect that the Project might physically divide an established community.⁴²¹ Similarly, because the DEIR failed to adequately account for potential cumulative impacts by limiting the scope of projects reviewed, it inadequately assesses the mitigation measures that would be required

XIV. Once Proper Assessment of the Project is completed, the DEIR must Consider Viable Mitigation Measures to Any Identified Significant Impacts

As mentioned above, because the DEIR failed to properly describe the scope of the Project, it also failed to properly identify significant impacts that the project is likely to have. Once a proper and more holistic analysis of the Project’s impact is conducted, the DEIR should identify additional mitigation measures for any significant impacts that arise after analyzing the Project in connection with ongoing Port-expansion endeavors and the creation of the 250-acre Multimodal Logistics Park.

While these measures will depend on the scope of the significant impacts identified once a proper assessment is done for the Project, some measures targeting air quality and construction-related impacts may include, but are not limited to, the following:

- Using zero-emissions equipment and technology during the construction, maintenance, and operation of the proposed Project sites, including the 250-acre segment of the Multimodal Logistics Park.
- Building the infrastructure necessary to electrify the Port as proposed in the Port Electrification Master Plan.
- Electrifying Port terminals that new vehicle storage facilities, including the Multimodal Logistics Park, are intended to serve.
- Building and utilizing zero-emissions rail options in connection with new vehicle transportation.⁴²²
- Further reducing emissions from ocean-going vessels by using technology that allow emissions reductions to go beyond California Air Resources Board at-berth control measures.⁴²³

⁴²¹ DEIR, Section 5.11, pp.,5.11-22 and 5.11-26

⁴²² See, Ventura County Freight Corridors Study, p.37 (recommending feasibility study for Ventura County Railroad Emissions Reduction strategy by converting to low or zero emissions locomotives for operation by the VCRR).

⁴²³ California Air Resources Board, Control Measure for Ocean-Going Vessels At Berth; Cal. Code Regs. Tit. 17, § 93118.3 (2020)

This is not an exhaustive list of potential mitigation measures the City should consider in a revised DEIR, should it decide to continue with the Project. Mitigation measures will depend on the significant impacts that are identified once the entire Project is properly assessed.

XV. The DEIR fails to Consider a Range of Reasonable Alternatives Because the Project Objectives are Too Narrowly Defined

Even with unlawful Project objectives, the DEIR must consider a reasonable range of alternatives. Alternatives are central to an EIR, and their assessment is a major function of an EIR.⁴²⁴ The purpose of the requirement to contemplate alternatives is to identify ways to mitigate or avoid the significant effects of a project.⁴²⁵ “[A]n agency may not approve a proposed project if feasible alternatives exist that would substantially lessen its significant environmental effects.”⁴²⁶ The alternatives discussion must be “meaningful” and must “contain analysis sufficient to allow informed decision making.”⁴²⁷

“The process of selecting the alternatives to be included in the EIR begins with establishment of project objectives by the lead agency.”⁴²⁸ The DEIR must include “[a] clearly written statement of objectives,” as this will guide the City in developing a reasonable range of alternatives.⁴²⁹ An alternatives analysis under CEQA must focus on potentially feasible alternatives to the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.⁴³⁰

The DEIR outlines several objectives for the project that include: facilitating commercial success for Port clients to ensure they keep their business in the region; reducing and consolidating off-Port satellite storage locations by finding locations closest to the Port; and promote efficiency and provide operational flexibility for goods already flowing through the Port.⁴³¹ The objectives listed are overly narrow such that they exclude a host of feasible Project alternatives. By referencing the “commercial success” of Port clients in its objectives, the DEIR demonstrates that OHD intends to focus its range of alternatives on the business needs and profitability of logistics operators that handle vehicle cargo from the Ports.⁴³²

⁴²⁴ *Laurel Heights Improvement Ass’n v. Regents of the Univ. of California* (1988) 47 Cal.3d 376,400

⁴²⁵ Cal. Pub. Res. Code § 21002.1

⁴²⁶ *Save Panoche Valley v. San Benito Cnty.*, (2013) 217 Cal.App.4th 503, 52 (citations omitted); *See also* Cal. Pub. Res. Code §21081(a); 14 Cal.Code Regs. §15091(a)(3); *California Native Plant Soc. V. City of Santa Cruz* (2009)177 Cal.App.4th 957, 1002.

⁴²⁷ *Laurel Heights, supra*, 47 Cal.3d at 403-4.

⁴²⁸ *North Coast Rivers Alliance v. Kawamra* (2015) 243 Cal. App.4th 647, 666 [196 Cal.Rptr.3d 559,573] (Citing Pub. Resources Code §21001(g)(internal quotation omitted); *see also* Cal. Code Regs. Tit. 14 §15124(b) (stating an EIR requires a statement of the objectives sought by the proposed project).

⁴²⁹ Cal. Code Regs., Tit. 14, § 15124(b).

⁴³⁰ Cal. Code Regs., Tit. 14, §§ 15126.6(b), (f); *see also* Cal. Pub. Res. Code § 21102.1(a) (“The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.”).

⁴³¹ DEIR Section 3.5., p. 3-15

⁴³² DEIR, Section 1.2, p. 1-1

The DEIR also states OHD's desire to "reduce and consolidate" reliance on off-port satellite storage locations as an objective, without mentioning how this objective will continue to meet its client's needs through a temporary 34-acre site.⁴³³ Unless existing off-Port sites are being kept in operation or an additional more permanent site is planned as part of this Project, the temporary nature of the Project calls into question how it will provide "operational flexibility for transportation of goods that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships."⁴³⁴ The objectives are contradictory—on the one hand, calling for consolidation and the other offering to accommodate existing throughout on a site that will allegedly only be available for a limited term.

Two alternatives are listed as "considered but not carried forward." The first involves reducing the 34-acre site to 24 acres.⁴³⁵ The second involves the use of electric car carrier trucks. As discussed later in these comments, the use of zero-emissions car carrier trucks presents a viable alternative that is environmentally superior because it does not involve the disturbance of the 34-acre site. However, because the objectives are so narrowly focused on facilitating the commercial success of the Port's logistics clients, the option is summarily dismissed without conducting an analysis of long-term benefits and economic viability.

For similar reasons, the DEIR is able to reject Alternative 1- "No Project" because it would presumably not eliminate car carrier trucks or consolidate the off-port sites. Alternative 2- continuing existing off-port sites, is similarly rejected because it would not lead to consolidation closer to the Port. And, Alternative 3- developing the land for light manufacturing use as zoned, is rejected because it would not meet any of the objectives.⁴³⁶ Each of these alternatives is rejected without the necessary analysis required under CEQA because the DEIR relies on overly restrictive objectives to force a desired outcome.

While there is a "rule of reason" that governs the City's consideration of alternatives and the DEIR need "set forth only those alternatives necessary to permit a reasoned choice," the City's restrictive objectives prevent it from discussing alternatives "in a manner to foster meaningful public participation and informed decision making." *Kawamura, supra*, 243 Cal.App.4th at 667 (citing Guidelines, §15126.6, subd.(f)). This taints the entire analysis and ultimately violates CEQA.

The DEIR fails to assess alternatives to the Project in a meaningful way because it too narrowly defines the objectives of the Project and arbitrarily segments the 34-acre site from larger port-expansion plans and the growth of off-port vehicle storage sites. In doing so, the DEIR offers only a cursory analysis of alternatives that are not only viable and reasonable, but also present

⁴³³ *Id.*

⁴³⁴ *Id.*

⁴³⁵ DEIR Sections 1.4, 1-6. Note: It is unclear how the applicant considers Alternative 1 a viable alternative as it would still require grading and some construction on half the acreage on the site. Without providing any rationale for how the 34-acre site will lead to the consolidation of acres currently available at existing sites used for vehicle storage, the DEIR dismisses this alternative for failing to fulfill a key objective for reducing and consolidating reliance on off-Port storage locations or reducing the need for a car carrier truck

⁴³⁶ *Id.*

environmentally superior paths that avoid the substantial environmental changes that permanently altering 34-acres of land will have on the region.

Below is a discussion of some of options that OHD should consider as alternatives.

A. Park and Coastal Access

The City should include alternatives and mitigation measures related to park and coastal access, particularly in light of the Ormond Beach Restoration Plan and the 2030 General Plan's designation of a portion of the 34-acre site as intended for park use. In fact, Oxnard indicated in its 2030 General Plan that intends to establish a "gateway park" and visitor center near Saviers Rd.⁴³⁷ This alternative would not only reflect the City's 2030 General Plan objectives, but would adhere to community concerns and desires for public access to Ormond Beach and the Ormond Beach Wetlands.

The DEIR fails to address the possibility of utilizing the parcels as a park or as a nature center, even as it acknowledges that the two suggested alternatives were raised during public comments to the Notice of Preparation and are identified as "areas of controversy."⁴³⁸ Instead of addressing these concerns, the DEIR focuses on the zoning designation as "light manufacturing" to reject an alternative that would develop the parcels in line with General Plan land use designation. The 2030 General Plan land use designation, however, designated a portion of the 34-acre site for use as a "park."⁴³⁹ Therefore, it is not inconceivable that the proposed Project site would be utilized as a recreational space as community residents have demanded.

There are several reasons why the DEIR should consider the use of the 34 acres as a gateway park to Ormond Beach and the Ormond Wetlands Restoration area as an alternative to the current Project. This alternative would place the parcels in line with the land use outlined in City's 2030 General Plan and would eliminate the negative impacts of using the site as year-round car storage and further increasing traffic on Hueneme Road and Perkins Road. This alternative would also bring the site's use in line with the Ormond Beach Wetlands Restoration Plan, which identified suitable entrances to the wetlands restoration area at the northeast corner of the 34-acre site at the intersection of Savier and Hueneme Roads, as well as improving bike access to trails as an alternate entrance to the wetlands starting at Perkins Road.⁴⁴⁰

Under this alternative, the Project's objectives could best be met by utilizing alternate storage sites already in use or being considered, preferably using zero-emissions transport as discussed below. The park alternative would avoid further disruption of the 34-acre site, provide a buffer to protect sensitive wetlands, and help mitigate some of the environmental harms of Port expansion by preserving open green space, eliminating the need for hundreds of individual car trips on local roads and foregoing construction and operation that threaten wildlife.

⁴³⁷ Oxnard 2030 General Plan, Goal CD-22 "Environmentally sound Ormond Beach wetlands with appropriate public access", p.9-4; Policy CD 22.2- Develop and Ormond Beach Visitor Access, p. 9-12, and ICS-23.5, p.9-19- Resident access to scenic areas and Ormond beach, pp.3-41 and 4-27.

⁴³⁸ DEIR, p. 2-3

⁴³⁹ Oxnard 2030 General Plan, Figure 3-1, Land Use Map, p. 3-3.

⁴⁴⁰ Ormond Beach Restoration and Public Access Project: Preliminary Restoration Plan, pp. 4-11 through 4-19;

B. Navy Yard Expansion as an Alternative to Vehicle Storage needed to accommodate GLOVIS.

The Navy Base Ventura County (NBVC) has had a long-standing partnership with OHD to provide backup storage and access at the Port of Hueneme.⁴⁴¹ In fact, NBVC recently partnered with OHD to make a shipping berth and nearly 30 acres of land available for storage of incoming cargo shipments under a reactivated Joint Use Agreement.⁴⁴² GLOVIS already leases land from NBVC for its operations.⁴⁴³

The DEIR should include an alternative that explores expanded leasing opportunities at NBVC to accommodate GLOVIS vehicle imports. This alternative would: 1) avoid increasing traffic on public roads by forgoing the individual transport of cars to the proposed Project site; 2) avoid construction and environmental effects associated with the Project; and 3) meet each of the objectives listed for the Project. At a minimum, the DEIR should assess expanding use of leasing opportunities from the Navy site as a viable and reasonable alternative to grading and transforming currently undeveloped open space into vehicle storage. Such an alternative may also include expansion of vehicle storage parking structures to potentially double auto capacity on the dock as has previously been contemplated for the Port facility.⁴⁴⁴ When coupled with mitigation measures that integrate zero-emissions technology and port electrification strategies, this alternative would present an environmentally superior option.

C. Requiring the Usage of Zero-Emissions Class 7 and 8 trucks to Transport Automobiles to Existing Storage Sites

The DEIR does not offer any mitigation or alternative for driving hundreds of cars individually along public roads each day to and from the proposed Project site. The DEIR rejects Alternative 1- no project, although deemed environmentally superior⁴⁴⁵, in part because it requires car-carrier truck trips to deliver new vehicles from the Port to existing sites. The DEIR claims that the Alternative 2- keeping the two existing off-port vehicle storage locations would result in “greater impacts relative to air quality, energy, greenhouse gas emissions, hydrology and water quality, land use, mineral resources, noise and transportation.”⁴⁴⁶ This assumes, however, that diesel-powered car-carrying trucks would be utilized to transport new vehicles to these sites.

The use of zero-emissions car carriers would provide an alternative that would not only reduce the number of vehicles on the road but would also reduce or eliminate significant environmental impacts related to the storage of vehicles off-port. The DEIR, however, summarily dismisses this alternative as “considered but not carried forward”- citing costs and the fact that electric vehicles

⁴⁴¹ Brian J. Varela, *Port of Hueneme, Navy Partner to Assist Los Angeles County Port Backlog*, Ventura County Star, November 28, 2021, 10:40 a.m.; <https://www.vcstar.com/story/news/2021/11/28/port-hueneme-assist-la-county-ports-through-agreement-navy/8771397002/>

⁴⁴² *Id.*

⁴⁴³ DEIR, p. 1-2

⁴⁴⁴ See 2020 OHD Comprehensive Economic Development Strategy, p. 29; See also, Oxnard Harbor District, Economic-Environment Partnership, Slide presentation (undated) , Slides 29 and 30.

⁴⁴⁵ DEIR, p. 1-7

⁴⁴⁶ DEIR, p. 1-8.

are not currently used by GLOVIS.⁴⁴⁷ Yet the idea of using zero-emissions trucks to transport goods out of ports is not without precedent. In the fall of 2021, for example, the Port of San Diego, where GLOVIS is also a major customer, announced plans to require all drayage trucks to be 100% zero emissions by 2030.⁴⁴⁸ The idea of using zero-emissions trucks for port cargo is therefore not infeasible. In rejecting zero-emissions strategies as an alternative, the DEIR skips the level of analysis requiring consideration of a full range of alternatives that would mitigate or avoid significant environmental impacts of the proposed Project.

Here, two of the Project's prominent impacts are GHG, and air quality impacts due to the increased amount of fossil-fueled car and truck trips associated with the Project. Requiring the usage of zero-emission Class 7 and 8 semi-trucks to haul vehicles in lieu of independently driving each imported combustion vehicle to the project site, offers a superior alternative under CEQA because these zero-emission vehicles have no tailpipe emissions, and much lower life-cycle GHG emissions.

According to the Union of Concerned Scientists, battery-electric Class 7 and 8 trucks have lower life cycle GHG emissions than diesel trucks, no matter the operating characteristics of the vehicle or the electric grid.⁴⁴⁹ While battery-electric vehicles do not have tailpipe GHG emissions like diesel vehicles, there are still GHG emissions associated with the generation of the electricity used to power the vehicle. With the current mix of electricity generation sources in the United States, the Union of Concerned Scientists found that a battery-electric semi-truck operating locally offers 65% life cycle GHG reductions compared to its diesel counterpart.⁴⁵⁰ Battery-electric semi-trucks operating on highways offer 50% GHG reductions compared to diesel semi-trucks.⁴⁵¹ These reductions are likely even higher in California, since California has a larger proportion of renewable electricity generation sources than the national average.⁴⁵²

Further, the GHG reductions associated with operating battery-electric semi-trucks will only increase as California moves closer to its goal of ending its dependence on fossil fuels for electricity generation. Thus, requiring battery-electric Class 7 and 8 semi-trucks to efficiently carry multiple (on average, between 5 and 9) vehicles in lieu of requiring each of these most-likely gasoline or diesel-powered vehicles to individually drive to the project site would significantly reduce the amount of GHG emissions associated with the Project, making it effective mitigation measure for the Project's significant GHG impacts.

Zero-emission vehicles, including Class 7 and 8 battery-electric semi-trucks, also cause significantly less air pollution than combustion vehicles. Light-duty combustion vehicles are a

⁴⁴⁷ DEIR, p. 1-6.

⁴⁴⁸ Press Release, Port of San Diego Adopts Most Ambitious Maritime Clean Air Strategy of its Kind in California (October 14, 2021), <https://www.portofsandiego.org/press-releases/general-press-releases/port-san-diego-adopts-most-ambitious-maritime-clean-air#:~:text=A%20goal%20of%20100%20percent,in%20some%20cases%2C%20even%20more>.

⁴⁴⁹ Union of Concerned Citizens, *Ready for Work: Now is the Time for Heavy Duty Electric Vehicles*, at 6 (Dec. 11, 2019) <https://www.ucsusa.org/sites/default/files/2019-12/ReadyforWorkFullReport.pdf>.

⁴⁵⁰ *Id.* at 7.

⁴⁵¹ *Id.*

⁴⁵² Nuclear Energy Institute, *State Electricity Generation Fuel Shares* <https://www.nei.org/resources/statistics/state-electricity-generation-fuel-shares> (last visited February 12, 2022) [hereinafter, "Nuclear Energy Institute"]

major source of both Particulate Matter 2.5, and well as Nitrogen Oxides (“NO_x”), a precursor for ozone.⁴⁵³ These air pollutants have serious health consequences, as exposure to them is associated with asthma, bronchitis, increased cancer risk, increased hospitalization, and even premature death.⁴⁵⁴ Battery-electric semi-trucks have no tailpipe emissions.⁴⁵⁵ The only significant air pollutant associated with the operation of battery-electric semi-trucks is the Particulate Matter emitted from brake wear.⁴⁵⁶ However, according to the California Air Resources Board (“CARB”), zero-emission vehicles produce 50% less Particulate Matter from brake wear when compared to diesel vehicles.⁴⁵⁷ This is because zero-emission vehicles utilize “regenerative braking,” which reduces brake usage.⁴⁵⁸ Thus, requiring zero-emission Class 7 and 8 semi-trucks in lieu of multiple additional combustion passenger car trips and not moving forward with building the 34-Acre site would greatly reduce the air quality impacts associated with transporting vehicles to storage, and is therefore a far superior alternative under CEQA.

1. *The Current Total Cost of Ownership of Battery-Electric Semi-Trucks is Less than Diesel Semi-Trucks*

The total cost of ownership advantage of zero-emission class 7-8 tractors is now a well-established fact. Numerous studies have compared battery-electric semi-trucks with their diesel and natural gas counterparts using a Total Cost of Ownership (“TCO”) analysis. A TCO analysis attempts to capture the total cost of purchasing and operating a vehicle throughout its entire life. While each study has a slightly varied methodology, each TCO analysis generally consists of vehicle purchase cost, lifetime fuel and maintenance costs, and necessary infrastructure costs. Some studies analyze additional factors, including California’s available financial incentives, the charging infrastructure investments made by California’s utilities, and the environmental externalities associated with Class 7 and 8 semi-trucks. A recent TCO analysis by UC Berkeley’s School of Public Policy, examining upfront costs, fuel costs, maintenance, health, and environmental externalities, and the cost of infrastructure installation, shows the dramatic cost advantage for Class 7-8 tractor EVs over their diesel equivalents.⁴⁵⁹

⁴⁵³ CARB, Mobile Source Strategy Presentation (Oct 28, 2021) at slide 9
<https://ww3.arb.ca.gov/board/books/2021/102821/21-11-2pres.pdf>.

⁴⁵⁴ *Id.*

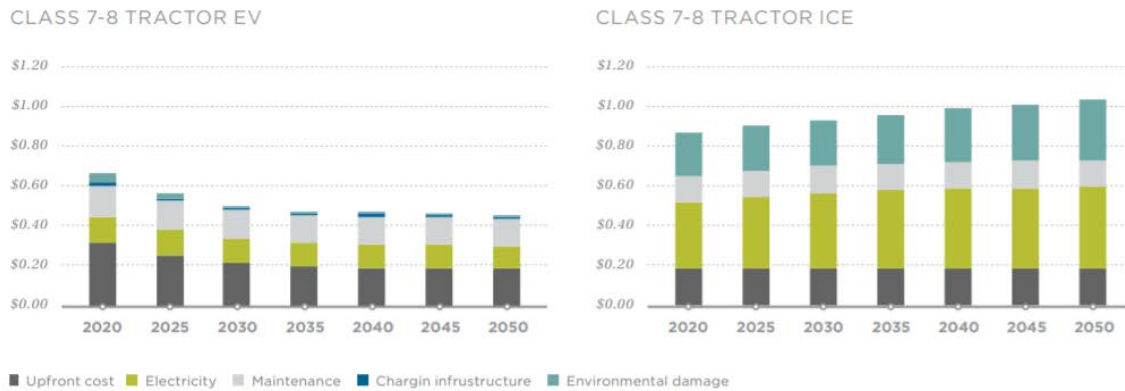
⁴⁵⁵ California Air Resources Board, *Updated Costs and Benefits Analysis for the Proposed Advanced Clean Truck Regulation*, at 3 (April 28, 2020) <https://ww3.arb.ca.gov/regact/2019/act2019/30dayattc.pdf>.

⁴⁵⁶ *Id.*

⁴⁵⁷ *Id.*

⁴⁵⁸ *Id.*

⁴⁵⁹ 2035 The Report Appendices- Transportation: Plummeting Costs and Dramatic Improvements in Batteries can Accelerate Our Clean Transportation Future, Goldman School of Public Policy, University of California, Berkeley (June 2021), Available at http://www.2035report.com/transportation/wp-content/uploads/2020/05/GridLab_2035-Transportation-Appendix.pdf?hsCtaTracking=c4d392a4-96ff-474c-86c3-bfa335c67aa2%7Ce2107ae8-40d7-44ff-8b5b-72016d87fe98.



Even setting aside the environmental damage costs, ZE Class 7-8 tractors have a comparable TCO to diesel tractors as of 2 years ago and have a clear TCO advantage by 2025.⁴⁶⁰ Further, studies indicate that the cost of battery-electric Class 7 and 8 semi-trucks will continue to decrease as the 2020s progress, whereas the cost of diesel trucks will either increase or remain stagnant.

CARB undertook a TCO analysis that compared battery-electric and diesel Class 8 Day Cab semi-trucks.⁴⁶¹ Day Cabs are a type of truck generally used for day trips less than 250 miles, and are also known as regional-haul or short-haul trucks. CARB's analysis also includes the cost of infrastructure investment, but does not factor in environmental damages or any subsidies or grants. Nevertheless, the battery-electric day cabs proved especially cost-effective. The study finds that battery-electric day cabs yield significant savings as early as 2025. By 2030, a battery-electric day cab operating in drayage duty cycle is expected to have a 31 percent lower TCO versus diesel, equal to savings of \$239,000.⁴⁶²

Both of these studies indicate the current TCO of a battery-electric semi-truck is already either comparable or favorable compared to a diesel equivalent and that battery-electric semi-trucks will have a vastly superior TCO sometime by 2025 (within 3 years). Notwithstanding these favorable findings, these assessments should be treated as conservative. Neither study takes into account the financial incentives available in California, and the CARB study only considers the Low Carbon Fuel Standard. California has many more incentives available, with the most prominent being the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project ("HVIP").⁴⁶³ For certain Class 7 battery-electric trucks, this HVIP program provides \$95,000 as a voucher to offset some of the purchase price.⁴⁶⁴ For certain Class 8 battery-electric trucks, the voucher amount is \$150,000.⁴⁶⁵ Further, in their respective analyses of charging infrastructure costs, neither study incorporates the hundreds of millions of dollars that California utilities have

⁴⁶⁰ *Id.* at 29.

⁴⁶¹ CARB, Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document (Sept. 2021) https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf.

⁴⁶² *Id.* at 8.

⁴⁶³ California Hybrid and Zero-Emission Truck and Bus Voucher Program (Last visited February 12, 2022) <https://www.californiahvip.org/>.

⁴⁶⁴ See generally, California HVIP Eligible Vehicle Catalog (Last visited February 12, 2022) <https://www.californiahvip.org/how-to-participate/#Eligible-Vehicle-Catalog>.

⁴⁶⁵ *Id.*

already committed to supporting the development of heavy-duty charging infrastructure,⁴⁶⁶ the billions committed and proposed through California's State budgets in 2022 and 2023,⁴⁶⁷ nor the funding already signed into law by the Federal Bipartisan Infrastructure Law – including \$5 billion for medium- and heavy-duty vehicle infrastructure, and an additional \$2.25 billion specifically for electrification at Ports.⁴⁶⁸

In addition to financial incentives and utility charging infrastructure investment, when the environmental externalities of air pollution and GHG emissions are monetized and incorporated into a TCO analysis, battery-electric trucks are even cheaper compared to diesel. A study done by the Lawrence Berkeley National Laboratory ("LBNL") monetizes the reductions in GHG emissions and air pollution associated with battery-electric trucking in three different scenarios: when the electricity comes from 90% renewable sources and 10% gas, when it comes from 100% gas, and when it comes from 100% coal.⁴⁶⁹ The study found that, when battery-electric trucks are fueled by electricity generated with 90% renewables and 10% gas, these trucks save \$0.28 per mile compared to diesel.⁴⁷⁰ When battery-electric trucks are powered by electricity generated with 100% gas, these trucks save \$0.20 per mile compared to diesel.⁴⁷¹ California's electricity generation mix is somewhere in between these two extremes of 100% gas and 90% renewable.⁴⁷² Therefore, battery-electric trucks operating within California would likely save somewhere between \$0.20 and \$0.28 per mile in GHG and air pollution costs compared to a diesel truck operating in California. Further, even without the monetization of environmental externalities, the LBNL study concludes that the current TCO of a Class 8 semi-truck with a 400-mile range is about 20% less than a diesel equivalent.⁴⁷³

Battery-electric Class 7 and 8 semi-trucks are *currently* an economically feasible alternative to diesel and natural gas semi-trucks. If incentive programs like the HVIP and LCFS, as well as the significant investment made by California utilities in charging infrastructure are incorporated into a TCO analysis, battery-electric trucks are dramatically cheaper than diesel equivalents. As the 2020s progress, battery-electric trucks will yield positive cashflows in shrinking payback periods, as diesel trucks become more expensive.

⁴⁶⁶ California Public Utilities Commission, *Transportation Electrification Activities Pursuant to Senate Bill 350* <https://www.cpuc.ca.gov/sb350te/>.

⁴⁶⁷ Office of the California governor, Governor Newsom Outlines Historic \$10 Billion Zero-Emission Vehicle Package to Lead the World's Transition to Clean Energy, Combat Climate Change (Jan. 26, 2022) <https://www.gov.ca.gov/2022/01/26/governor-newsom-outlines-historic-10-billion-zero-emission-vehicle-package-to-lead-the-worlds-transition-to-clean-energy-combat-climate-change/>.

⁴⁶⁸ Infrastructure Investments and Jobs Act (2021) Pub. L. No. 117-58, 135 Stat. 429.

⁴⁶⁹ Amol Phadke, *et al.*, *Why Regional and Long-Haul Trucks are Primed for Electrification Now*, Lawrence Berkeley National Lab, International Energy Analysis Department (March 2021) [hereafter, "Lawrence Berkeley"] at 20 https://eta-publications.lbl.gov/sites/default/files/updated_5_final_ehdv_report_033121.pdf.

⁴⁷⁰ *Id.* at 27.

⁴⁷¹ *Id.*

⁴⁷² Nuclear Energy Institute, *supra*.

⁴⁷³ Lawrence Berkeley, *supra*, at 3.

2. *The Most Significant Technological Barriers to Widespread Usage of Battery-Electric Semi-Trucks Have Been Overcome with Immense Public and Private Investment*

Battery-Electric Trucks are Already Technologically Feasible for the Majority of Trucks In-Use, and Particularly for Class 7-8 Day Cabs. Battery Technology has Advanced to Support Long Range Freight Movement A recent market assessment of the medium- and heavy-duty market by analysts at MJ Bradley & Associates examines the in-use truck fleet to assess readiness for adoption of zero-emission trucks.⁴⁷⁴ The analysis factors in charging patterns, operating requirements, market status, and business case. It relies on conservative assumptions (from a 2019 ICF study), but nevertheless, finds that 66% of the truck fleet has “strong potential for near-term [pre-2025] uptake.”⁴⁷⁵

A separate report by industry experts at the North American Council on Freight Efficiency (“NACFE”), titled “Electric Trucks Have Arrived” documents the positive results from a real-world truck demonstration.⁴⁷⁶ The demonstration of 13 trucks over a 3-week period had the following conclusion: “The event proved that four market segments – vans and step vans, medium-duty box trucks, terminal tractors, **and heavy-duty regional haul tractors** – are ready to go electric.”⁴⁷⁷

Not only are battery prices falling significantly, but battery technology is progressing to such an extent that it is technologically feasible for battery-electric semi-trucks to operate effectively over the long ranges necessary for some kinds of freight movement. The LBNL study referenced above found that “recent technological developments indicate that electric trucks, like electric cars, can be fully charged in thirty minutes.”⁴⁷⁸ This is consistent with claims by Tesla that its Tesla Semi can be fully charged in under thirty minutes.⁴⁷⁹ Fast-charging is crucial for freight movement, as approximately 40% of large semi-trucks travel 500 miles or more per trip.⁴⁸⁰ Each thirty-minute charging session is estimated to provide 4-6 hours of driving time, allowing long-haul battery-electric truck operators to effectively compete with operators using diesel and/or natural gas trucks.⁴⁸¹ The International Council on Clean Transportation (“ICCT”) study referenced above found that with fast charging, a battery-electric semi-truck operator would spend approximately two hours charging on a trip between Los Angeles and Chicago.⁴⁸² Although two hours is more time than a diesel or natural gas semi-truck operator would spend

⁴⁷⁴ MJ Bradley, *Market Medium- and Heavy-Duty Vehicle Market Structure and EV Readiness* (July 2021) <https://www.mjbradley.com/reports/medium-heavy-duty-vehicles-market-structure-environmental-impact-and-ev-readiness>.

⁴⁷⁵ *Id.*

⁴⁷⁶ NACFE Report, Executive Summary, *Electric Trucks Have Arrived, Documenting A Real-World Electric Trucking Demonstration* (Jan 2022) <https://nacfe.org/wp-content/uploads/edd/2022/01/RoL-Report-Executive-Summary-FINAL.pdf>

⁴⁷⁷ *Id.* at 4 (Emphasis Added).

⁴⁷⁸ Lawrence Berkeley, *supra*, at 4.

⁴⁷⁹ *Id.*

⁴⁸⁰ Shashank Sripad and Vekatasubramanian Viswanathan, *Quantifying the Economic Case for Electric Semi-Trucks*, at 149 (available at <https://pubs.acs.org/doi/pdf/10.1021/acsenergylett.8b02146>).

⁴⁸¹ Lawrence Berkeley, *supra*, at 4.

⁴⁸² Hall, Dale and Nic Lutsey, (August 2019), *Estimating the Infrastructure Needs and Costs for the Launch of Zero Emissions Trucks*, International Council on Clean Transportation, [hereafter, “ICCT Report”], p.17

refueling, ICCT concludes this time “does not significantly affect total daily driving time within legal limits.”⁴⁸³ Therefore, not only are battery prices falling dramatically, but battery technology is advancing exponentially, making it technologically feasible for battery-electric trucks to operate over both short and long ranges. In the case of OHD’s proposed project, having zero-emissions trucks carry new cars to existing sites is ideal given the fixed-route they would travel on and the relatively short distances from the Port.

3. California’s Electric Utilities have Committed Hundreds of Millions of Dollars to Build Medium and Heavy-Duty Charging Infrastructure

While it has been shown that battery prices are falling significantly, and battery technology is increasing rapidly, this means little if there is insufficient charging infrastructure. According to CARB, charging infrastructure has emerged as the largest current issue preventing the widespread usage of heavy-duty battery-electric trucks.⁴⁸⁴ Fortunately, there has been significant investment by California public utilities in medium and heavy-duty charging infrastructure. Further, the cost of charging infrastructure per vehicle diminishes significantly as the volume of vehicles increases. Therefore, the utilities’ investment allows the battery-electric semi-truck market to circumvent the high costs currently associated with early charging infrastructure development and helps to create economies of scale for future buyers.

The California Public Utilities Commission (“CPUC”) has approved significant investments proposed by California’s major public utilities in medium and heavy-duty charging infrastructure.⁴⁸⁵ For example, in 2018, the CPUC approved Pacific Gas & Electric’s (“PG&E”) proposed investment of \$236 million to support medium and heavy-duty charging infrastructure installations across their service territory.⁴⁸⁶ The CPUC in 2018 also approved Southern California Edison’s (“SCE”) proposed investment of \$343 million to support medium and heavy-duty charging infrastructure installations in its service territory.⁴⁸⁷ In 2019, the CPUC approved a similar program proposed by the San Diego Gas and Electric (“SDG&E”), although the exact dollar amount is unclear at this point.⁴⁸⁸ Altogether, these investments will support the development of charging infrastructure for *at least* 18,000 trucks and busses. Therefore, although charging infrastructure is a significant barrier to widespread usage of heavy-duty vehicles, the almost \$1 billion already committed to building this infrastructure by California’s utilities is a huge step in overcoming this barrier.

This investment by California’s utilities is vital because it has been shown that the cost of charging infrastructure per truck diminishes significantly as the amount of infrastructure installations increases. In the ICCT study referenced above, the ICCT calculates the expected cost of charging infrastructure per Class 8 long-haul battery-electric truck. With 100 trucks and 150 charging installations, the cost of infrastructure per vehicle is \$189,000.⁴⁸⁹ With 1,000 trucks

⁴⁸³ *Id.*

⁴⁸⁴ California Air Resources Board, *Heavy-Duty Investment Strategy*, at D-41 (Sep. 20, 2019) <https://ww2.arb.ca.gov/sites/default/files/2019-09/fy1920fundingplan-appd.pdf>.

⁴⁸⁵ In Concordance with SB 350 (De Leon, Chapter 547, Statutes of 2015), <https://www.cpuc.ca.gov/sb350te/>.

⁴⁸⁶ *Id.*

⁴⁸⁷ *Id.*

⁴⁸⁸ *Id.*

⁴⁸⁹ ICCT Report, Executive Summary at i.

and 1,200 installations, the cost drops to \$114,000 per truck; with 10,000 trucks and 9,700 installations, the cost drops even further to \$71,000 per truck.⁴⁹⁰ The economies of scale associated with charging infrastructure shows why the utilities' investments are so crucial in ensuring the technological feasibility of battery-electric semi-trucks. The utilities' committed investment will help early battery-electric truck purchasers avoid the high costs currently associated with charging infrastructure. Further, the investment will aid the battery-electric market generally, as these hundreds of millions of dollars will create the economies of scale needed to significantly lower the cost of charging infrastructure for future buyers. This is partly why, as the ICF study shows, when these utility investments are incorporated into a TCO analysis, large battery-electric semi-trucks currently have a favorable TCO when compared to diesel. Thus, with these investments, the cost of charging infrastructure is no longer an obstacle to the widespread usage of Class 7 and 8 battery-electric semi-trucks at freight facilities.

4. *Class 7 and Class 8 Battery-Electric Semi-Truck Models are Available for Purchase, and Many Freight Facilities are Have Committed to Utilizing these Trucks*

Countering any claims that the technology is unavailable, there are numerous models of Class 7 and 8 Battery-Electric semi-trucks that are currently available for purchase, and are already in operation across the nation. Based on company announcements, there are at least ten Class 7 or 8 models with ranges up to 550 miles that are slated for commercial deployment by 2021.⁴⁹¹ As early as January of 2018, 19 companies had already ordered 375 Tesla Semis, with UPS ordering 125 and PepsiCo ordering 100.⁴⁹² BYD, a Chinese zero-emission vehicle manufacturer, announced in January 2020 that it had delivered its 100th battery-electric truck within the United States, which was a second-generation Class 8 semi-truck.⁴⁹³ The German company Daimler announced it delivered its first battery-electric semi-truck in 2019, and had delivered five more by early 2020.⁴⁹⁴ Daimler is planning on significantly increasing the volume of its battery-electric semi-trucks on the road in 2021.⁴⁹⁵

Not only are there multiple Class 7 and 8 battery-electric semi-truck models available for purchase and currently on the road, but many freight facilities have already committed to incorporating these trucks into their fleets. Walmart announced that it would be opening a fulfillment center in British Columbia in 2022, which will feature a *fully electric* fleet.⁴⁹⁶ Anheuser-Busch announced in 2018 that it had ordered 800 electric and hydrogen semi-trucks.⁴⁹⁷ Frito-Lay is currently working on upgrading an existing freight facility, which will include use of

⁴⁹⁰ *Id.*

⁴⁹¹ *Id.* at 2.

⁴⁹² Business Insider, *Companies that Have Ordered Tesla Semis* (April 25, 2018), <https://www.businessinsider.com/companies-that-ordered-tesla-semi-2017-12>.

⁴⁹³ BYD, *BYD Delivers its 100th Battery-Electric Truck in the United States* (Jan. 8, 2020), <https://en.byd.com/news-posts/byd-delivers-100th-battery-electric-truck-in-the-united-states/>.

⁴⁹⁴ Electrek, *Daimler Delivers More Electric Freightliner eCascadia Semi-Trucks* (Mar. 4, 2020), <https://electrek.co/2020/03/04/daimler-electric-freightliner-semi-trucks-ecascadia/>.

⁴⁹⁵ *Id.*

⁴⁹⁶ CleanTechnica, *Walmart Orders 30 More Tesla Semi Electric Trucks* (Sep. 7, 2018), <https://cleantechnica.com/2018/09/07/walmart-orders-30-more-tesla-semi-electric-trucks/>.

⁴⁹⁷ Transport Topics, *Anheuser-Busch, Nikola, BYD Complete First Zero-Emission Run* (Nov. 21, 2019), <https://www.ttnews.com/articles/anheuser-busch-nikola-byd-complete-first-zero-emission-beer-run>.

15 Tesla Semis and a 1 Megawatt photovoltaic array with charging infrastructure.⁴⁹⁸ Loblaw, a Canadian supermarket company, has committed to fully transforming its fleet to zero emission vehicles by 2030, and had already ordered 25 Tesla Semis by late 2017.⁴⁹⁹ Further, the Port of Los Angeles has committed to deploying ten Kenworth and Toyota Class 8 fuel cell trucks, and two battery-electric yard tractors.⁵⁰⁰ The South Coast Air Quality Management District has committed to deploying 23 Class 8 Volvo battery-electric trucks to move freight across the Inland Empire.⁵⁰¹

In addition to multiple studies demonstrating that battery-electric semi-trucks are cheaper on a lifetime basis than diesel semi-trucks, these examples of semi-trucks currently available for purchase, and facilities committed to transforming their fleets, indicate that widespread usage of Class 7 and 8 battery-electric trucks at freight facilities is currently feasible.

5. *California Regulatory Agencies are Aggressively Pushing for Increased Utilization of Battery-Electric Semi-Trucks*

Multiple government agencies within California are attempting to increase the number of battery-electric semi-trucks on the road through regulatory mandates, grant programs, and incentive programs. These are in addition to the Low Carbon Fuel Standard, the HVIP program, and the utility investments in charging infrastructure referenced above. In addition to the favorable TCO of battery-electric semi-trucks, these various agency actions increase the feasibility of widespread usage of these types of trucks at freight facilities.

The South Coast Air Quality Management District (“SCAQMD”) has recently proposed an Indirect Source Rule that would apply to freight facilities within the South Coast region.⁵⁰² Under this rule, freight facilities above 100,000 square feet would be required to accumulate a certain number of Warehouse Actions and Investments to Reduce Emissions (“WAIRE”) points per year.⁵⁰³ WAIRE points can be generated through the purchase and usage of zero-emission and near zero-emission equipment, including vehicles and charging infrastructure.⁵⁰⁴ Zero-emissions and near-zero-emission truck trips also generate WAIRE points. The most points that

⁴⁹⁸ Frito-Lay, *Frito-Lay Transforms California Production Site into First-of-its-Kind Showcase for Sustainability* (Oct. 3, 2019), <https://www.fritolay.com/news/frito-lay-transforms-california-production-site-into-first-of-its-kind-showcase-for-sustainability>.

⁴⁹⁹ Financial Post, *Loblaw Says it Ordered 25 Tesla Semis, Wants Fully Electric Fleet by 2030* (Nov. 17, 2017), <https://business.financialpost.com/news/retail-marketing/loblaw-says-it-ordered-25-tesla-electric-trucks-wants-fully-electric-fleet-by-2030>.

⁵⁰⁰ California Air Resources Board, *CARB Announces More than \$200 Million in New Funding for Clean Freight Transportation* (Sep. 26, 2018), <https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation>.

⁵⁰¹ *Id.*

⁵⁰² South Coast Air Quality Management District, *Proposed Rule 2305: Warehouse Indirect Source Rule* (Nov. 10, 2019), http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/warehouse-isr_prelim-1st-draft.pdf?sfvrsn=6.

⁵⁰³ *Id.* at 2305-3.

⁵⁰⁴ South Coast Air Quality Management District, *Draft WAIRE Menu Technical Report at 1* (Mar. 3, 2020), http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/waire-menu-technical-report_draft_3-3-20.pdf?sfvrsn=6.

can be allocated for a singular action is for the purchase and usage of Class 8 battery-electric or fuel cell trucks.⁵⁰⁵

SCAQMD cites the commercial availability of battery-electric Class 7 and 8 trucks in the technical document supplementing the regulatory language.⁵⁰⁶ While the specific acquisition and usage of Class 7 and Class 8 zero-emission trucks is not *per se* required, this rule would strongly incentivize, if not force, many freight facilities to acquire these types of trucks and/or ensure that a certain number of truck trips made to their warehouse each year are by these trucks. With the proposal of this rule, SCAQMD indicates that increased usage of Class 7 and 8 battery-electric trucks is feasible and seeks to ensure more of these trucks are on the road.

SCAQMD is not the only California agency attempting to increase the usage of battery-electric trucks in the state. CARB has proposed an update to its Advanced Clean Truck rule, which will increase the number of zero-emission vehicles that medium-duty and heavy-duty manufacturers are required to sell into California.⁵⁰⁷ Further, CARB oversees an over \$200 million program designed to facilitate the transition to zero-emission freight fleets.⁵⁰⁸ This CARB program funded the deployment of zero-emission semi-trucks done by the Port of Los Angeles and the SCAQMD, referenced above. CARB also oversees a grant program called the Carl Moyer Memorial Air Quality Standards Attainment Program.⁵⁰⁹ This program provides funding to vehicles that have less particulate matter and NOx emissions than is currently required by state and federal law. In addition, CARB oversees the Air Quality Improvement Program (“AQIP”), which is almost exclusively used to provide financing for small fleet owners to purchase clean fleets.⁵¹⁰

This is certainly not an exhaustive list of the grant programs and incentives available in California. Altogether, CARB indicates that more than a dozen California agencies issue hundreds of millions of dollars annually to support the deployment of heavy-duty vehicles.⁵¹¹ These grant programs, regulations, and incentives further illustrate the feasibility of widespread usage of battery-electric semi-trucks at freight facilities. None of the TCO studies analyzed above incorporate these programs and regulations into their calculation. Even without considering any of these, the TCO of a battery-electric semi-truck is currently less than a diesel equivalent. When these programs, regulations, and incentives are also considered, the case for the feasibility of requiring Class 7 and 8 battery-electric semi-trucks at freight facilities becomes even stronger.

⁵⁰⁵ *Id.* at 2.

⁵⁰⁶ *Id.* at 4.

⁵⁰⁷ See generally California Air Resources Board, *Advanced Clean Trucks Regulation*, <https://ww2.arb.ca.gov/rulemaking/2019/advancedcleantrucks>.

⁵⁰⁸ California Air Resources Board, *CARB Announces More than \$200 Million in New Funding for Clean Freight Transportation* (Sep. 26, 2018), <https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation>.

⁵⁰⁹ California Air Resources Board, *Carl Moyer Air Quality Standards Attainment Program*, <https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program>.

⁵¹⁰ California Air Resources Board, *AQIP Formal Regulatory Documents*, <https://ww2.arb.ca.gov/resources/documents/aqip-formal-regulatory-documents>.

⁵¹¹ California Air Resources Board, *Heavy-Duty Investment Strategy*, at D-90 (Sep. 20, 2019) <https://ww2.arb.ca.gov/sites/default/files/2019-09/fy1920fundingplan-appd.pdf>.

6. *There are Multiple Co-Benefits Associated with the Widespread Usage of Class 7 and 8 Zero-Emission Semi-Trucks as an Alternative*

i. *Requiring the Usage of Class 7 and 8 Battery-Electric Semi-Trucks will Reduce Local Air Pollution*

The operation of Class 7 and 8 diesel semi-trucks within and around communities has devastating, sometimes deadly, air quality impacts. As mentioned above, diesel semi-trucks are significant sources of particulate matter and NO_x pollution. The impacts of these pollutants are so severe that the International Agency for Research on Cancer, which is part of the World Health Organization, has classified diesel exhaust as carcinogenic to humans.⁵¹² According to the California Office of Environmental Health Hazard Assessment (“OEHHA”), particulate matter pollution is linked to increased hospital visits, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory illnesses.⁵¹³ Children are especially susceptible to this harmful pollution, as their lungs and respiratory systems are still developing.⁵¹⁴ NO_x emissions are also quite harmful and can damage lung tissue, lower the body’s resistance to respiratory infection, and worsen chronic lung diseases. Further, NO_x reacts with other pollutants in the atmosphere to form ozone, a precursor to smog.⁵¹⁵

Class 7 and 8 zero-emission semi-trucks almost fully eliminate the creation of these potentially deadly pollutants. As referenced above, zero-emission vehicles, including battery-electric trucks, have no tailpipe emissions. The only significant air pollutant associated with these semi-trucks is the particulate matter caused by braking. However, according to CARB, battery-electric trucks emit about 50% less particulate matter from braking than diesel semi-trucks, using “regenerative braking.” Therefore, requiring the usage of Class 7 and 8 zero-emission semi-trucks is not only economically and technologically feasible but will provide significant health benefits to the people of Oxnard and Ventura County. Thus, the usage of these trucks not only offers the City a reasonable alternative to building a temporary parking lot near wetlands but is also a moral imperative. No person within the surrounding communities should be subjected to asthma lung cancer when it is clearly possible to meet the objective of facilitating vehicle storage at existing sites using better technology.

ii. *Requiring Usage of Class 7 and 8 Battery-Electric Semi-Trucks will Aid California in Reaching its GHG and Air Pollution Reduction Goals*

California has multiple stringent GHG and air pollution reduction goals, and electrification of freight fleets is a vital component to achieving these goals. California is mandated under the federal Clean Air Act to reduce its air pollution consistent with the National Ambient Air Quality

⁵¹² American Cancer Society, *Diesel Exhaust and Cancer*, <https://www.cancer.org/cancer/cancer-causes/diesel-exhaust-andcancer.html#:~:text=The%20EPA%20classifies%20diesel%20exhaust,a%20%E2%80%9Cpotential%20occupational%20carcinogen.%E2%80%9D>.

⁵¹³ California Office of Health Hazard Assessment, *Health Effects of Diesel Exhaust* (May 21, 2001), <https://oehha.ca.gov/air/health-effects-diesel-exhaust>.

⁵¹⁴ *Id.*

⁵¹⁵ *Id.*

Standards (“NAAQS”).⁵¹⁶ As mentioned above, diesel semi-trucks are a significant source of NO_x tailpipe emissions, whereas battery-electric semi-trucks have zero tailpipe emissions. Thus, requiring the usage of these vehicles in Port operations and throughout the existing network of off-port storage facilities, will aid California in achieving compliance with the federal NAAQS.

California also has aggressive GHG reduction goals. State Bill 32 mandates that GHG emissions be reduced 40% below 1990 levels by 2030. Executive Order S-3-05 mandates that GHG emissions be reduced 80% below 1990 levels by 2050. Executive Order B-55-18 mandates that California achieve economy-wide carbon neutrality by 2045. According to a report by the Energy Futures Initiative, meeting the goals for 2045 and 2050 will be “extremely challenging.”⁵¹⁷ According to the ICF study mentioned above, the deployment of 100,000 electric medium and heavy-duty vehicles is necessary to achieve both the 2030 and 2050 GHG reduction goals.⁵¹⁸ Heavy-duty vehicles, including diesel semi-trucks, are a significant source of GHG emissions. According to the Union of Concerned Scientists, heavy-duty vehicles constitute 10% of vehicles in the United States but emit 28% of vehicle-related GHG emissions.⁵¹⁹ Battery-electric trucks, as shown above, have significantly less life cycle GHG emissions than diesel semi-trucks, and the GHG emissions from battery-electric trucks will continue to decrease as California increases the proportion of electricity generated by renewable sources. Thus, requiring the usage of battery-electric semi-trucks will aid California in meeting its aspirational GHG emissions reduction goals.

iii. *Electrification of Freight Fleets has Positive Economic Impacts for California*

In addition to the TCO calculation, the ICF study referenced above also analyzes the economic impacts associated with the electrification of freight fleets in the state of California. The report concluded that widespread electrification has multiple positive economic impacts. For one, transitioning from petroleum fuels to electricity allows funds that would otherwise flow out of California’s economy to be retained within the state.⁵²⁰ Further, investment in battery-electric vehicles results in greater net employment, Gross Regional Product, and industrial activity per dollar invested, when compared to investment in natural gas vehicles.⁵²¹ Also, investment in the electrification of freight fleets results in a doubling of jobs in the medium and heavy-duty sectors relative to investment in natural gas and diesel vehicles.⁵²² These economic benefits are consistent with the findings of the LBNL. In a letter to CARB regarding its Advanced Clean Truck Rule, LBNL indicates that a mandate that manufacturers must sell 100% zero-emission

⁵¹⁶ ICF, *Comparison of Medium and Heavy Duty Technologies in California*, Executive Summary (December 2019) [hereafter, “ICF Study”], available at https://caletc.com/assets/files/ICF-Truck-Report_Final_December-2019.pdf, p.3.

⁵¹⁷ Energy Futures Initiative, *Optionality, Flexibility, and Innovation: Pathways for Deep Decarbonization in California* at x (April 2019), <https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/5cadebd04cd61c00017a563b/1554901977873/EFI+California+Summary+DE+PM.pdf>.

⁵¹⁸ ICF Study, *supra*, 28.

⁵¹⁹ Union of Concerned Scientists, *supra*, at 2.

⁵²⁰ ICF Study, *supra*, at 6.

⁵²¹ *Id.*

⁵²² *Id.*

Jay Dobrowalski
February 14, 2022

vehicles across all truck classes would result in \$49 billion in savings to the state economy compared when to a “business-as-usual” scenario.⁵²³

The DEIR should consider each of benefits stemming from deployment of zero-emissions trucks as part of existing and future Port operations- including in distribution to the network of existing off-Port storage facilities. Not only is this good for the economy, but it is a better alternative for the environment and for public health. Exploring this option further will allow the City to avoid the potentially harmful consequences of pursuing a Project that will permanently alter 34-acres of land near sensitive receptors and bring harmful environmental impacts to the environment.

XVI. Conclusion

There are many flaws with this DEIR. These flaws are significant and must be fixed if the OHD and the City want to proceed with this Project. We urge the City to reject this Draft Environmental Impact Report at this time. Should you have any questions about this comment letter, please do not hesitate to contact us at fgaytan@earthjustice.org, nospina@nrdc.org, and hkryczka@nrdc.org. Thank you for considering our comments.

Sincerely,

Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Maricela Morales
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtoyo Chumash Foundation

Attachments
Addendum A – Matt Hagemann & Dr. Paul Rosenfeld Letter
Addendum B – Dr. Shawn Smallwood Letter
Addendum C – Brenton Spies Letter

⁵²³ Lawrence Berkeley National Laboratory, Letter to CARB Regarding Proposed Amendments to the ACT Standard Yield \$11 Billion in Savings and 50% Emissions Reductions over Original Standards (May 20, 2020), <https://www.arb.ca.gov/lists/com-attach/4122-act2019-AWBdOAZzAzMKYwFs.pdf>.

ATTACHMENT 2



EARTHJUSTICE



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

July 1, 2022

Via Email and Federal Express

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Re: Supplemental Comments on The Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We write on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”) to provide supplemental comments for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”).

On March 21, 2022, the City of Oxnard Planning Division (“OPD”) hosted a Virtual Community Workshop with presentations from the OHD discussing its plans for the 34-acre Vehicle Storage Site currently under review. At the conclusion of the Virtual Community Workshop, OPD invited additional written comments from the public concerning the proposed Project and the presentation by the Oxnard Harbor District (“OHD” or the “Port”). In line with this invitation, these comments supplement our previous letter submitted on February 14, 2022. We incorporate by reference all previous comments submitted raising issues regarding the Draft Environmental Impact Report (“DEIR”) and reiterate our position that the DEIR is inadequate and cannot support the Special Use Permit sought through the relevant application to the Planning Commission.

In our prior letter, we explained how the DEIR for the Project failed to comply with the California Environmental Quality Act (“CEQA”). There is new evidence that has emerged under production in response to Public Records Act (“PRA”) requests to the Port that should be part of the record such that decisionmakers and the public have all substantial relevant information to participate in the CEQA process and make an informed decision on the project, as required by CEQA.¹ The

¹ Cal. Code Regs. tit. 14, § 15151 (1992) (“An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences”); *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 394 (1988), as modified in denial of reh’g (Jan. 26, 1989) (“A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding *whether to approve a proposed project*... If post-approval environmental review were allowed, EIR’s would likely become nothing more than post hoc

released documents substantiate the serious CEQA violations described in our February 14 letter: in compiling the DEIR, the Port knowingly piecemealed other expansion projects, willfully ignored significant environmental issues and did not include adequate detail in the DEIR, and failed to translate the DEIR for meaningful public review.

Furthermore, we are concerned that the City of Oxnard is withholding additional relevant information due to their egregious delay in responding to our PRA request from June 2021 and their failure to meet with requestors to identify responsive records. We ask, once again, that the City set up a meeting with requestors as soon as possible to develop a path forward to producing records responsive to our June 2021 request.

Simply put, the current DEIR is inadequate. Given the significant flaws described further below, the DEIR should be rejected, and the special use permit must be denied. If the City wishes to move forward, it must recirculate a DEIR that contains sufficient information and detail to allow decision makers to make an informed decision on the entire Project, as required by CEQA. Should the City fail to conduct a full, thorough, and transparent environmental analysis in compliance with CEQA, the Planning Commission must decline to certify any final EIR.

rationalizations to support action already taken”); *Sierra Club v. County of Fresno*, 6 Cal. 5th 502, 510, 431 P.3d 1151, 1158 (2018) (holding that an EIR must include “sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises...”).

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PROCEDURAL BACKGROUND

Given the lack of publicly available information on expansion planned by the Port, CAUSE and NRDC submitted Public Records Act (“PRA”) requests to both the City and the Port in June 2021.

The City has almost entirely ignored the aforementioned PRA requests and has produced only 20 documents to date, despite the statutory and constitutional right under California law to public access to governmental records.² This failure by the City to fully respond to our request not only violates the PRA, but also undermines a core principle of CEQA: public participation.

Since we submitted comments on the Draft EIR in February 2022, the Port produced additional documents responsive to the PRA requests on February 22, March 18, April 22, April 29, and May 26, 2022, and continues to make documents available on a rolling basis. The produced documents provided additional information previously unavailable to commenters regarding the 34-acre site, the permanent 250-acre site, and other reasonably foreseeable development in the Port. Based on our review of these new documents, commenters have the right to supplement our earlier comments.³ Since this supplemental letter is based on new information revealed in the Port’s responses to our PRA Requests, the comments raised herein and the attached produced documents should become part of the administrative record.

CEQA requires agencies to recirculate an EIR when “significant new information” is disclosed and provide an opportunity for a renewed public notice and comment.⁴ “Significant new information” includes documents that reveal that “the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”⁵

As detailed below, the documents produced by the Port under the PRA reveal precisely how the DEIR was inadequate: (1) the DEIR improperly piecemealed the Project; (2) the DEIR’s Project Description is inaccurate and misleading; (3) the DEIR failed to incorporate critical environmental information in violation of CEQA; and (4) the City has not provided a meaningful public review of the DEIR.

I. The DEIR Improperly Piecemealed the Project.

The DEIR failed to consider the 250-acre site as a reasonably foreseeable extension and therefore improperly piecemealed the Project. CEQA prohibits the piecemealing of projects to avoid a more robust review of the potential direct or indirect physical changes to the environment caused by a

² See Cal. Gov. Code §§ 6253(b), 6253.1(a).

³ Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* 124 Cal. App. 4th 1184, 1199-1203, 22 Cal. Rptr. 3d 203, 214 (2004); see *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* 60 Cal. App. 4th 1109, 1121, 71 Cal. Rptr. 2d 1, 8 (1997).

⁴ Cal. Code Regs., tit.14, § 15088.5(d), (f); see also Cal. Pub. Res. Code § 21092.1 (West).

⁵ Cal. Code Regs., tit.14, § 15088.5(a)(4).

project.⁶ An EIR must include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.⁷

The Port produced “significant new information” which revealed that the DEIR “was so fundamentally and basically inadequate and conclusory in nature” with respect to the 250-acre site that meaningful public review was precluded—thus triggering the need for recirculation as stated in the CEQA Guidelines § 15088.5(a)(4). The record indicates that the 34-acre site is an allegedly temporary measure with the Port already discussing future action plans to move the site to the 250-acre lot; and the Port and the City are contemplating multiple projects with a singular goal: to reduce capacity constraints for vehicle storage. Because these documents reveal serious gaps in the DEIR, they must not only be made part of the record, but the agency must also revise and recirculate the DEIR giving full consideration to the 250-acre site.

The Port has repeatedly emphasized, in different contexts, that the 250-acre site would operate as a logical outgrowth, i.e., a reasonably foreseeable consequence, of the 34-acre site and that it would be a permanent structure with a larger environmental footprint. For instance, the Port has started drafting conceptual plans, pursuing financial arrangements with customers, considering the 250-acre project for grants, and designating the site as an Opportunity Zone. More egregiously, records indicate that the Port might have commenced the CEQA process for the 250-acre project as early as 2018. As such, this new evidence further demonstrates that the 250-acre site meets the CEQA test for a future project that must be considered in an EIR for the 34-acre site.⁸

In addition to the evidence and comments already raised in our February 14, 2022 letter, recent PRA productions further show that the 250-acre project is intended as a reasonable future consequence of the 34-acre site and that concrete steps have been taken to bring the project into fruition. The subsequent paragraphs detail a chronology of the Port’s various grant applications, meetings with landowners, communications with potential tenants and clients, and Community Workshop meetings with stakeholders, which together demonstrate that the Port has known for many years, and at least since 2019, that the 250-acre site would be a reasonably foreseeable consequence of 34-acre site.⁹

In August 2019, the Port began working with the 16 owners to get a non-binding commitment that the 250-acre property would be designated as an opportunity zone.¹⁰ As early as November 2019,

⁶ *Berkeley Keep Jets Over the Bay Comm. v. Bd. Of Port Comm’rs*, 91 Cal.App. 4th 1344, 1358, 111 Cal. Rptr. 2d 598, 608 (2001), as modified on denial of reh’g (Sept. 26, 2001).

⁷ *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 396, 764 P.2d 278 (1988), as modified on denial of reh’g (Jan. 26, 1989).

⁸ *Id.*

⁹ Aegir Property Advisors, *Project Update on Proposed Port of Hueneme Logistics Park* at p. 9 (Feb. 2021) (this presentation highlights a timeline wherein the CEQA process for the 250-acre site started in 2018).

¹⁰ See Email from Kristin Decas to Commissioners, Subject: Weekly Update (Aug. 5, 2019).

GLOVIS had already committed to 140 acres of the 250 site.¹¹ In these conversations, contacts at GLOVIS discussed Letters of Intent for the 250-acre and 34-acre sites together.¹² Emails from Port customers indicate that they viewed the 250-acre project, 34-acre project, and the STACKED parking structure as reaching the same goal of expanding port vehicle capacity.¹³

Thereafter in February 2020, OHD and GLOVIS began discussing arrangements for an MOU for the use of the 250-acre site as a long-term project. These email communications also reflect GLOVIS' interest in an on-dock parking structure and additional properties for use. More critically, it flags a 10-acre storage site at 6001 Arcturus, which has to go through renovations to be able to land cars.¹⁴

In March 2020, the Port signed a Memorandum of Understanding ("MOU") with the property owners for the 250-acre site.¹⁵ The MOU says that the Port and the landowners will cooperate in drafting and considering a purchase option for the 250-acre site.¹⁶ The MOU lists the following property owners:

- William Ito, Ito Farms
- Allen Camp, South Shore Land Company LLC
- Steven Murata, Plum Vista LP / Ume Properties LLC
- Ito Family Trust
- White Family Trust
- Katsuda trust(s)

The newly produced documents by the Port indicate that they were in conversation with landowners, including Allen Camp and Bill Ito, in 2020.¹⁷

Beginning in June 2020, multiple budget documents list the 34-acre site and the 250-acre site as a single line item, e.g., "34 Acre/250 Acre Project," suggesting that the projects are inextricably

¹¹ See Email from Dona T. Lacayo to GLOVIS USA at p.2 (Feb. 8, 2021).

¹² See Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019).

¹³ *Id.*

¹⁴ Email from Dona T. Lacayo to Charles Franklin Re GLOVIS real estate update at p. 2 (Feb. 21, 2020).

¹⁵ *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020).

¹⁶ *Id.* at p. 2.

¹⁷ See Email from Kristin Decas to Commissioners, Subject: Weekly Update (Oct. 16, 2020); Email from Sandra Cruz to Kristin Decas, Subject: End of Day Review (Dec. 2, 2020).

linked.¹⁸ In October 2020, the Port continued meeting with the negotiating team for the owners to determine an accurate market value for the site.¹⁹

From late 2020 to early 2021, GLOVIS and OHD continued correspondence about coordination for port vehicle storage expansion that tied the 250-acre site with an on-dock parking structure, the 34-acre site, and Naval base property.²⁰ In early 2021, OHD noted in a presentation that it has already invested \$230,000 in developing the 250-acre site, including: development structure analysis; extensive analysis on CEQA, real estate, park development, engineering, rail; and discussions with City/County officials.²¹ The same presentation also highlighted that OHD needed “firm commitments” and “fast track permitting” for the 250-acre project and the “stop gap measure”—referring to the 34-Acre site.²²

At the same time, the Port re-applied for federal funding for the 250-acre project and successfully designated the 250-acre site in census tracks as an Opportunity Zone.²³ Beginning in February 2021, OHD started to line up potential customers for the 250-acre site and began securing MOUs.²⁴ In an email, subject line: “250 Acres Development Update Call to Action,” the Port noted that “in discussions with several potential port clients, we have identified potential demand from them for approximately 160 acres.”²⁵ Although this estimate did not translate to firm commitments, the Port noted that they could not accommodate more than three to four tenants, one of which would be the Port itself. Thereafter in May, the Port sent a draft MOU with an expected deadline of “July 2nd, 2021.”²⁶ The Draft MOU provides that Port customers will put down a deposit (\$12,000 per acre) to use land on the 250-acre site, with the deposit being refundable until the Port secures legal entitlements to the 250-acre site.²⁷ An April 2021 Board Meeting also notes that the Port has engaged in “advanced discussions with auto customers on the 250 acres site.”²⁸ Thereafter, in June, the emails noted that there was a “strong indication from WWL, Del Monte and GLOVIS that they

¹⁸ The Port of Hueneme Oxnard Harbor District, *Fiscal Year 2021 Budget Schedule* at pp. 3-4 (2021); The Port of Hueneme Oxnard Harbor District, *FY 2022 Capital Outlay Plan* (2021); The Port of Hueneme, *FY2021/2022 Preliminary Budget Presentation* at p. 17 (May 17, 2021); The Port of Hueneme Oxnard Harbor District, *FY 2021 Capital Outlay Plan Draft* (2020).

¹⁹ See Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020).

²⁰ See Email from Dona T. Lacayo to Charles Franklin Re: GLOVIS real estate update (Feb. 21, 2020).

²¹ Aegir Property Advisors, *Project Update on Proposed Port of Hueneme Logistics Park* at p. 5 (February 2021).

²² *Id.* at p. 6.

²³ See OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing).

²⁴ See Email from Dona T. Lacayo to Port of Hueneme Staff and Aegir Ports at pp. 4-6 (June 2021).

²⁵ *Id.* at p. 5.

²⁶ *Id.* at p. 2.

²⁷ Memorandum of Understanding for Deposit and Right to Lease Land in a Proposed Port Related Logistics Park in the City of Oxnard (Form as of May 11, 2021).

²⁸ Board of Harbor Commissioners, Board Meeting Materials at p. 14 (Apr. 19, 2021).

are in” and an update indicating the amount of space each customer wants to be reserved via the MOU “40-50 acres for Del Monte, 100 for WWL.”²⁹

In September 2021, the OHD received an Infrastructure for Rebuilding America (“INFRA”)-Extra grant for the Hueneme Modernization Project.³⁰ The INFRA-Extra initiative provides an opportunity to apply for Transportation Infrastructure Finance and Innovation Act (“TIFIA”) credit assistance for up to 49% of eligible project costs. The 2021 request for the INFRA grants states, “[t]he Project advances a critical component of the 2020 Plan that calls for ... increased auto capacity.”³¹ The application goes on to state that the “[m]odernization Project [would] increase the Port’s ability to accommodate automobile exports” and that the “Port’s automobile customers have high demand for additional space to accommodate their cargo.”³²

Most recently, during the March 2022 virtual Community Workshop, Oxnard Planning Division officials and OHD officials stated that the 34-acre site and the 250-acre site would operate “like Legos.”³³ That is, the 250-acre site would build off of the “stop-gap” 34-acre site. The Port had already recognized the link between a more permanent solution to their capacity issues and a stop-gap measure for their clients’ space constraints.

Finally, the City of Oxnard was also aware of the Port’s plans for the 250-acre site. For example, the Port produced a document titled “Collaboration Call with City of Oxnard” with the goal of “Partnership for Economic Development.”³⁴ The document has an “ongoing deadline” and is supplemented with information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.³⁵ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that “[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail.”³⁶

As all the above information demonstrates, it was reasonably foreseeable that the 250-acre site would be a necessary component of this Project. Separating the 250-acre site as a “separate and

²⁹ Email between Dona T. Lacayo and Port of Hueneme Staff and Aegir Ports at p. 1 (June 2021).

³⁰ The Port of Hueneme, *Port of Hueneme Projects & Events* (March 2019).

³¹ The Port of Hueneme, *The Hueneme Modernization Project – Dep’t of Transportation – INFRA Grant Application FY 2021* at p. 6.

³² *Id.*

³³ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:57:19 (Mar. 21, 2022).

³⁴ OHD, *Collaboration Call with City of Oxnard* at p. 2 (Ongoing).

³⁵ *Id.* Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.

³⁶ City of Oxnard & The Port of Hueneme: *Partners in Economic Development, Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard.*

distinct” project in the EIR is not only piecemealing in violation of CEQA but also entirely disingenuous.

II. The DEIR’s Project Description is Inaccurate and Misleading.

OHD staff have repeatedly emphasized the temporary nature of the Project to downplay the project’s impacts. The Port also noted that the 34-acre project could be taken apart to make another future possible. Yet, when stakeholders asked the Port about a) where the Port would store the 5,000 cars after the 3-5 years; and b) whether workers will be laid off after 3-5 years – the Port evaded answering major questions about the expiration of the temporary permit.³⁷

The Project description in the DEIR also suffers from these fatal flaws. The Port produced “significant new information” revealing that the DEIR was “fundamentally and basically inadequate” for two key reasons. First, neither the City nor the Port explains why the Project is truly temporary. Second, assuming the Project is temporary, neither the City nor the Port explains why the benefits of the Project would be permanent. For these reasons, the new documents must not only be made part of the record, but they also demonstrate how the project description is inadequate under CEQA, and the agency must revise and recirculate the Draft EIR with a proper project description so that decisionmakers can properly assess the impacts of this project.

A. The City has not Demonstrated how the Project is Temporary in the DEIR.

Although OPD and OHD officials have repeatedly stated that the project would be “temporary,” the documents produced by the Port in response to our PRA requests have demonstrated that the project is likely to become permanent.

The Port has repeatedly raised concerns about an unsustainable “serious off port land deficit” of about 300 acres. More recently, the Port has noted that “storage is becoming an issue now not just for automobiles but containers now as well.”³⁸ While the City has highlighted these space issues, it has not provided the public with any information that would buttress the alleged temporary nature of the site. For example, OHD has not provided specifics regarding plans to transition the site post-project (e.g., into a park) or that the Port will undertake specific mitigation measures to prevent the environmental impact of that reversion. Instead, the space issues that the Port has repeatedly raised in internal documents lead us to believe that the site will be used to increase the carrying capacity of the Port. The lack of transparency on these points calls into question the temporary nature of the site as well as OHD’s long-term intentions for the site.

We reiterate that the temporary nature of the project does not align with the objectives outlined for the project, i.e., to “reduce and consolidate” reliance on off-port satellite storage locations. Unless existing off-Port sites are being kept in operation or an additional more permanent site is planned

³⁷ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> (Mar. 21, 2022) (questions regarding future of cars at 1:48:55 and temporary employment at 1:30:26 and 1:53:10. Vague answers from the Port beginning at 2:43 -3:00)

³⁸ OHD, Collaboration Call with City of Oxnard at p.4 (Ongoing).

as part of this Project, the temporary nature of the Project blurs the sincerity of the objectives—and by extension—the adequacy of the project description. The City cannot seem to reconcile the objectives in the project description with the purported temporary nature of the site.

If truly temporary, the project would fail to satisfy the stated objectives—making Alternative One: No Project/No Build by far the environmentally superior alternative that the City should adopt. As we stated in our February 14, 2022 comment letter, the City’s concern over reducing diesel truck traffic, if genuine, could be addressed with the deployment of zero-emission trucks and related technologies that are increasingly becoming available in the market. Indeed, at the March 21, 2022 Community Workshop, Port staff touted that the Project’s presumptive tenant, GLOVIS, has led the industry in producing Class-8 zero-emissions trucks.³⁹ This information serves to counter the argument that deploying zero-emission trucks to serve the Port’s vehicle storage operations is infeasible. Therefore, we reiterate our call to the City and the Port to broadly consider deploying zero-emission trucks and other technology as an alternative to building an unnecessary temporary vehicle storage parking lot next to sensitive wetlands.

B. The City has not Explained the Permanence of the Alleged Benefits of the Project.

Logically, this project cannot provide the promised permanent benefits—increasing economic activity, bringing sustainable jobs, and consolidating existing sites from Camarillo and Ventura—while also being temporary.

In its ongoing collaboration calls with the City, the Port has repeatedly emphasized that the Project will “create 40+ new jobs and add \$2.2 million in local salaries annually.”⁴⁰ However, it does not explain where these jobs and salaries will go after the allegedly temporary project expires. Indeed, when stakeholders asked the Port about potential layoffs for the new workers in the March 2022 Community Workshop, the Port responded that the jobs that the 34-acre site would create are temporary construction jobs, implying contracts that will expire.⁴¹ Simply put, the Project is not actually creating any long-term, unionized, and adequately paying jobs. Additionally, in its Project 34 FAQs, the Port has also repeatedly emphasized that the Project will create capacity for 4,944 vehicle storage spaces. The Port fails to explain where these cars will go after the allegedly temporary project expires. Again, when stakeholders asked the Port whether GLOVIS intends to cancel car shipments after the temporary storage facility expires in the March 2022 Community Workshop, the answer was murky at best – stakeholders remain unclear about the future of

³⁹ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:49:30 – 2:52:00 (Mar. 21, 2022).

⁴⁰ OHD, Collaboration Call with City of Oxnard – Partnership for Economic Development at p. 2 (Ongoing).

⁴¹ City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:44:40 (Mar. 21, 2022).

imported cars and other imports.⁴² If the other projects are truly “separate and detached,” then they will not serve as sites for moving these vehicles.⁴³

These are integral components of the full project that remain unknown, and as such, the DEIR fails to disclose all the impacts of the project.

III. The DEIR Failed to Incorporate Critical Environmental Information in Violation of CEQA.

Without complete environmental reporting, as well as public commentary from an adequately informed public, officials cannot make informed decisions on projects.⁴⁴ CEQA procedure is intended to not only provide for adequate environmental assessment, but also to “demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.”⁴⁵ The integrity of the CEQA process is “dependent on the adequacy of the EIR.”⁴⁶

The “significant new information” produced by the Port reveals that the DEIR was inadequate and conclusory because it failed to incorporate and inform the public and decisionmakers about the Project’s cumulative impacts, rubberstamped an important traffic analysis, and omitted from consideration reasonable, zero-emission alternatives. The lead agency’s fundamental exclusions in its DEIR deprived the public of informed commentary. As such, the agency also failed to demonstrate how it has taken a hard look at the environmental implications of its actions with respect to the Project. Because these documents reveal serious gaps in the DEIR, they must not only be made part of the record, but the agency must revise and recirculate the DEIR giving full consideration to the environmental consequences.

C. The DEIR Failed to Incorporate an Accurate Cumulative Impact Assessment.

⁴² *Id.* at 2:44:05-2:44:55 (providing vague statements regarding “long term developments” and “future sites to help support the Port” and that such developments will be managed in an “open and transparent” way but not specifically responding to how car shipments will be managed.)

⁴³ *Id.* at 23:04 and 2:44:00 (the Port acknowledging that they are in preliminary discussions for allegedly “separate and detached” projects – such as the 250-acre site.)

⁴⁴ *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.*, 57 Cal. 4th 439, 447, 452, 304 P.3d 499 (2013) (*see also* *Save the Hill Grp. v. City of Livermore*, 76 Cal. App. 5th 1092, 1109, 292 Cal. Rptr. 3d 120, 133 (2022) and *League to Save Lake Tahoe Mountain etc. v. Cnty. of Placer*, 75 Cal. App. 5th 63, 95, 290 Cal. Rptr. 3d 218, 244 (2022), *review denied* (May 18, 2022) for recent California courts affirming this approach to prejudicial omissions in EIRs).

⁴⁵ *Laurel Heights Improvement Assn. v. Regents of Univ. of California*, 47 Cal. 3d 376, 392, 764 P.2d 278 (1988), *as modified on denial of reh’g* (Jan. 26, 1989).

⁴⁶ *California Native Plant Soc’y v. City of Santa Cruz*, 177 Cal. App. 4th 957, 979-80, 99 Cal Rptr. 3d 572 (2009), *as modified on denial of reh’g* (Oct. 14, 2009).

CEQA requires that the DEIR address cumulative impacts.⁴⁷ Cumulative impacts are those that result from “the combination of the project evaluated in the EIR together with other projects causing related impacts.”⁴⁸ Failure to include a complete list of projects that produce related or cumulative impacts is a violation of CEQA.⁴⁹ This is especially critical if the proposed 34-acre site is not, in fact, temporary and would add to the overall cumulative impacts.

In addition to the projects, the City listed in the DEIR as “reasonably foreseeable, planned and approved future projects” (which, despite being listed, were not considered in a cumulative impact assessment), our review of the recently produced documents provides further evidence that there are planned projects left out of the DEIR, resulting in a cumulative impacts analysis that is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”⁵⁰

For example, the City recently produced an application for a Special Use Permit, which shows that a project site is proposed for a large trailer truck storage facility just east of the 34-acre project site.⁵¹ This would presumably increase truck traffic in the general vicinity of the proposed project site. The City also indicated in a Market Street Landing Summary that the Port is pursuing a 2-acre site to create additional space for cargo movement. The summary notes indicate that the space is expected to “yield a 30% increase in capacity” in the long term.⁵²

The newly produced documents further indicate that the Port anticipates significant growth in the coming years, which has not been included in the DEIR nor in any cumulative impact assessment – a fact that the Port itself acknowledges in its correspondence.⁵³ For example, the Port’s deepening and dredging projects are explicitly intended to accommodate anticipated cargo growth on larger vessels and expand the Port’s capacity.⁵⁴ Yet the cumulative impacts of dredging at the Port were completely left out of the DEIR. This is especially troubling because a portion of its dredging proposal has already undergone environmental review under CEQA and the National Environmental Policy Act (“NEPA”) and received federal funding last year,⁵⁵ which further

⁴⁷ Cal. Code Regs., tit.14, § 15130; *see also* Cal. Code Regs., tit.14, § 15355

⁴⁸ Cal. Code Regs., tit.14, § 15130(a)(1).

⁴⁹ *Id.* at § 15130(b)(1).

⁵⁰ Cal. Code Regs., tit.14, § 15088.5(a)(4).

⁵¹ Port of Hueneme Draft Project Description - Temporary Storage Facility at p. 4.

⁵² The Port of Hueneme, *Market Street Landing – Essential to the Port’s Future as an Economic Engine* at p. 1.

⁵³ Email between Dona T. Lacayo and Port of Hueneme Staff at p. 1 (Feb. 2019) (Discussing that the impact of more ships and the resulting increase in new business and automotive traffic has not been part of the Project assessment).

⁵⁴ *See, e.g.,* Oxnard Harbor District, *Port Makes Another Splash - \$5M Economic Development Grant*, September 22, 2021, available at: <https://www.portofhueneme.org/eda-grant-09-22-2021>.

⁵⁵ *Id.* (the U.S. Economic Development Administration awarded the Port \$5.1 million to dredge Berth 3 to facilitate larger vessels carrying fresh produce to arrive at the Port); *See also* The D3 Project: The Dredge, Demo and Delivery Project, U.S. Economic Development Administration – EDA Grant Application PWEAA2020, June 10, 2020.

substantiates that the Port dredging projects are “reasonably foreseeable, planned and approved future projects.”

In addition to the dredging project, as commenters noted in their February letter, beginning in April 2020, the Port published a “Priority List for 2020 Grants” which lists the STACKED project, the 34-Acre Temporary Expansion, and the 250 Acre Port Enterprise Zone.

Thereafter in its April 2021 Board Meeting, the Port notes that it anticipates “[i]ncreas[ing] rail and land capacity” (i.e., 34 acres, 250 acres, parking structure).⁵⁶ The Port has also noted that it is working on securing additional property owned by Arcturus.⁵⁷ The Port hired consultants to undertake a study of a parking structure for the STACKED project to use in grant applications during summer 2021. This parking structure would be shorter and cover a larger footprint than the multilevel parking structure studied in 2016.⁵⁸ In the 2021 Comprehensive Economic Development Strategy, the Port noted that the STACKED Project would “have 7,500 bays nearly doubling the Port’s current automobile capacity.”⁵⁹ The first phase will include the base and the next two stories of the structure.⁶⁰ The second phase is set to add an additional two levels, making it a five-story tall structure.⁶¹ Additionally, the Port noted that to retain business, “it will be necessary for the Port to provide infrastructure such as an on-dock parking structure for staging automobiles [and] an off-port multi modal logistics park.”⁶²

In its Financial Year 2022 Capital Outlay Plan, the Port sets aside \$5 million in Financial Year 2022 and Financial Year 2023 (a total of \$10 million) for the Engineering of a “Parking Structure.”⁶³ Although the vague term “Parking Structure” is unclear, what is clear is that funding has already been allocated for capacity growth projects in the Port.

Inevitably, all these projects tie into the same goal – to resolve the serious space constraints the Port is facing. Clearly, OHD has already invested considerable time and resources into preparing for the development of these related projects – including applying for federal funding. Because these developments are all planned and reasonably foreseeable, the cumulative impacts of these additional projects must be considered in the DEIR.

D. The Traffic Study Incorporated into the DEIR was Rubberstamped.

As indicated by the documents produced by the City and the OHD in response to the PRA requests, the Port may not have conducted a comprehensive and independent traffic study.

⁵⁶ Board of Harbor Commissioners, Board Meeting Materials at p. 10 (Apr. 19, 2021).

⁵⁷ Email from Kristin Decas to Commissioners, Subject: Weekly Update (June 11, 2021).

⁵⁸ Oxnard Harbor District, Professional Services Agreement (May 26, 2021).

⁵⁹ Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ The Port of Hueneme Oxnard Harbor District, *FY 2022 Capital Outlay Plan* (2021).

An EIR required by CEQA must include sufficient detail to enable those who did not participate in its preparation to understand and meaningfully consider the issues raised by the proposed project.⁶⁴ An *omission* in a DEIR significant impacts analysis is deemed prejudicial if it deprives the public and decisionmakers of substantial relevant information about the project’s likely adverse impacts.⁶⁵ Here, the produced documents make clear that there was never any intention for the Port to vet the real traffic impacts of the 34-acre site. Instead, the documents demonstrate that the Port seems to willingly turn a blind eye to the full impacts.

In an email dated August 11, 2018, a land-use planning specialist asked whether an expert could “prepare a letter report for the argument against needing a traffic study.”⁶⁶ Thereafter on August 27, 2018, the same land-use planning specialist noted that “the City just needs a paper trail – this way they can cover themselves with a letter from a professional.”⁶⁷ The next day on August 28, 2018, the expert responded, noting that “[e]verything we do will be based on that [Project] description. I will just have to take the time to type up a trip generation analysis based on the trips in noted in the Jensen Design letter and charge the Port for my time.”⁶⁸ Thus, the Associated Transportation Engineers Traffic Study (“Traffic Study”) that the DEIR relies on appears to have been based solely on a Project Description and a Design letter – omitting consideration of CEQA guidelines and the Ventura County Freight Corridors Study.

Because of the shoddy traffic analysis that was performed, the numbers cited by the Port for the vehicle impacts of the 34-acre site vary across documents and are unreliable. For example, in one document, the Port notes that “32 additional vehicles would be imported/exported per day (576 vehicles per month)”⁶⁹ In another document, GLOVIS notes that they expect to “shuttle 10 - 12 vehicles at one time ... between the hours of 7:00 am and 4:00 pm Monday through Friday” which amounts to an “average of 54 vehicles a day” (or 972 vehicles per month).⁷⁰ The Associated Transportation Engineers’ Traffic Assessment notes, “76 vehicles will be transported to and from the Port to the Storage Lot for approximately 18 days of every month”⁷¹ (or a total of 1368 vehicles per month).

⁶⁴ Cal. Pub. Res. Code § 21100.

⁶⁵ See *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.*, 57 Cal. 4th 439, 304 P.3d 499 (2013) (see also *Save the Hill Grp. v. City of Livermore*, 76 Cal. App. 5th 1092, 1109, 292 Cal. Rptr. 3d 120, 133 (2022) and *League to Save Lake Tahoe Mountain etc. v. Cnty. of Placer*, 75 Cal. App. 5th 63, 95, 290 Cal. Rptr. 3d 218, 244 (2022), review denied (May 18, 2022) for recent California courts affirming this approach to prejudicial omissions in EIRs).

⁶⁶ See Emails between Dona T. Lacayo, Hollee King, and Darryl F. Nelson at p. 7 of 8 (Aug. 2018) (emphasis added).

⁶⁷ See Emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018) (emphasis added).

⁶⁸ See Emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018).

⁶⁹ See Letter from The Port of Hueneme to City of Oxnard, *Subject SUP Project Description – Temporary Outdoor Vehicle Storage* at p. 4 (Aug. 27, 2018).

⁷⁰ See Letter from Frank Cerrito (GLOVIS) to Ashley Golden Re: Oxnard Storage Lot (Aug. 9, 2018).

⁷¹ Assoc. Transportation Engineers, *Traffic Impact Study for the Port of Hueneme Temporary Vehicle Storage Special Use Permit – City of Oxnard* at p.2 (Aug. 29, 2018).

There remains confusion as to the exact number of vehicles to be transported and the extent to which additional trucks/shuttles will be needed. As such, this lack of consistency deprives the public and decisionmakers of substantial relevant information about the project's likely adverse traffic impacts as required under CEQA.

E. The Port Failed to Provide a Reasonable Explanation for not Considering a Zero-Emission Vehicle Alternative.

In our February 2022 letter, we recommended that the City should more thoroughly consider zero-emissions trucks as a reasonable and viable alternative and mitigation measure for this Project. The viability of this alternative is supported by OHD's own statements touting GLOVIS as one of the region's only makers of HD Class 8 zero-emission trucks. OHD reiterated this commitment to zero-emission technology during the Community Workshop held on March 21, 2022.⁷² Yet, OHD summarily dismisses this alternative as infeasible.

Currently, the DEIR does not offer any mitigation or alternative for driving hundreds of cars individually along public roads each day to and from the proposed Project site. As mentioned above, the ambiguity surrounding whether the 34-Acre site will truly be temporary calls into question whether this Project will meet the stated objectives. The "no-build" alternative, by far, is the environmentally superior alternative. When coupled with the deployment of zero-emission trucks for car transport, the Port and the City have an opportunity to mitigate the impact of operations and offer the community a chance for cleaner air. Despite claiming this approach would prove infeasible, the Port also acknowledges that its own client, GLOVIS, is a leader in producing zero-emissions Class 8 trucks.⁷³ In fact, GLOVIS noted that operations at the Port would transition trucks to hydrogen fuel cell technology, similar to what is being done as a pilot at the Port of Oakland.⁷⁴ Moreover, GLOVIS itself touts being a leader in driving decarbonization and is committed to being a zero-emissions company by 2040.⁷⁵ This reality belies the argument that a zero-emissions transition for the Port and GLOVIS' operations is infeasible.

Furthermore, the Port claims that the site may be used as storage for zero-emission cars. Port representatives claim that of the vehicles likely to be stored at the proposed 34-acre site, "many of these vehicles will be zero emission electric cars."⁷⁶ Yet, there is no mention of zero-emission cars in the DEIR or an estimate of the number of zero-emission cars expected in the 34-acre site. Suppose the Port intends to use the site for purposes of storing electric vehicles. In that case, this potentially raises a host of additional questions including, but not limited to, whether additional infrastructure is needed to support battery electric vehicles being stored there for long periods of time. This further shows that the information presented in the DEIR does not offer the public or

⁷² City of Oxnard, *Community Workshop-34 Acre Vehicle Storage Facility Project* available online at <https://oxnardca.civicclerk.com/web/player.aspx?id=4561> at 2:57:19 (Mar. 21, 2022).

⁷³ *Id.*

⁷⁴ *Id.* at 1:03:30 – 1:04:00.

⁷⁵ *Id.* at 1:03:20 – 1:03:30; 1:05:00 – 1:05:14.

⁷⁶ *Id.* at 18:40 – 19:00.

decisionmakers sufficient facts to support an adequate analysis of the Project’s environmental impacts.

IV. The Port has not Provided a Meaningful Public Review of the DEIR.

In violation of CEQA, neither the DEIR nor the Community Workshop was properly translated into Spanish. Limiting public access in this way contravenes one of the core tenets of CEQA – that “the public holds a ‘privileged position’ in the CEQA process ‘based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.’”⁷⁷

According to the latest census data, in Oxnard as a whole, 66% of residents speak a language other than English at home, and 30% speak English less than “very well.” Indeed, the City itself has also acknowledged that a significant percentage of Oxnard residents speak Mixteco, particularly in south Oxnard. Yet, as described in the commenters’ February letter, the public does not have access to Spanish or Mixteco translations for any of the close to 1,000 pages of documents that provide the environmental review undertaken by the City and the details of the Project.

The language access issues have persisted through the March Community Workshop, which was primarily held in English. There was no simultaneous interpretation of the information presented by the Port. Instead, staff were invited to provide only a “summary” of the presentation in Spanish and Mixteco. More egregiously, the City’s presentation was entirely in English without interpretation.

Language access reports and studies show that such summaries do not provide for meaningful public review of important project development information. Over a decade ago, the Institute for Local Government published a guide for local officials on language access. In this guide, the authors highlighted how “providing language access increases the opportunities that residents have to communicate with their local leaders and public service providers and ensures the flow of information between public agencies and residents and among residents that is vital to effective community-building.”⁷⁸

Furthermore, California’s Bilingual Services Act was created with the intent to safeguard democracy and public participation in California’s diverse landscape.⁷⁹ State agencies must distribute applicable translated written materials if the State agency “serves a substantial number of non-English-speaking persons” and “[t]he information solicited, required, or furnished affects or may affect the individual’s rights, duties, or privileges with regard to that agency’s services or benefits.” Although, as local agencies, the City and Port are not directly subject to this rule, refusing to translate environmental documents restricts non-English speaking individuals’ ability

⁷⁷ Cal. Code Regs. Tit. 14, § 15201 (1992).

⁷⁸ INSTITUTE FOR LOCAL GOVERNMENT, Language Access Laws and Legal Issues: A Local Official’s Guide, (2011), http://ca-ilg.org/sites/main/files/file-attachments/language_access_guide_formatted_9-27-11_2.pdf

⁷⁹ Cal. Gov. Code § 7290 et seq. (1973)

and right to meaningfully participate in environmental decisions that impact their health and safety. As such, the City and Port should commit to equivalent language access services.

Given the high percentage of Spanish and Mixteco-speaking Oxnard residents, if the City truly aims to provide meaningful opportunities for engagement and public review of the information provided on the Project, it must translate the entirety of any written information provided into Spanish and any oral information into Spanish and Mixteco.

CONCLUSION

In light of the numerous flaws in the DEIR and the broader CEQA process, the Planning Division should not certify a final EIR at this time and must deny the requested Special Use Permit. The public deserves an opportunity to review and comment on a comprehensive EIR that discloses the full extent of the Project's environmental impacts. Additionally, the comments raised in this letter, along with the attached produced documents, should become part of the administrative record. Lastly, we ask that the City of Oxnard comply with its legal obligations under the California Public Records Act and set up a meeting with requestors as soon as possible. Should you have any questions, or would like to discuss the contents of this letter, please do not hesitate to contact us at rkannan@earthjustice.org, fgaytan@earthjustice.org, nospina@nrdc.org, hkryczka@nrdc.org, and lucia@causenow.org. Thank you for considering our supplemental comments.

Sincerely,

Radhika Kannan
Fernando Gaytan
Earthjustice

Natalia Ospina
Heather Kryczka
Natural Resources Defense Counsel

Lucia Marquez
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Mati Waiya
Wishtoyo Chumash Foundation

ATTACHMENT 3

October 19, 2022

Via Email and Federal Express

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Re: Comments on The Final Environmental Impact Report for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (#2020069039) and PZ 18-500-02 (Special Use Permit)

Dear Mr. Dobrowalski:

We submit these comments on the Final Environmental Impact Report (“FEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) on behalf of the Central Coast Alliance United for a Sustainable Economy (“CAUSE”), Earthjustice, Natural Resources Defense Council (“NRDC”), and Wishtooyo Chumash Foundation (“Wishtooyo”).

The FEIR fails to address several fundamental deficiencies in the Draft Environmental Impact Report (“DEIR”) that commenters had previously identified. Despite the submission of over 200 comments on the DEIR, the City of Oxnard Planning Division (“OPD” or “City”) has only made minor revisions to its analysis in finalizing the FEIR.¹ Even when confronted with new knowledge, facts, and expertise, including record evidence from the Oxnard Harbor District’s (“OHD” or the “Port”) internal documents, the City has refused to reevaluate its mistaken analysis. Consequently, the FEIR is legally deficient and unfit for certification under the California Environmental Quality Act (“CEQA”).

I. The Record Must Include Commenters’ Submitted Evidence on July 1, 2022

Following the close of the public comment period for the DEIR in February 2022, commenters became aware of new evidence through documents produced in response to a Public Records Act request to the OHD. These documents contained substantial relevant information for decisionmakers to be aware of ahead of deciding whether to approve this proposal. Furthermore, on March 21, 2022, the City hosted a Virtual Community Workshop with presentations from the OHD discussing its plans for the 34-acre Vehicle Storage Site currently under review. At the conclusion of the Virtual Community Workshop, OPD invited additional

¹ Final Environmental Impact Report, Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project, SCH No. 2020069039 (Sept. 2022) (hereinafter “FEIR”).

written comments from the public concerning the proposed Project and the presentation by the Port. In line with this invitation, and to ensure that the Commissioners and other decisionmakers were provided with information necessary to make an informed decision, commenters submitted supplemental comments on July 1, 2022, in addition to the comments submitted on February 14, 2022.

The City of Oxnard Planning Division has acknowledged receipt and noted that the letter and all supporting documents would be entered into the record. The confirmation email is attached hereto as Attachment 1, Dobrowalski July 13, 2022 Email. Although the July 1 letter appears in Attachment F of the Staff Report (along with other letters submitted after February 14, 2022), the supporting evidence does not. When commenters realized that the supporting documents had not been entered into the record as part of the FEIR documentation, commenters sent an email to Mr. Dobrowalski requesting an erratum. This request is attached hereto as Attachment 2, Commenters' October 11, 2022 Errata Request. This erratum has not been filed. As Planning Commissioners are tasked with deciding whether to approve this controversial project, they should have access to the entire record. In an abundance of caution, we are attaching the July 1, 2022 letter, as well as the February 14th letter, and all supporting documents to each of these comments as Attachment 3, Previous Comment Letters and Attachments.

Commenters request that the Commissioners strongly consider both the July 1, 2022, supplemental letter, and all supporting evidence in deciding this permit. We realize that this is a significant amount of information to review in a short amount of time which is also why we previously asked for the Commission's decision to be delayed for 30 days until the Commissioners have had an opportunity to hear from the public and have full access to the entire record in this considerable matter.

II. The FEIR Fails to Adequately Respond to Comments

When comments raise significant environmental issues through expert declarations or evidence-based assertions, the FEIR's response must provide a reasoned, good-faith analysis and "describe the disposition of significant environmental issues raised."² Comments must be "addressed in detail giving reasons why specific comments and suggestions were not accepted."³ Detailed responses are required to "ensure that the lead agency will fully consider the environmental consequences of a decision before it is made."⁴ Generally, the level of detail in the response must match the level of detail in the comment.⁵

"[C]onclusory statements unsupported by factual information" are never an adequate response.⁶ Yet, such conclusory statements are precisely what the City has proffered in its FEIR. Firstly, other than the Vehicle Miles Traveled ("VMT") analysis, the City has not made any substantive changes to the DEIR. Mere editorial changes do not rise to the level of fully engaging with public comments. Secondly, and more egregiously, while commenters have

² Cal.Code Regs., tit.14, §15088(c).

³ *Id.*

⁴ *City of Long Beach v. Los Angeles Unified Sch. Dist.* (2009) 176 Cal.App.4th 889, 904.

⁵ *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.

⁶ Cal.Code Regs., tit.14, §15088(c); *City of Maywood v. Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 391.

provided detailed explanations including several citations to documents produced by the OHD, the City’s response to these detailed and well-supported objections has been to overwhelmingly refer commenters to “Global Responses.” *See e.g.*, FEIR Comment Response 206-15; 206-24 (the response containing nothing more than “Please refer to Global Response GR-3, Relation of Project to the Multimodal Logistics Park and Global Response GR-8, Cumulative Projects.”) At the same time, no additional details can be found in these Global Responses. These Global Responses do not grapple with OHD’s emails, grant applications, internal memos and other logical inconsistencies pointed out by the commenters. This failure to engage extends to most responses to the comments.

As such, the City has failed in its CEQA obligation to provide detailed reasoning for why commenters’ suggestions were not accepted. Overall, the City has not shown a good faith effort to consider public input.

III. The FEIR Improperly Piecemeals the Analysis of the Whole Project and Fails to Analyze the Impacts of Important Project Components

The FEIR’s flawed Project Description violates the fundamental goal of CEQA, which is to provide complete and accurate information about the environmental impacts of a proposed project before it is approved. The City claims that the design of the Project is meant to “[r]educe and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations.”⁷ The FEIR also notes in the Project Description that the 34-acre outdoor vehicle storage facility is meant to be temporary – for a maximum of 5 years.⁸ Yet, the FEIR misstates the true scope of the 34-acre site, leading to an incorrect analysis regarding the design of the Project.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements

The FEIR attempts to re-write the CEQA process for what must be considered in the Project Description.

The law requires that an EIR must include an analysis of the environmental effects of future expansions or other actions when: a) a project is a reasonably foreseeable consequence of the initial project; and b) the future expansion or action is significant in that it will likely change the scope or nature of the initial project or its environmental effects.⁹

“[T]he environmental review accompanying the first discretionary approval must evaluate the impacts of the ultimate development authorized by that approval. ... Even though further discretionary approvals may be required before development can occur, the agency’s environmental review must extend to the development envisioned by the initial approvals. It is irrelevant that the

⁷ FEIR, Section 3.5, p. 3-15.

⁸ FEIR, Section 3.6, p. 3-15.

⁹ *Laurel Heights Improvement Ass’n v. Regents of Univ. of California* 47 Cal. 3d 367, 396 (1988), as modified on denial of reh’g (Jan. 26, 1989).

development may not receive all necessary entitlements or may not be built. Piecemeal environmental review that ignores the environmental impacts of the end result will not be permitted.”¹⁰

CEQA mandates “that environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences.”¹¹

The FEIR’s failure to recognize the 250-acre site stems from its erroneous interpretation of CEQA requirements. The FEIR claims that the 250-site does not need to be integrated in this project description and no environmental analysis needs to be conducted because: (1) “the City of Oxnard has not received an application for proposed development of a 250-acre site”¹²; and (2) a 250-acre parcel would require annexation which would be subject to future environmental review.¹³

Whether a project is a “reasonably foreseeable consequence of the initial project” does not depend upon whether the City has received an application for it or whether that project might trigger additional CEQA review. Indeed, such a requirement is nowhere to be found in the City’s or the State’s CEQA Guidelines. The City cites to no authority for these “requirements” for which projects need to be included in its project description.¹⁴ These additional elements are created out of whole cloth by the City to avoid re-writing the project description to include what is *clearly* a foreseeable project. As described above, the City cannot use the fact that the entitlement will be subject to further environmental review as an excuse to avoid integrating the extension in its analysis currently.

B. The FEIR’s Conclusions Regarding the 250-Acre Site Are Not Supported By Substantial Evidence.

The City concludes that because “the future development of a 250-acre site is unspecified and uncertain, the City has determined that potential future development of a 250-acre site is not reasonably foreseeable and is speculative.”¹⁵ However, this conclusion flies in the face of the wealth of documents presented to the City demonstrating how the City was well aware of the depth of the planning for the 250-acre site.

As commenters have highlighted in their previous letters, several documents from the Port (including new documents released in response to commenters’ Public Records Act request) indicate that beginning in 2018, the Port has started drafting conceptual plans, pursuing financial arrangements with customers, hiring consultants related to the project, considering the 250-acre project for grants, and designating the site as an Opportunity Zone.¹⁶ Yet, in response, the FEIR

¹⁰ See Kostka, et al., *Practice Under the California Environmental Quality Act*, § 6.52, p. 298.

¹¹ *Bozung v. LAFCO*, 13 Cal.3d 263, 283-84 (1975); *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1452 (1989).

¹² FEIR, Section 12.4.2, p. 12-9.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Attachment 3, February Comment letter, pp. 9-11 (hereinafter “Commenters’ February Letter”); *see also* Attachment 3, July Comment Letter, pp. 4-5 (hereinafter “Commenters’ July Letter”).

Global Responses makes no effort to address these documents. The City's response is entirely inadequate.

First, the FEIR selectively ignores evidence that the Port has coordinated with the City a more permanent solution to the auto storage issue through the 250-acre site. The Port produced a document titled "Collaboration Call with City of Oxnard" with the goal of "Partnership for Economic Development."¹⁷ The document has an "ongoing deadline" and is supplemented with information about the 250-acre site, including grant applications and the inclusion of the 250-acre site in census tracks as an Opportunity Zone.¹⁸ Furthermore, a flyer published by both the City of Oxnard and the Port indicates that "[t]he stop gap 34-acre measure ... will ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail."¹⁹ Thus, the City was well aware that the 250-acre site was a reasonably foreseeable extension of the 34-acre site.

Second, the Global Response to Comments regarding piecemealing the 250-acre site, is primarily devoted to explaining how the 250-acre Multimodal Logistics Park site "was *conceptual* at the time of the Notice of Preparation and is *one possible concept* for potential future development" (emphasis added).²⁰ But the Port's communications to landowners, the Memoranda of Understanding ("MOU") and Letters of Intent ("LOI") between GLOVIS and the Port, and the funding applications demonstrate that concrete steps have indeed been taken to bring the project into fruition and render the 250-acre site very far from merely "conceptual."²¹

Third, the FEIR's Project Description fails to consider the timescale of the Project. It makes no sense to assume, as the FEIR does, that given the serious land deficits (over 300-acres) the Port is facing, that there will be no further land use planned for automobile storage once the five-year temporary site expires.²² The FEIR summarily dismisses these land deficits by referring commenters to its superficial Global Responses.²³ This is not substantial evidence to support a conclusion that the 250-acre site is speculative. By postponing review of this component, the FEIR improperly bifurcates the project in violation of CEQA, and in doing so, severely underestimates the impact on human health and the environment.

¹⁷ Commenters' July Letter, p. 8 (citing OHD, Collaboration Call with City of Oxnard at p. 2).

¹⁸ *Id.* (Commenters also noted that "Private investments made within this zone will expect return on their investment over a period of time. This strongly suggests that an increased movement of cars and other goods through this corridor was reasonably foreseeable.")

¹⁹ Commenters' July Letter, p. 8 (citing City of Oxnard & The Port of Hueneme: Partners in Economic Development, *Flyer Re: Ensuring the commercial viability of a major Ventura County Economic Engine - The Port of Hueneme (PoH) - for a better tomorrow at the City of Oxnard.*)

²⁰ FEIR, Section 12.4.2, Global Response 3, p. 493.

²¹ Commenters' July Letter, pp. 6-8 (citing Email between Dona T. Lacayo and GLOVIS USA (Nov. 7, 2019), Email between Dona T. Lacayo and GLOVIS USA (Aug. 20, 2019), Email between Dona T. Lacayo and GLOVIS USA (Sept. 2019); *Memorandum of Understanding*, Oxnard Harbor District (March 3, 2020); Email from Kristin Decas to Commissioners, Subject Weekly Update (Oct. 16, 2020); OHD, Collaboration Call with City of Oxnard at p.2 (Ongoing)).

²² Commenters' February Letter, p. 9; Commenters' July Letter, p. 9 (citing Oxnard & POH Commercial Viability Report, p.1. PROD-PHCN0000828).

²³ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-15, p. 12-1162.

IV. The FEIR's Project Description is Inaccurate and Misleading and Impedes Meaningful Public Review

As stated in prior comments, the City has disingenuously omitted analysis of the broader Port logistics expansion that this Project represents. The City has strained to create a project description that artificially limits the scope of the Project to the 34-acre site, despite substantial evidence demonstrating a much broader plan to increase storage capacity in the region, including at the 250-acre Multimodal Logistics Center. In doing so, the City has produced a FEIR with a flawed project description under CEQA that contradicts its own objectives and fails to offer the Planning Commission the information necessary to properly assess the impacts of this project. This is discussed further in Section V.

The City simply ignores the multiple comments submitted concerning the inadequacy of the project description itself—more specifically, the incompatibility of the Project's objectives with the alleged "temporary" nature of the storage site.²⁴ One of the key objectives listed for this Project is to "reduce and consolidate" reliance on off-port satellite storage locations.²⁵ Yet, the City maintains that the project will be temporary, stating: "[t]he project proposes a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. Future expansion of Port facilities based on the project is speculative at this time."²⁶ The FEIR fails to reconcile this inherent conflict nor explain how the Project, allegedly limited to a maximum of 5 years, will actually result in the consolidation of existing sites to meet the Project's objectives.

As we stated in our July 1, 2022 comment letter, the City has failed to explain how the Project will be both "temporary" and fulfill its objectives to consolidate off-port storage.²⁷ There are no details, for example, for how the site will be transitioned post-Project but continue to serve the consolidation objective and meet the Port's known need for more land to accommodate its expansion.²⁸ Moreover, if this project is truly temporary, it would fail to satisfy the stated objectives—making Alternative One: No Project/No Build by far the environmentally superior alternative²⁹ that the City should adopt. The rejection of this alternative in the FEIR is based on deficient and incomplete analysis.

The inadequacy of the project description means that the Planning Commission is being called to make a decision "in the dark"—without the necessary information to fully appreciate the full scope of this Project or its impact. The approval actions before the Commission, therefore, involve much more than a straightforward EIR approval. Here, Planning

²⁴ See Commenters' July Letter

²⁵ FEIR, Section 3.5, p. 3-15.

²⁶ FEIR, Section 12.5, Response to Comment Letter #206, Response No. 206-20, p. 12-1163.

²⁷ Commenters' July Letter, pp. 9-10.

²⁸ *Id.*

²⁹ The FEIR also identified Alternative Two: Two Existing Off-Port Vehicle Storage Locations as the environmentally superior option among the Project alternatives. FEIR, Section 6.9.4, pp. 6-16. This conclusion is as flawed as the rejection of the No Project/No Build alternative, as the analysis of this alternative is not only incomplete, but also fails to incorporate feasible mitigation measures to address air quality impacts, such as the implementation of zero-emission technology. See Commenters' February Letter, p 69; FEIR, Section 6.7, pp. 6-5 to 6-10.

Commissioners are not simply being asked whether to certify the FEIR and approve a Special Use Permit for a single project. Despite how the Planning Division has decided to reframe this project as a “Temporary” Vehicle Storage Facility to make it seem benign, this Project sets the stage for an unprecedented expansion of Port activities into the very neighborhoods that have already borne the brunt of air pollution, traffic, noise, and lack of greenspace and coastal access. This is not simply a storage lot; it will hasten the expansion of commercial and industrial activity in the region—an expansion for which we do not know the true extent of environmental impact. Because of these flaws in the project description, the FEIR remains inadequate as an informational document and precludes meaningful public review. It should therefore be rejected in its current form and recirculated for further public review if revised to fix these discrepancies.

V. The FEIR Fails to Consider a Reasonable Range of Alternatives and Improperly Rejects Existing Alternatives

A major function of an EIR is the lead agency’s full assessment of a reasonable range of alternatives stemming from a well-prepared project description and statement of objectives.³⁰ However, where a project description is inadequate or overly narrow—as in the case here—the alternatives analysis risks being equally flawed. As discussed at more length in commenters’ February and July letters,³¹ the project objectives are narrowly tailored in a way that facilitates the City’s improper rejection of alternatives that could offer substantial environmental advantages and avoid worsening air quality and further concentrating industrial uses and harms adjacent to an over-burdened residential neighborhood, while still meeting most project objectives. As a result, the FEIR contains a flawed and incomplete analysis of feasible alternatives and fails as an informational document that facilitates meaningful public engagement. It, therefore, cannot be certified.

The FEIR fails to address the deficiencies in the DEIR’s alternatives analysis. First, the lack of detail provided in the EIR prevents a meaningful public review and a reasonable choice of alternatives.³² For instance, it is impossible to know based on the limited discussion and lack of detailed information provided in the EIR whether there are no feasible alternative sites for car storage that would meet most of the stated objectives.³³ Lead agencies are required to disclose in their EIR their reasons for concluding that no feasible alternative locations exist.³⁴ However, the City’s failure to consider the Navy Base Ventura County (“Navy”) property as an alternative site

³⁰ Cal. Pub. Resources Code, § 21002; Cal.Code Regs., tit.14, § 15124(b); *Laurel Heights Improvement Ass’n v. Regents of the Univ. of California* (1988) 47 Cal.3d 376, 400; *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1163, citing Cal.Code Regs., tit.14, § 15124(b).

³¹ Commenters’ February Letter, pp. 68-83; Commenters’ July Letter, p. 15.

³² See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287 (“Absolute perfection is not required; what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”)

³³ FEIR, Section 1.5, pp. 1-11 to 1-12.

³⁴ Cal.Code Regs., tit.14, § 15126.6(f)(2)(B); see also *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405, as modified on denial of reh’g (Jan. 26, 1989) (“Those alternatives and the reasons they were rejected, however, must be discussed in the EIR in sufficient detail to enable meaningful participation and criticism by the public.” (citations omitted)).

in the EIR and to instead address its feasibility solely in a General Response, violates CEQA and is further evidence of the FEIR's failings as an informational document.

Second, the FEIR continues to apply circular logic to reject alternatives for not lessening project impacts. By failing to carry out the full analysis required under CEQA, the FEIR underestimates the Project impacts. As a result, it comes to the incorrect conclusion that the project would not result in significant or unavoidable impacts and therefore the City has no obligation to consider alternatives. However, as discussed at length in this and other comments, there is substantial evidence that the project will have significant impacts on the environment and public health.

Third, the FEIR improperly conflates the City's jurisdiction with feasibility. Alternatives cannot be rejected simply because they are beyond the lead agency's authority.³⁵ And yet, the City relies on this argument to avoid even considering alternatives raised by commenters. For instance, the City relies on the 34-acre property being privately-owned to conclude that a park alternative is infeasible.³⁶ Similarly, the City refuses to consider the Navy property³⁷ as a feasible alternative in part because it does not have jurisdiction over Navy property.³⁸ This ignores the definition of feasibility under CEQA³⁹ and fails to address the central question of whether the OHD as the project proponent has reasonable access, ownership, or control over alternative sites.⁴⁰ In the case of the Navy property alternative, the close relationship between the OHD and the Navy evidenced by a 2021 Joint Use Agreement demonstrates that it is a viable alternative worth considering. Nevertheless, this goes undiscussed in the FEIR. The City should apply the CEQA definition of feasibility and fully evaluate all reasonable alternative locations⁴¹, including the Navy property.

³⁵ See *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286–287 (“[I]t is not appropriate to disregard alternatives simply because the alternative may be beyond the scope of expertise of the agency or because the alternative may require implementing legislation since CEQA was intended to provide a basis for consideration and choice by all branches of government.”)

³⁶ FEIR, Section 12.4.2, p. 12-15.

³⁷ It is disingenuous for the City to claim it is not informed about the Joint Use Agreement between the Navy and the Port given the coverage the agreement received in the local press. See, e.g., Commenters' February Letter, p. 71 (citing Brian J. Varela, Port of Hueneme, Navy Partner to Assist Los Angeles County Port Backlog, Ventura County Star, November 28, 2021, 10:40 a.m.; <https://www.vcstar.com/story/news/2021/11/28/port-hueneme-assist-la-county-ports-through-agreement-navy/8771397002/>).

³⁸ FEIR, Section 12.4.2, p. 12-15.

³⁹ CEQA Guidelines define feasibility as capable of “being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Cal.Code Regs., tit.14, § 15364.

⁴⁰ Cal.Code Regs., tit.14, § 15126.6(f)(1). See, e.g., *Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 288 (finding that an alternative to develop a university athletic stadium jointly with the city was properly rejected based on a prohibition to spend funds on a non-university stadium and the city's documented lack of interest in a joint stadium project).

⁴¹ Another such alternative site could include prioritizing the on-dock parking structure for which the OHD has sought federal funding over the past several years, which is intended to store over 7,000 vehicles. Commenters' February Letter, p. 71 (citing Oxnard Harbor District, Economic-Environment Partnership, Slide presentation (undated), Slides 29 and 30); see also <https://maritime.dot.gov/PIDPgrants>. While not all information about this proposal is public, it is apparent that it is not speculative; the Port has hired consultants to study this parking

Finally, the FEIR once again ignores the current availability of zero-emission technology⁴² and GLOVIS' role as a leading regional maker of heavy-duty Class 8 zero-emission trucks in its rejection of the Electric Car Carrier Truck Alternative. During public meetings and in public statements, the OHD frequently highlights its alleged commitment to a zero-emission transition, and yet when an opportunity arrives to make a clear commitment that investment is not even considered or analyzed. In order to begin to address the air quality impacts from the Port on the surrounding community, the OHD must invest in a zero-emission transition and establish near-term milestones to achieve that vision, such as the use of zero-emission car-carriers. In their expert reply to the FEIR, Matt Hagemann and Dr. Paul E. Rosenfeld identify several mitigation measures related to zero-emission technology that the City should consider and evaluate to address air quality impacts from the Project.⁴³

Due to deficiencies described above and in previous letters, the EIR contains an inadequate discussion of project alternatives in violation of CEQA.

VI. Mitigation Measures Offered in FEIR Continue to be Inadequate

Under CEQA, a public agency cannot approve a project if there are “feasible mitigation measures which substantially lessen the significant environmental effects” of the project.⁴⁴ Any potential mitigation measure must be at least partially effective in reducing the significance of the impacts at issue.⁴⁵ The FEIR fails to offer mitigation measures that meet this standard. Since the FEIR does not evaluate the full scope of the Project due to an overly narrow project description and project objectives, it fails to analyze, much less address, the significant impacts that would result from the Project. Given that most mitigation measures in the FEIR went unaltered,⁴⁶ those measures continue to be inadequate and will not substantially lessen the significant environmental effects of the full scope of the Project.

Moreover, the few updates made to mitigation measures for biological resources and cultural and tribal resources in the FEIR continue to fall short of addressing the impacts from the Project. For instance, the addition of a preconstruction wildlife survey to the biological resource mitigation measures will be insufficient in detecting special status species, as discussed in detail by Dr. Shawn Smallwood.⁴⁷ As a result, the FEIR's mitigation measures are deficient, and new measures must be considered following a complete evaluation of the Project's full impacts.

structure proposal. Commenters' July Letter, p. 13 (citing Oxnard Harbor District, Professional Services Agreement (May 26, 2021); and Oxnard Harbor District Comprehensive Economic Development Strategy at p. 50 (2021)).

⁴² Commenters' February Letter, pp. 71-83; Commenters' July Letter, p. 15. There are companies working on developing zero-emissions Class 6-8 car carrier trucks and a commitment by the OHD to order and use these carriers could drive additional investments in this type of technology. See Namrita Chow, Electric car carriers promise to pack a punch, Automotive Logistics, access Oct. 17, 2022 at 4:52pm, <https://www.automotivelogistics.media/finished-vehicle-logistics/electric-car-carriers-promise-to-pack-a-punch/42868.article>, attached hereto as Attachment 6.

⁴³ Attachment 4, SWAPE Report, pp. 12-13 (hereinafter “SWAPE report”).

⁴⁴ Cal. Pub. Res. Code § 21002.

⁴⁵ *Sierra Club v. County of Fresno*, (2018) 431 P.3d 1151, 1166.

⁴⁶ Commenters' February Letter, pp. 63-67.

⁴⁷ See Attachment 5, Smallwood Reply Letter (Oct. 18, 2022), pp.8-9 (hereinafter “Smallwood Reply Letter”).

VII. The FEIR Inadequately addresses the Cumulative Impacts

The FEIR's flawed cumulative analysis violates CEQA. The City claims that Table 4-1 lists all projects that could contribute to considerable cumulative impacts.⁴⁸ The FEIR also acknowledges various Port projects that are in development, including the 250-acre Multimodal Logistics Park, channel deepening, berth widening, on-dock expansions, expansion of rail lines, the Structure for Transfer of Automobiles Creating Key Economic Development (STACKED) Project, off-Port Cargo storage yards and overall expansion of Port Operations, the INVEST Project, the BUILD Project, and the Port Intermodal Corridor (Hueneme Modernization Project).⁴⁹ Yet, the FEIR fails to include relevant projects in its cumulative analysis.

A. The FEIR Misstates and Improperly Rewrites CEQA Requirements for Cumulative Impacts

The FEIR attempts to re-write the CEQA process for what must be considered in a cumulative impact analysis.

The City admits that CEQA requires that the FEIR address cumulative impacts.⁵⁰ Cumulative impacts are those that result from "the combination of the project evaluated in the EIR together with other projects causing related impacts."⁵¹ The incremental effects of an individual project "are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."⁵² Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.⁵³ A relatively "small" impact is not insignificant under CEQA if it contributes to an existing environmental problem.⁵⁴

The City also admits CEQA requires a cumulative impact analysis to contain, at minimum, either 1) a list of past, present, and reasonably anticipated future projects, including those projects outside the agency's control that produce related or cumulative impacts⁵⁵ or 2) a summary of such projections contained in an adopted general plan or related planning document

⁴⁸ FEIR, Section 4.2, p. 4-2.

⁴⁹ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁵⁰ FEIR, Section 4.1, p. 4-1; Cal.Code Regs., tit.14, § 15130; *see also* Cal.Code Regs., tit.14, § 15355

⁵¹ Cal.Code Regs., tit.14, § 15130(a)(1).

⁵² *Id.* at § 15065(a)(3).

⁵³ *Id.* at § 15355(b) (The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time).

⁵⁴ "[A] project's cumulative environmental impact cannot be deemed insignificant solely because its individual contribution to an existing environmental problem is relatively small." *See, San Francisco Baykeeper, Inc. v. State Lands Comm'n* (2015) 242 Cal.App.4th 202, 223. "In fact, 'the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant.'" *Id.* (quoting *Cmtys for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 120).

⁵⁵ FEIR, Section 4.1, p. 4-1; CEQA suggests that agencies consider factors such as the nature of the environmental resource examined, location of project, and type. Cal. Code Regs., tit.14, § 15130(b)(2).

that evaluates regional or areawide conditions.⁵⁶ The cumulative impacts analysis of this Project continues to remain flawed.

As with the Project Description, the FEIR's failure to include several projects in its cumulative impacts analysis stems from its erroneous understanding of the CEQA requirements. The FEIR claims that several pertinent projects need not be considered in its list of past, present, and reasonably anticipated future projects because (1) "each cumulative development project represented in Table 4-1 was "determined to be reasonably foreseeable by the City based on applications that the City received at the time the Notice of Preparation (NOP) for the Draft EIR was released (June 25, 2020)"⁵⁷; and (2) the City does not consider conceptual long-range projects under the jurisdiction of another lead agency to be reasonably foreseeable.⁵⁸

Commenters address each of these excuses in turn. First, whether a project is a "reasonably anticipated" does not turn on whether the City has received an application for it. Indeed, such a requirement is nowhere to be found in the City's or the State's CEQA guidelines. Because this element is not required under law, it should not factor into which projects are listed. Second, as plainly stated in the law, the agency must consider any project that can reasonably have cumulative impacts even if "those projects [are] outside the agency's control." Thus, the legal excuses provided by the City do not pass muster.

B. The FEIR's Conclusions Regarding the Projects Included in the Cumulative Analysis Are Not Supported by Substantial Evidence

The City cites to three different reasons why the projects commenters list should not be considered: (1) that some cumulative impacts are speculative; (2) they are not within the proposed geographic zone; and (3) despite proposed increases in passageways for rail and freight traffic, *this project* doesn't change capacity requirements.⁵⁹ These objections are unfounded.

First, commenters have pointed to several projects that could impact the area surrounding the 34-acre site with supporting evidence demonstrating why they are not speculative. For example, the proposed widening of Hueneme Road to four lanes included in the Roads and Transportation Five-Year Capital Improvement Program; how the Port has invested in a new rail line with GLOVIS; and the capital investments to deepen berths to accommodate larger capacity vessels.⁶⁰ The City makes no effort to engage with the wealth of evidence of these substantial

⁵⁶ *Id.* at § 15130(b)(1).

⁵⁷ FEIR, Section 12.4.2, p. 12-17.

⁵⁸ *Id.*, at p. 12-18.

⁵⁹ *Id.*, at pp. 12-17 to 12-18.

⁶⁰ Commenters' February letter at pp. 19-20 (citing INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project Summary, PROD-00002504; INFRA FY20 Application Project Summary; [2020 OHD Comprehensive Economic Development Strategy](#), PHCN0002370; [2020 OHD Comprehensive Economic Development Strategy](#), PROD-PHCN0002353; INFRA FY19 Multimodal Optimization & Vehicle Efficiency Project, PROD-PHCN00005158; OHD Board of Commissioners Meeting Agenda- September 11, 2017-Press Report Attachment, PROD-00002699; The Hueneme Modernization Project BCA Appendix - March 17 2021, PROD-0004367; The Hueneme Modernization Project INFRA Grant Application FY2021, PROD-0003201; Ventura County Freight Corridor Study, (October 2021), Prepared by Iteris, Inc., on behalf of Southern California Council of Governments, The Port of Hueneme, Caltrans and Ventura County Transportation Commission at 36, PROD-PHCN0001900-2126).

plans. The record evidence demonstrates that concrete steps have been taken to bring the listed projects into fruition and disprove the City’s conclusion that these projects are “speculative.”⁶¹

Second, commenters have provided figures for the proposed developments including a figure showing the relative locations of the 34-acre site to the 250-acre site, a figure showing the relative position of the STACKED project (on the North Terminal), and another showing the traffic pathways and the potential widening of Hueneme Road.⁶² The City’s response to these relevant images has been to claim that these images “do[] not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.”⁶³ At the same time, the City notes that the cumulative impacts are only assessed in the geographic area “bound by Bard Road to the north; Ormond Lagoon Waterway/Edison Drive to the east; the Pacific Ocean to the south; and Ventura Road and other areas within the City of Port Hueneme to the west, but not within the Port of Hueneme or Naval Base Ventura County (“Navy”) Port Hueneme.”⁶⁴

As described above, the City cannot shirk its duty to review cumulative impacts just because a project may be in another agency’s control. Thus, delineating a line for any project “within the Port of Hueneme” is legally void, particularly given how the Port is viewing its many expansion projects as interconnected and in furtherance of their stated goal of expanding throughput. Furthermore, the lines drawn at Bard Road, Ventura Road, and Edison Drive are internally inconsistent. For example, the City addresses air quality concerns arising from Port operations and agricultural use which are outside these boundaries.⁶⁵ The City also extends the VMT analysis to Camarillo Airport and Tuff shed – both of which are outside these arbitrary lines.⁶⁶ The City cannot cherry pick instances in which to apply these arbitrary boundaries in a self-serving manner. The City cites to no authority for setting these specific limitations. At the very least, the city must explain why it chose these boundaries as supported by substantial evidence e.g., scientific studies indicate that emissions from facilities do not travel beyond “X” miles. In summary, these geographic boundaries are arbitrary and not supported by substantial evidence.

Even within these arbitrary boundaries that the City has set, several projects listed have at least some portion of their operations within this geographic region. The City cannot dismiss all these projects as outside the geographic area without taking a hard look at the impacts that portions of these proposed projects will likely have.

Third, the City admits that the “project would result in less trucking and more rail on/off moves compared to existing conditions” yet, the City concludes that it doesn’t need to conduct a cumulative impact analysis because “the City has not received an application for a new rail project.”⁶⁷ Similarly, in response to commenters noting that there are berth widening and

⁶¹ FEIR, Section 12.5, Responses to Comment Letter #206, Response Nos. 206-35 to 206-38, pp. 12-1164 to 12-1165.

⁶² See FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-17, p. 12-1162; Response No. 206-25, FEIR p. 12-1163; and Response No. 206-38, FEIR p. 12-1165.

⁶³ *Id.*

⁶⁴ FEIR, Section 12.4.2, pp. 12-17 to 12-18.

⁶⁵ FEIR, Section 5.33, p. 5.3-8.

⁶⁶ FEIR, Section 12.4.1, p. 12-13

⁶⁷ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-23, p. 12-1163.

dredging projects that would increase shipping traffic, the City concludes that new cars stored at the vehicle storage facility would not require additional ships.⁶⁸ Even assuming that the temporary 34-acre site will neither facilitate an increase in goods movement by ship nor rail nor truck in the area (a fact that commenters do not concede), the fact that all three pathways propose to be extended in this exact area reflect, without a question, significant impacts. Simply, the City fundamentally and mistakenly conflates these points in the FEIR and leaves the Planning Commission and the public with an incomplete cumulative impacts analysis.

Finally, even with the projects that have been listed in Table 4-1, the City undertakes no analysis of *how* the listed projects will impact the area surrounding the 34-acre site – including but not limited to additional emissions that might result and how that could impact vulnerable populations.⁶⁹ In summary, the EIR’s cumulative impacts analysis remains deficient such that the FEIR cannot be certified.

VIII. The FEIR Fails to Consider Environmental Justice Impacts and Violates CEQA

The temporary 34-acre storage site is located next to low-income, densely populated neighborhoods in south Oxnard. As commenters note in their February letter, a Report prepared by the California Office of Attorney General (“OAG”), provisions of CEQA, and Government Code Section 11135 require lead agencies to study the environmental justice impacts of projects and to mitigate those impacts.⁷⁰ Part of the discussion in the FEIR must include an evaluation of the location of the project because the significance of an impact on people and the environment may change based on the project’s setting.⁷¹ Commenters pointed to studies demonstrating how California communities of color and low-income communities bear a disproportionate burden of the state’s diesel trucking emissions.⁷² Commenters also highlighted that the nearest school is only 780 feet from the Project site and the proposed Project would also be located as close as 360 feet from residences located to the northwest, north, and northeast of the Project site.⁷³

To these points, the City’s response has been to point the public to Global Response No. 5 on environmental justice impacts.⁷⁴ This response is insufficient. Although the City admits that the proposed Project would “result in a minor increase in vehicle traffic...[due to] worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips,” it nevertheless concludes “impacts would be less than significant on sensitive receptors.” This conclusion is based entirely on the assertion that the project site is “not located in an area with poor circulation or heavy traffic.” The City points to no study supporting its circulation finding and proffers no

⁶⁸ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-21, p. 12-1163.

⁶⁹ FEIR, Section 4.2, Table 4-1, p. 4-2.

⁷⁰ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-180 to 206-182, p. 12-1189 (citing the Office of the California Attorney General, *Environmental Justice at the Local and Regional Level* (2012), p. 3, available at https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/ej_fact_sheet.pdf).

⁷¹ *Id.*

⁷² FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-183, p.12-1189 (citing Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in California*, fact sheet (Feb. 2019), available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>).

⁷³ FEIR, Section 12.5, Responses to Comment Letter #206, Response No. 206-185, p. 12-1190 (citing DEIR, p. 5.3-9)

⁷⁴ FEIR, Section 12.4.2, p. 12-11

evidence in support of the traffic patterns. In fact, with the additional projects described above, it would seem that the City has conveniently omitted several projects in the pipeline that would increase traffic and emission patterns.

Commenters appreciate that the City has added language responding to commenters' concerns associated with nearby power plants, superfund site, and factories.⁷⁵ The City summarily concludes that the "distance between the project" and these sites would not create a significant hazard to the public.⁷⁶ However, the City fails to provide the underlying data, study, or processes used to come to this determination. Neither the Commissioners nor the public should accept conclusions that have not been properly substantiated – especially where the health and safety of vulnerable populations and overburdened communities are at stake.

IX. The City has Failed to Address Deficiencies in Language Access, Which has Further Frustrated Meaningful Public Review of the EIR Documents

The City claims that it is under no obligation under State law (CEQA or otherwise) to translate environmental review documents into Spanish or any other language.⁷⁷ This response completely ignores comments previously submitted highlighting the fact that limiting public access violates a core tenet of CEQA⁷⁸ – that "the public holds a 'privileged position' in the CEQA process 'based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.'"⁷⁹

While the City acknowledges that CEQA, "deems public participation and comment during any environmental review process as an essential part of the CEQA process," it has done very little to offer document translation or interpretation. In fact, according to the FEIR's response to comments, only the Port has offered the minimal language access services in the form of a Spanish-translated Executive Summary from the DEIR, and "a video in Mixteco explaining the contents of the Draft EIR."⁸⁰

Under the California Bilingual Services Act, State agencies must distribute applicable translated written materials if the State agency "serves a substantial number of non-English-speaking persons" and "[t]he information solicited, required, or furnished affects or may affect the individual's rights, duties, or privileges with regard to that agency's services or benefits." Although, as local agencies, the City and Port are not directly subject to this rule, refusing to translate environmental documents restricts limited or non-English speaking individuals' ability and right to meaningfully participate in environmental decisions that impact their health and safety. Given the importance of this Project to the many residents for whom English is not a primary language, we reiterate our call to translate the EIR and make it accessible by recirculation in order to ensure meaningful public review.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ FEIR, Section 12.4.2, p.12-9.

⁷⁸ See Commenters' July Letter.

⁷⁹ Cal. Code Regs. tit. 14, § 15201 (1992).

⁸⁰ FEIR, Section 12.4.2, p.12-9.

X. The FEIR's Vehicle Miles Travelled Analysis Remains Woefully Inadequate and Does Not Support a Finding of No Significant Traffic of VMT Impacts

The City admits that neither it, nor the City of Port Hueneme have adopted guidelines or significant criteria for assessing VMT by development projects⁸¹ — a requirement under California Public Resources Code §21099 and 14 Cal. Code Regs § 156064.3 (CEQA Guidelines). Rather than directly responding to our comments highlighting the need for a more robust VMT analysis for the Project, the FEIR points to the same conclusory and vague explanation in its Global Response No. 6 to justify not doing more to provide the Planning Commission and the public with sufficient information to appreciate the full scope of traffic impacts. The FEIR's conclusion that no VMT impacts would result from the Project is unsupported by what little analysis is offered for three key reasons.

First, the FEIR's application of Governor's Office of Planning and Research's ("OPR") Technical Advisory on Evaluating Transportation Impacts ("Technical Advisory") is flawed. The FEIR fails to adopt any specific methodology or criteria for its evaluation of the Project's VMT that would make its conclusions verifiable based on OPR's guidance. It inappropriately adopts a screening threshold when no such threshold applies to this Project and it misapplies the qualitative analysis outlined in the Technical Advisory. The FEIR's conclusions that no VMT or traffic impacts are present are therefore unreliable.

The FEIR contends that the qualitative analysis approach outlined in OPR's Technical Advisory is the appropriate evaluation for the Project's VMT impact.⁸² It also summarily adopts the DEIR's conclusion that no VMT impacts would result from the implementation of the Project without showing how the qualitative analysis approach was specifically applied in this case. The City admits based on the screening thresholds outlined in OPR's Technical Advisory — which apply to residential, office, retail projects, land use plans, and transportation projects — that this project would not "screen out"⁸³, i.e., that further analysis would be required even under a qualitative approach. Yet, the FEIR reaches the conclusion that "the project would lead to a less-than-significant transportation impact" using the same retail threshold it admits is inapplicable.⁸⁴

The Technical Advisory does recommend, however, that "[a]gencies should consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations."⁸⁵ No such data-supported analysis was provided in this FEIR.

Second, the FEIR's analysis on VMT and traffic impacts is conclusory and relies on contradictory assumptions. For example, in its assessment of alleged VMT reductions, the City assumes the elimination of two existing vehicle storage facilities to conclude overall VMT reduction while at the same time defending the DEIR's analysis of the traffic effect of the Project

⁸¹ FEIR, Section 12.4.2, p.12-13.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ California Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts on CEQA (OPR Technical Advisory) (December 2018), p. 17; available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

“under existing and cumulative conditions, with due consideration of other related projects in the area.”⁸⁶ These inconsistencies lead to self-serving conclusions that simply cannot be relied on.⁸⁷ If current conditions are assumed, then VMT analysis would have to account for the higher VMT that the Project would produce as a result of having the approximately 240 daily trips made in individual cars (according to one estimate provided), compared to the more limited car carrier truck trips making the haul to the furthest existing site. Even using that simplistic comparison, which we do not concede qualifies as a VMT threshold under either the Technical Advisory or CEQA guidelines, the Project would still generate more vehicle miles travelled on its own as compared to the furthest existing site.⁸⁸ The FEIR attempts to avoid dealing with this increase in VMT by attempting to shoehorn a threshold analysis for new retail facilities that is inapplicable to the Project.

Third, the FEIR ignores evidence submitted showing that the traffic report that underlies much of the City’s environmental review was merely rubber stamped and created in a way to offer cover for predetermined conclusions. It therefore cannot be relied upon to conclude that no impacts will result from the project.

As commenters pointed out in their July 1, 2022 comment letter to the City, documents made available in response to Public Records Act requests suggest that there was never any intention on the part of the Port applicant or the City to vet the real traffic impacts of the 34-acre site. In fact, emails between Port staff and a land-use planning specialist suggest that the City might forgo a traffic report altogether by providing a letter, noting, “the City just needs a paper trail - this way they can cover themselves with a letter from a professional.”⁸⁹ In subsequent emails, the hired consultant confirmed that they would prepare the trip generation analysis based solely on the Project Description and a Design letter⁹⁰— without considering the requirements outlined in CEQA guidelines or the recommendations found in the Ventura County Freight Corridors Study. These revelations, which the FEIR neglects to address, cast further doubt on the reliability of calculations, information, and analysis used to support the FEIR’s conclusion that no significant traffic or VMT-related impacts will occur.

Given the cursory manner in which the traffic study and VMT analysis were conducted, it is unsurprising that the FEIR is replete with inconsistencies and contradictions that call into question its reliability as an informational document. We call on the Planning Commission to reject this FEIR. Moreover, the City should fix its lack of baseline methodologies and thresholds for assessing the impact of VMT from this Project. Until these errors are corrected, the FEIR fails to meet basic standards under CEQA.

⁸⁶ FEIR, Section 12.5, Responses to Comment Letter #206, Response 206-51, pp. 12-1166 to 12-1167.

⁸⁷ Note: the FEIR does not address the inconsistent assumptions highlighted in our February 14, 2022 comment letter wherein we highlight that in order to switch to an analysis that would presume the elimination of two existing sites, the agency must first justify this decision by showing that the existing conditions are somehow misleading or without informational value. No such analysis has been done in the FEIR. See Commenters’ February Letter, p. 25.

⁸⁸ See *id.*, at pp. 24-25.

⁸⁹ Commenters’ July Letter (citing emails between Dona T. Lacayo and Kevin Waldron at p. 2 of 8 (Aug. 2018)).

⁹⁰ *Id.* (citing emails between Dona T. Lacayo and Darryl F. Nelson at p. 1 of 11 (Aug. 2018)).

XI. The FEIR Continues to Rely on Flawed Air Emissions Modeling, Lacks the Requisite Health Impact Analysis, and Fails to Properly Assess Greenhouse Gas Emissions.

The FEIR fails to justify its modelling used to calculate greenhouse gas emissions (“GHG”) and air quality impacts and continues to lack the necessary analysis on health impacts. These flaws were originally outlined in a findings report submitted by experts Matt Hagemann and Dr. Paul Rosenfeld and incorporated into commenters’ February 14, 2022 letter.⁹¹ Hagemann and Rosenfeld have reviewed the FEIR and responses to those comments and have concluded that many of the justifications used by the City for their approach to air emissions, health hazards, and GHG emissions remain fundamentally flawed.⁹² Several of these flaws in the FEIR are outlined below:

- **Hazards and Hazardous Materials** – The FEIR fails to address the lack of a Phase I ESA analysis, despite being a key element called for in the City of Oxnard 2030 General Plan Safety and Hazards Chapter. More specifically, the FEIR does not explain why Policy H-7.12, which requires a hazardous materials study for any new development, was not followed.
- **Air Quality and CalEEMod Model** - The FEIR again fails to provide access to, or justify the use of, the underlying data inputs used to calculate the Project’s emissions. More specifically, the FEIR refers to “applicant provided” information for its inputs on the length of construction for the site, yet the underlying data, and the justification for using it, are not made publicly available in the documents attached to the FEIR. This makes it impossible to verify whether the changes to defaults accurately reflect the proposed construction schedule. Despite the City’s claims that relying on “applicant provided” information is sufficient, CalEEMod requires that information used to change defaults be supported by substantial evidence as required under CEQA.⁹³ The calculations, therefore, remain unreliable and the City must either justify these modifications with substantial evidence or revise its calculations. Similarly, the FEIR’s modeling concerning construction activities is flawed as the FEIR arbitrarily modified construction lengths based on different phases of development – potentially underestimating peak daily emissions. Similarly, the FEIR fails to provide substantial evidence for changing off-road construction equipment amounts therefore making it challenging, if not impossible, to verify if these changes are accurate.
- **Greenhouse Gas Emissions** – The conclusion that GHG impacts are “less-than-significant” relies on the same incorrect and unsubstantiated air modelling described above. Moreover, the FEIR relies on outdated thresholds which the City fails to justify through substantial evidence. This has resulted in the FEIR failing to identify any potentially significant GHG impact from the project.

⁹¹ See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (February 9, 2022), Attachment A to Commenters’ February Letter.

⁹² See Letter from Matt Hagemann and Dr. Paul E. Rosenfeld to Fernando Gaytan (October 17, 2022), attached hereto as Attachment 4, SWAPE Report.

⁹³ See SWAPE Report.

This flawed analysis of air pollution impacts also extends to the FEIR’s treatment of the necessary mitigation and health impacts associated with it. In concluding that the project will not reach the thresholds set by Ventura County Air Pollution Control District (“VCAPCD”), the FEIR relies on an arbitrarily restrictive view of the Project without accounting for the inconsistencies between the Project Description and Objectives and ample evidence demonstrating that this project encompasses more than the 34-acres described and for longer than five years. This arbitrarily restrictive scope is also used by the City to claim that the Project will not pass emissions thresholds set by the VCAPCD⁹⁴ and to justify its refusal to conduct the type of Health Impact Assessment required under the California Supreme Court case, *Friant-Ranch*.

In short, the FEIR’s conclusion misses the mark. While CEQA may not mandate an in-depth risk assessment outright:

“CEQA requires that the EIR have made a reasonable effort to discuss relevant specifics regarding the connection between two segments of information already contained in the EIR, the general health effects associated with a particular pollutant and the estimated amount of that pollutant the project will likely produce.”⁹⁵

Because the FEIR fails to address flaws in its modeling, its estimation of the pollutants generated by the Project is unreliable. Moreover, the narrow and cursory analysis that the FEIR does offer on air pollutants and potential health impacts, is unverifiable given the lack of access to the underlying data. This foundational information is necessary for informed decision-making and public participation. The City, therefore, cannot support its conclusion that the Project falls under the VCAQCD’s thresholds. Even so, the FEIR misinterprets *Friant-Ranch* wherein the California Supreme Court found that CEQA requires analysis correlating increased air emissions to probable resulting human health effects.⁶ The City cannot claim that no emissions will result from this Project just as it cannot avoid the necessary health impact analysis required under *Friant-Ranch* by simply stating that emissions will not surpass thresholds it has arbitrarily chosen to apply.

As further highlighted in Hagemann and Rosenfeld’s review and commenters’ letters, the FEIR also fails to address the following:

- **Diesel Particulate Matter emissions** – The City fails to include a health impact of using equipment producing diesel particulate matter (“DPM”) emissions during a construction phase of the Project slated to last over 180 to 200 days and its justification for not doing so is not supported by the evidence. More specifically, as the Hagemann and Rosenfeld report points out, “until both the Project’s construction and operational health risks are quantified, summed together, and compared to the VCAPCD threshold of 10 in one million, the

⁹⁴ SWAPE Report, pp. 5-6.

⁹⁵ *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 521

FEIR’s response is inadequate” and does not evaluate the Project’s potential health risk impacts.

- **Comprehensive assessment of Toxic Air Contaminants** – The FEIR fails to provide a “good faith reasoned analysis” of the health effects of any increase in Toxic Air Contaminants caused by the Project, including those that result from the combustion of diesel and gasoline engines associated with the entire car storage complex, the 34-acre and the 250-acre sites, increased Port-related emissions due to augmented cargo throughput, and construction related to the aforementioned projects.
- **Encroachment of Port-Related Activities** – The FEIR also fails to adequately address comments concerning the shift in port-activity emissions towards south Oxnard populations adjacent to the Port-serving freight corridors like Hueneme Road.

In short, the FEIR ignores critical flaws in its analysis and inadequate data verification that call into question its reliability as an informational document for environmental assessment. The law requires that the public and the Planning Commission have an accurate assessment of potential health risks and air quality impacts – which this FEIR fails to deliver.

XII. FEIR Continues to Underestimate Impacts on Special Status Species, Habitats, and Wildlife Movement

The City failed to provide good-faith, reasoned responses to the comments raised regarding the DEIR’s biological impacts analysis.⁹⁶ Instead, the City offered partial responses and conclusionary statements that ignores large swaths of commenters’ concerns and failed to make significant changes to its analysis to ensure the full scope of direct, indirect, and cumulative biological impacts from the Project are evaluated by the FEIR. Therefore the FEIR’s conclusions that there will not be a significant impact on biological resources from the Project remains unsupported by substantial evidence.

In its responses, the City avoided addressing the full concerns raised in the expert report prepared by Dr. Shawn Smallwood that determined that significantly more special status species likely rely on the property for habitat, foraging, hunting, mating, or other needs.⁹⁷ The FEIR dismisses this evidence entirely and continues instead to rely on flawed reconnaissance surveys that failed to observe or detect special status species.⁹⁸ Further, Dr. Smallwood identified flaws in the additional assessment attached to the FEIR as Appendix FA.⁹⁹ In fact, he explains that the databases relied upon by the FEIR show bird species using nearby sites with similar levels of disturbance as the Project site, which undermines the FEIR’s conclusion that the Project site cannot be habitat to special status species.¹⁰⁰ The FEIR’s over-reliance on inadequate analysis and surveys means it grossly underestimates the special status species that may use the site and the value of this Project property as important habitat. Eliminating 34-acres of habitat (regardless

⁹⁶ These comments are laid out in significant detail in Commenters’ February Letter, at pp. 39-46 (citing Smallwood report).

⁹⁷ Commenters’ February Letter, at pp. 39-42.

⁹⁸ See Commenters’ February Letter, at pp. 40-41 (citing Smallwood report); Smallwood Reply Letter (Oct. 18, 2022), at pp. 3-5.

⁹⁹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 4-5, 15.

¹⁰⁰ Smallwood Reply Letter (Oct. 18, 2022), at p. 8.

of whether it is used for breeding or wintering) would result in a significant impact on special status species, thereby meeting the City's threshold of significance for a biological resources impact.

The slight update to the proposed mitigation measures is not sufficient to lessen the impact below the threshold level of significance. As was raised in previous comments, an additional pre-construction survey is unlikely to detect species that are notoriously difficult to detect in surveys, such as the burrowing owl.¹⁰¹ Moreover, the fact that there may be a detectable presence of a special status species at the time of the pre-construction survey does not change the fact that after five years of intensive use as a parking lot this habitat will be, at best, unavailable during that period and at worst irreparably damaged or destroyed.¹⁰²

The City's refusal to acknowledge the value of this property to wildlife extends to its alternative analysis as well. The FEIR concludes that using the 34-acre site as open space would not lessen the significant impacts from the Project, but that is based on an erroneous conclusion that building a parking lot on un-developed property would not impact special status species or wildlife movement, which is not supported by substantial evidence.¹⁰³

Commenters incorporate by reference all points raised in Dr. Smallwood's October 18, 2022 reply letter.

XIII. The FEIR must be Recirculated Before Project Approval and Certification

Under CEQA, an EIR must be re-circulated for review and comment whenever significant new information becomes known to the lead agency and is added to the EIR, after public notice of the availability of the draft document has been made, and before the EIR is certified.¹⁰⁴ Under such circumstances the lead agency is specifically required to re-notice the environmental review document to the public and all responsible agencies, and is required to obtain comments from the same, before certifying the document's impacts and alternatives analyses as well as any mitigation measures.¹⁰⁵ A lead agency's decision not to recirculate an EIR must be supported by substantial evidence.¹⁰⁶

"Significant new information" includes any information regarding changes in the environmental setting of the project under review.¹⁰⁷ It also includes information or data that has been added to the EIR and is considered "significant" because it deviates from that which was presented in the draft document, depriving the public of a meaningful opportunity to comment upon a significant environmental effect of the project, or a feasible way to mitigate or avoid such an effect at the time of circulation of the draft.¹⁰⁸ Recirculation is further required where the

¹⁰¹ Smallwood Reply Letter (Oct. 18, 2022), at pp. 8-9.

¹⁰² See *id.*, at p. 9.

¹⁰³ FEIR, Section 12.4.2, p. 12-16.

¹⁰⁴ Pub. Res. Code § 21092.1

¹⁰⁵ See *id.*; see also, Pub. Res. Code § 21153.

¹⁰⁶ Cal. Code Regs. tit. 14, § 15088.5(e)

¹⁰⁷ *Id.*, at § 15088.5(a).

¹⁰⁸ *Id.*

draft EIR is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”¹⁰⁹

While re-circulation is an exception and not the rule in the preparation of final environmental review documents, it is an exception that must be invoked here – where the absence of significant information rendered the DEIR ineffective in meeting CEQA’s substantive mandates, and now, where included, the addition of significant new information substantially changes the FEIR’s analyses and conclusions regarding the Project’s impacts, feasible alternatives and required mitigation.¹¹⁰

As stated in numerous comments to the DEIR, that document failed to provide critical information regarding the duration, scope, and mitigation of the Project’s impacts; it failed to adequately describe fundamental information relating to the phasing and timing of the project’s implementation and phase out by claiming to add permanent jobs to the region; it lacked adequate detail specifically regarding the construction and operations phases of the Project, including mitigation; and it contained analyses and mitigation measures relating to the Project’s air quality, traffic, human health and biological resources impacts based on incorrect datasets and formulas.

In some instances, the FEIR erratically and arbitrarily includes selective new data into its analysis of the Project’s impacts, and in others critical information remains absent from the document.

The FEIR contains significant new information and must be recirculated for public review and comment before being considered by the Planning Commission.¹¹¹ Although this new information does not cure the inadequacies pointed out in comments to the DEIR, the City has added new information that that the public should be allowed to thoroughly review and evaluate with sufficient opportunity to further comment prior to a decision by the Planning Commission. This new information includes, but is not limited to: a revision of Mitigation Measure MM-BIO01 related to biological resources; the addition of land use policies to be considered pertaining to aesthetics; different data on maximum daily construction emissions and maximum daily operational emissions; the addition of a new 2022 California Native Diversity database search performed and new analysis performed resulting from a revised habitat assessment concerning biological resources; alleged revisions to the analysis and evaluation of archaeological resources and mitigation measures proposed as MM-CUL-1 and MM-CUL-2; alleged revisions to the analysis of project impacts and mitigation measures under Tribal Cultural Resources; a new listing of potential hazardous sites; a new summary of significant unavoidable impacts not previously disclosed; remodeling of the project in CalEEMod used for the project to project emissions during construction and operation; and, a list of additional previously undisclosed alternative locations considered by the City. In addition, Appendix D, Air Quality

¹⁰⁹ *Id.*

¹¹⁰ *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Ca4th 1112, 1132.

¹¹¹ Cal. Code Regs. tit. 14, §15088.5.

and Greenhouse Gas Study and Appendix FA – Biological Resources Inventory 2022 were updated with new information previously not disclosed.

The FEIR also contains new references to the storage of electric vehicles at the site without any details as to whether these vehicles will require charging infrastructure at the site while the cars are being stored.¹¹² Thus, it is unclear whether further alterations to the site will be necessary in the near future. In short, this new information adds greater uncertainty and highlights the document's failure as an informational document.

The public must have an adequate opportunity to comment on these many changes and address any new impacts this new information may reveal. Providing just 10 days before a hearing with the Planning Commission does not provide that opportunity for meaningful public engagement concerning the new information contained in the FEIR. Given these revisions, the myriad other information, and alternative analysis added in the FEIR, recirculation is required.

Moreover, on March 21, 2022, our organizations requested that the City schedule a special meeting of the Planning Commission before deciding on whether to approve the Project¹¹³. Not only would this give the Commission an opportunity to hear from stakeholders and members of the public and provide for adequate language access, but it would also give the Commission time to review additional evidence that has become available after the comment period. Given the tremendous interest that this Project has garnered with over 200 written comments received, setting a special pre-determination hearing before the Commission is more than appropriate.

The City released its responses to our comments less than ten full days prior to the October 20, 2022 hearing.¹¹⁴ To provide Commissioners with the opportunity to thoroughly review all the evidence, including the evidence and comments from stakeholders, the special meeting of the Planning Commission should be set at least 30 days prior to it making a final decision on this FEIR and pending Special Use Permit.

XIV. Conclusion

The FEIR's continuing informational deficiencies render it unlawful. The City's responses to commenters do not address their arguments against the adequacy of the DEIR. The FEIR contains an incomplete project description, a deficient cumulative impact analysis that omits relevant projects and impacts, inadequate alternatives analysis, and an incomplete evaluation of environmental justice, air quality, traffic, language access, public health and biological resources impacts. Accordingly, the Planning Commission should not certify an FEIR at this time and must deny the requested Special Use Permit until the City is able to present a comprehensive and accurate report of the Project's scope, impacts, alternatives, and mitigation measures.

¹¹² City of Oxnard, Planning Commission Report, (October 20, 2022), p.10.

¹¹³ See Letter from CAUSE et.al., to Jay Dobrowalski, Re: Port of Hueneme =Vehicle Storage Site Environmental Impact Report Comment Period, (March 21, 2022); available at page 141 of the Planning Commission Staff Report for October 20, 2022.

¹¹⁴ Response to the comments submitted by our organizations were sent out from the email account of Senior Planner, Jay Dobrowalski at 5:00 p.m. on Monday, October 10, 2022.



EARTHJUSTICE



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

Sincerely,

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Fernando Gaytan
Earthjustice

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ATTACHMENT 4



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October 18, 2022

Fernando Gaytan
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**Subject: Comments on the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility
Project (SCH No. 2020069039)**

Dear Mr. Gaytan,

We have reviewed the September 2022 Final Environmental Impact Report (“FEIR”) and December 2021 Draft Environmental Impact Report (“DEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) located in the City of Oxnard (“City”). Upon review, we find that the FEIR is insufficient in addressing our concerns regarding the Project’s hazards and hazardous materials air quality, health risk, and greenhouse gas impacts. As asserted in our February 9th, 2022 comment letter, an updated EIR should be prepared to adequately evaluate the Project’s potential impacts on the environment.

Hazards and Hazardous Materials

Inadequate Analysis of Impacts

In our February 9th comment letter, we found that the DEIR’s finding of-less-than-significant impacts associated with Hazards and Hazardous Materials were made without an adequate evaluation of potential impacts and the findings should not be relied upon for the purposes of determining significance. To adequately disclose and mitigate Hazards and Hazardous Materials, we stated a Phase I Environmental Site Assessment was necessary for the Project site. The FEIR did not address this comment adequately.

In response to comment 206-232 and 206-233 (p. 12-1199), the FEIR provides no explanation to failing to address the comment we made, that the failure to prepare a Phase I ESA was inconsistent with the City of Oxnard 2030 General Plan Safety and Hazards Chapter, which states:

Policy SH-7.12 Hazardous Material Studies. Ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project.

The responses provide no explanation as to why Policy SH-7.12 was not followed. As the policy states, a Phase I ESA is necessary and an updated EIR should be prepared to include a Phase I.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

In our February 9th comment letter, we identified several issues with the DEIR's air model (California Emissions Estimator Model, "CalEEMod")¹ that artificially reduced the Project's construction and operational emissions. After review of the FEIR, we found that it fails to address all our concerns and maintain that the DEIR's CalEEMod model is flawed and fails to accurately estimate the Project's criteria air pollutant emissions. As such, we find the DEIR and FEIR to be inadequate and maintain that an updated EIR should be prepared to adequately evaluate the Project's local and regional air quality impacts. Until a proper air quality analysis is conducted, the Project should not be approved.

Unsubstantiated Changes to Individual Construction Phase Lengths

As discussed in our February 9th comment letter, the "Port of Hueneme 34-acre Temporary Vehicle Storage Facility" CalEEMod model included several unsubstantiated changes to the default individual construction phase lengths. Review of the FEIR demonstrates that the Project again fails to justify or correct this modeling error. As discussed below, we find the DEIR and FEIR to be inadequate for two reasons, and maintain that the less-than-significant air quality impact conclusion is unsubstantiated. Specifically, regarding the changes to the default individual construction phase lengths, the FEIR states:

"The comment states that the Draft EIR fails to mention or justify the individual construction phase lengths. As shown in Appendix A to Appendix D of the Draft EIR, the construction phasing is based on the Client provided RFI. As such, any changes to the default phasing were based on the project applicant provided information. For this type of project, CalEEMod does not provide default construction information. As such, the use of applicant provided information is imperative for construction phasing inputs. No further response is needed" (emphasis added) (Response 206-241, p. 12-1201).

However, the FEIR again fail to provide the above-mentioned Client Provided RFI. As such, we cannot verify that the changes are an accurate reflection of the proposed construction schedule. According to the CalEEMod User's Guide:

¹ "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/download-model>.

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”²

Here, until the FEIR provides the above-mentioned Client Provided RFI and shows the calculations used for the revised individual construction phase lengths, we cannot verify the changes are accurate.

These unsubstantiated changes to the individual construction phase lengths present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User’s Guide, each construction phase is associated with different emissions activities (see excerpt below).³

Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

Thus, by disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As such, there will be less construction activities required per day and, consequently, less pollutants emitted per day. As a result, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance. Thus, we reiterate our February 9th comment that the DEIR’s CalEEMod model is unsubstantiated, and the DEIR and FEIR’s less-than-significant air quality impact conclusion should not be relied upon.

Unsubstantiated Changes to Off-Road Construction Equipment Unit Amounts

As discussed in our February 9th comment letter, the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” CalEEMod model included several unsubstantiated changes to the off-road construction equipment unit amounts. Review of the FEIR demonstrates that the Project again fails to justify or correct this modeling error. As discussed below, we find the DEIR and FEIR to be inadequate and

² “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at*: <https://www.aqmd.gov/caleemod/user's-guide>, p. 12.

³ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at*: <https://www.aqmd.gov/caleemod/user's-guide>, p. 32.

maintain that the less-than-significant air quality impact conclusion is unsubstantiated. Specifically, regarding the changes to the default off-road construction equipment unit amounts, the FEIR states:

“The comment states that the Draft EIR fails to mention or justify the unit amounts of equipment. The model inputs used in the technical study are consistent with the Draft EIR’s project description, as shown in Section 1.3 of the Draft EIR. Project specific information was included in the modeling in accordance with the requirements of CalEEMod and CEQA in order to provide more project-specific analysis of potential impacts. These project specific inputs were shown in detail in Appendix D of the Draft EIR” (emphasis added) (Response 206-246, p. 12-1201).

As demonstrated above, the FEIR states that the off-road construction equipment unit amounts were noted in Section 1.3 of the Draft EIR DEIR’s. However, upon further review, the DEIR and associated documents fail to mention or justify the off-road construction equipment unit amounts in the project description or elsewhere in the Project documents. As such, we cannot verify that the changes are an accurate reflection of the proposed construction equipment. As previously stated, according to the CalEEMod User’s Guide:

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”⁴

Here, as the DEIR and FEIR fail to provide substantial evidence to support the off-road construction equipment unit amounts, we cannot verify the changes. As such, we reiterate our February 9th comment that the Project’s CalEEMod model is unsubstantiated, and the DEIR and FEIR’s less-than-significant air quality impact conclusion should not be relied upon.

Diesel Particulate Matter Emissions Inadequately Evaluated

As discussed in our February 9th comment letter, the DEIR failed to adequately evaluate the Project’s potential health risk impacts. Review of the FEIR again demonstrates a failure to adequately evaluate the Project’s potential health risk impacts. As such, we find the FEIR to be inadequate and maintain that the DEIR’s less-than-significant impact conclusion regarding the Project’s health risk impact should not be relied upon. Regarding the toxic air contaminant (“TAC”) emissions associated with Project construction and operation, the FEIR states:

“The comment states that the Draft EIR ignores the use of the Ventura County Air Pollution Control District (VCAPCD) Air Quality Assessment Guidelines with response to health risk impacts. The VCAPCD 2003 Guidelines, Section 6.5.1, Determining Whether the Project will Emit Toxic Air Contaminants states that lead agencies should refer to Appendix D, Major Toxic Air Contaminant Regulations and Common Toxic Air Contaminant Sources and Substances, for a list of common toxic air contaminant sources and substances that may be encountered at facilities

⁴ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.agmd.gov/caleemod/user's-guide>, p. 12.

in Ventura County and Appendix B, Common Equipment and Processes Requiring a VCAPCD Permit to Operate. The project would include offroad equipment during construction which may emit diesel particulate matter. However, construction would be temporary, lasting up to 200 days, and would not be concentrated in one area of the site. Thus, emissions would disperse rapidly and would not expose sensitive receptors to substantial pollutant concentrations. Furthermore, the project would not exceed applicable VCAPCD significance thresholds during construction or operation. Finally, as shown in the closest meteorological station to the project site at the Oxnard Airport, the predominant wind direction blows from the west to the east away from the closest sensitive receptors to the project site. As stated on page 1-5 of the Draft EIR, all vehicles stored at this vehicle storage facility would be light duty vehicles; no trucks or diesel-powered vehicles be stored at this facility. As such, the project would not result in air quality impacts related to diesel powered vehicles and idling trucks. Please refer to Global Response GR-4, Traffic Related Pollution and Health Risks. Regarding electrification of the Port fleet, the comment does not reference the content of nor challenge the adequacy of the Draft EIR, and no further response is required” (p. 12-1171).

Furthermore, the FEIR states:

“Commenters also claim that the Draft EIR should address health impacts related to increased diesel emissions and particulate matter. As identified in the Draft EIR (Section 5.3.5, Air Quality Project Impacts and Mitigation) Measures, pp. 5.3-12), the project would not expose nearby sensitive receptors to substantial concentrations of substantial pollutant concentrations exceeding state or federal standards or in excess of health risk criteria for toxic air contaminants and impacts would be less than significant. The operational and construction emissions generated by the project were remodeled in CalEEMod in the Final EIR to account for all proposed land uses, to reflect the 316 daily operational trips as discussed in the Draft EIR, and to remove certain reductions used in the Draft EIR CalEEMod analysis (see the updated emissions tables in Final EIR, Section 5.3.5, Air Quality Project Impacts and Mitigation Measures, pp. 5.3-12, and Appendix D, CalEEMod Output Results of this Final EIR). As shown in this Final EIR, the corrections do not result in a change in any significance determination previously disclosed in the Draft EIR, nor do they indicate a substantially more severe environmental impact than was previously disclosed. Thus, the operational and construction emissions generated by the project would continue to not exceed applicable significance thresholds and would not expose nearby sensitive receptors to substantial concentrations of substantial pollutant concentrations exceeding state or federal standards or in excess of health risk criteria for toxic air contaminants” (Response GR-4, p. 12-10).

As demonstrated above, the FEIR claims that preparing a quantified construction and operational HRA is not necessary, as the emissions generated by the Project would not exceed applicable significance thresholds. However, this is incorrect. As discussed in our February 9th comment letter, the Project’s failure to prepare a quantified construction and operational HRA is inconsistent with the Office of

Environmental Health Hazard Assessment (“OEHHA”).⁵ As such, until both the Project’s construction and operational health risks are quantified, summed together, and compared to the VCAPCD threshold of 10 in one million, the FEIR’s response is inadequate, and we maintain our February 9th comment that the FEIR failed to adequately evaluate the Project’s potential health risk impacts.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The FEIR estimates that the Project would generate net annual greenhouse gas (“GHG”) emissions of 319.8 metric tons of carbon dioxide equivalents per year (“MT CO₂e/year”), which does not exceed the SCAQMD threshold of 3,000 MT CO₂e/year (p. 5.8-12). Furthermore, the FEIR’s analysis relies upon the Project’s consistency with the City’s Energy Action Plan (“EAP”) in order to conclude that the Project would result in a less-than-significant GHG impact (p. 5.8-13). However, review of the FEIR demonstrates that the Project again fails to adequately evaluate potential GHG impacts. As discussed below, we maintain that the DEIR’s and FEIR’s GHG analyses, as well as the subsequent less-than-significant impact conclusion, are incorrect for three reasons:

- (1) The DEIR and FEIR’s quantitative GHG analysis rely upon an incorrect and unsubstantiated air model;
- (2) The DEIR and FEIR rely upon an unsupported quantitative threshold; and
- (3) The DEIR and FEIR fail to identify a potentially significant GHG impact.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As discussed in our February 9th comment letter, the DEIR’s quantitative GHG analysis relied upon an incorrect and unsubstantiated air model. Review of the FEIR demonstrates that the Project again fails to justify or correct some of these modeling errors. As discussed below, we find the DEIR and FEIR to be inadequate and maintain that the Project’s less-than-significant GHG impact determination is unsubstantiated. Specifically, regarding the Project’s air modeling, the FEIR states:

“The comment states that the Draft EIR’s quantitative GHG analysis is unsubstantiated. The Final EIR is updated as reflected in Responses to Comment 206-235 through 206-258 and changes to the Draft EIR are included in Section 5.8 of the Final EIR.” (p. 12-1204).

However, this response is inadequate. While we acknowledge that the FEIR substantiated or corrected most of their modeling input parameters, the FEIR still fails to sufficiently address *all* of our comments regarding the Project’s flawed CalEEMod models. Specifically, the FEIR fails to provide access to the “Client provided RFI,” which is cited as justification for the revised construction-related CalEEMod input parameters, as previously discussed. As such, emissions associated with the Project remain underestimated, and the DEIR’s and FEIR’s quantitative GHG analyses should not be relied upon to determine Project significance. As such, we reiterate our February 9th comment that the DEIR’s

⁵ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/hotspots2015.html

CalEEMod models are unsubstantiated, and the DEIR's and FEIR's less-than-significant GHG impact conclusion should not be relied upon.

2) Incorrect Reliance Upon an Outdated Quantitative GHG Threshold

As discussed in our February 9th comment letter, the DEIR relies upon an unsupported GHG threshold. Review of the FEIR demonstrates that the Project again fails to adequately justify or correct this error. As discussed below, we find the DEIR and FEIR to be inadequate and maintain that the Project's less-than-significant GHG impact determination is unsubstantiated.

As previously stated, the FEIR estimates that the Project would generate net annual GHG emissions of 319.8 MT CO₂e/year, which would not exceed the SCAQMD threshold of 3,000 MT CO₂e/year (p. 5.8-12). Regarding the DEIR's use of an interim threshold, the FEIR states:

"The comment states that the Draft EIR incorrectly relied upon an outdated quantitative GHG threshold. The City understands that the 3,000 MT CO₂e per year threshold was proposed a decade ago and was never adopted. However, the 3,000 MT CO₂e per year threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008) document and subsequent Working Group meetings (latest in 2010). This threshold uses the Executive Order S-3-05 goal as the basis, so it is not tied to only the 2020 target year and is thus not outdated. This threshold is also based on the 90% capture rate methodology, which means that 90% of total emissions from all new or modified projects would be subject to some type of CEQA analysis, which was the approach taken by SCAQMD to establish the stationary/industrial source threshold, as well as by the California Air Resources Board (for interim threshold for stationary source projects) and one of the options suggested by the California Air Pollution Control Officers Association (quantitative threshold based on market capture). Further, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction. As such, the use of the 3,000 MT CO₂e threshold is appropriate and substantiated" (p. 12-1183).

However, the DEIR's use of this threshold remains incorrect. Regardless of the FEIR's claims, the Association of Environmental Professionals ("AEP") guidance states:

"[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine development and reduction potentials out to the next GHG reduction milestone (2030 or 2050).⁶

As discussed in our February 9th comment letter, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, rather than relying upon the outdated 2008 SCAQMD Draft thresholds, we recommend that the Project evaluate GHG

⁶ "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at*: https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

emissions per the next tier and apply the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/year, which was calculated by applying a 40% reduction to the 2020 targets.⁷

3) *Unsubstantiated Air Model Indicates a Potentially Significant GHG Impact*

When applying the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.⁸ As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 319.8 MT CO₂e/year (p. 5.8-12). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."⁹ The FEIR estimates that the Project would generate approximately 14 new jobs (p. 1-6). As the Project does not include any residential land uses, we estimate a service population of 14 people.¹⁰ When dividing the Project's net annual GHG emissions, as estimated by the DEIR, by a service population of 14 people, we find that the Project would emit approximately 22.8 MT CO₂e/SP/year (see table below).¹¹

FEIR Greenhouse Gas Emissions per Capita	
Annual Emissions (MT CO ₂ e/year)	319.8
Service Population	14
Service Population Efficiency (MT CO ₂ e/SP/year)	22.8
2035 SCAQMD Efficiency Target	3.0
<i>Exceeds?</i>	Yes

As demonstrated above, the Project's service population efficiency value, as estimated by the DEIR's provided net annual GHG emission estimates and service population, vastly exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, indicating a potentially significant impact not previously identified or addressed by the DEIR or FEIR. As such, we find the FEIR to be inadequate and maintain our February 9th comment that the DEIR's less-than-significant GHG impact determination should not be relied upon, as it is based on an outdated significance threshold. As a result, an updated EIR should be prepared, which includes an updated GHG analysis, and additional mitigation should be incorporated accordingly, per CEQA Guidelines.

⁷ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

⁸ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

⁹ CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>.

¹⁰ Calculated: 0 residents + 14 employees = 14 service population.

¹¹ Calculated: (62.3 MT CO₂e/year) / (14 service population) = (4.45 MT CO₂e/SP/year).

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in a potentially significant air quality and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Therefore, to reduce the Project's emissions, we recommend consideration of SCAG's 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") and Greenhouse Gas Project Level Mitigation Measures ("PMM-GHG-1"), as described below:¹²

SCAG RTP/SCS 2020-2045	
Air Quality Project Level Mitigation Measures – PMM-AQ-1:	
In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:	
a) Minimize land disturbance.	
b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.	
c) Cover trucks when hauling dirt.	
d) Stabilize the surface of dirt piles if not removed immediately.	
e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.	
f) Minimize unnecessary vehicular and machinery activities.	
g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	
h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.	
j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet.	
k) Ensure that all construction equipment is properly tuned and maintained.	
l) Minimize idling time to 5 minutes—saves fuel and reduces emissions.	
m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	

¹² "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocial_addendum_4_mitigationmeasures.pdf?1606004420, p. 4.0-2 – 4.0-10; 4.0-19 – 4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, available at: <https://scag.ca.gov/peir>.

n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.
q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.
s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects.
t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.
u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).
w) As applicable for port projects, the following measures should be considered: - Develop specific timelines for transitioning to zero emission cargo handling equipment (CHE) - Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress. - Use short side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives to gradually ramp up the usage of shore power. - Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized. - Maximize participation in the Port of Los Angeles' Vessel Speed Reduction Program or the Port of Long Beach's Green Flag Initiation Program in order to reduce the speed of vessel transiting within 40 nautical miles of Point Fermin. - Encourage the participation in the Green Ship Incentives. - Offer incentives to encourage the use of on-dock rail.
aa) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.
bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible: - Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85% - Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%. - Nonroad diesel engines on site shall be Tier 2 or higher. - Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp. - Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.

- Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.
- The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following:
 - i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
 - ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
 - iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
- The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- The contractor shall maintain a monthly report that, for each on road diesel vehicle, nonroad construction equipment, or generator onsite, includes:
 - i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
 - ii. Any problems with the equipment or emission controls.
 - iii. Certified copies of fuel deliveries for the time period that identify:
 - 1. Source of supply
 - 2. Quantity of fuel
 - 3. Quantity of fuel, including sulfur content (percent by weight)

Greenhouse Gas Project Level Mitigation Measures – PMM-GHG-1

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.

c) Include off-site measures to mitigate a project's emissions.

d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

- i. Use energy and fuel-efficient vehicles and equipment;
- ii. Deployment of zero- and/or near zero emission technologies;
- iii. Use lighting systems that are energy efficient, such as LED technology;
- iv. Use the minimum feasible amount of GHG-emitting construction materials;
- v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
- vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse;
- vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy;
- viii. Incorporate design measures to reduce water consumption;
- ix. Use lighter-colored pavement where feasible;

x. Recycle construction debris to maximum extent feasible; xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above.
e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program;
f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;
g) Improving transit access to rail and bus routes by incentives for construction and transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and
h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes.
i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles;
j) Land use siting and design measures that reduce GHG emissions, including: i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees; iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and

v.	Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.
k)	Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible.
l)	Require at least five percent of all vehicle parking spaces include electric vehicle charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in.
m)	Encourage telecommuting and alternative work schedules, such as: i. Staggered starting times ii. Flexible schedules iii. Compressed work weeks
n)	Implement commute trip reduction marketing, such as: i. New employee orientation of trip reduction and alternative mode options ii. Event promotions iii. Publications
q)	Price workplace parking, such as: i. Explicitly charging for parking for its employees; ii. Implementing above market rate pricing; iii. Validating parking only for invited guests; iv. Not providing employee parking and transportation allowances; and v. Educating employees about available alternatives.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The updated EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hageman CV

Attachment B: Paul Rosenfeld CV



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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**Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H₂O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



Technical Consultation, Data Analysis and
Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE

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Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermid and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International*

Conferences on Soils Sediment and Water. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23rd *Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 5-14-2021
Trial, October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty, Plaintiff vs. Consolidated Rail Corporation and National Railroad Passenger Corporation
d/b/a AMTRAK,
Case No.: No. 18-L-6845
Rosenfeld Deposition, 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe, Plaintiff vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA
Rail, Defendants
Case No.: No. 17-cv-8517
Rosenfeld Deposition, 5-25-2021

In the Superior Court of the State of Arizona In and For the Cuntly of Maricopa
Mary Tryon et al., Plaintiff vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case Number CV20127-094749
Rosenfeld Deposition: 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al *Plaintiffs*, vs. CNA Insurance Company et al.
Case Number 1:17-cv-000508
Rosenfeld Deposition: 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*.
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case No.: 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No.: 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action NO. 14-C-30000
Rosenfeld Deposition, June 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM
Rosenfeld Deposition: July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil Action No. CV 2008-2076
Rosenfeld Deposition: September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052
Rosenfeld Deposition: July 2009

ATTACHMENT 5



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February 9, 2022

Fernando Gaytan
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Los Angeles, CA 90017

**Subject: Comments on the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility
Project (SCH No. 2020069039)**

Dear Mr. Gaytan,

We have reviewed the December 2021 Draft Environmental Impact Report (“DEIR”) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (“Project”) located in the City of Oxnard (“City”). The Project proposes to construct a temporary outdoor vehicle storage facility, with 27.5 acres of parking accommodation and a 240-SF guard house, as well as 4,944 parking spaces on the 34-acre site.

Our review concludes that the DEIR fails to adequately evaluate the Project’s hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Hazards and Hazardous Materials

Inadequate Analysis of Impacts

The DEIR found less than significant impacts or no impact associated with hazards and hazardous materials. These findings were made without an adequate evaluation of potential hazards and hazardous materials impacts and the findings should not be relied upon for the purposes of determining significance.

The failure to prepare a Phase I Environmental Site Assessment (“ESA”) is inconsistent with the City of Oxnard 2030 General Plan which is to be used to guide development to the year 2030. The 2030 General Plan Safety and Hazards Chapter states:

Policy SH-7.12 Hazardous Material Studies. Ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project.

To adequately disclose and mitigate hazards and hazardous materials, a Phase I ESA needs to be completed for the Project site. The preparation of a Phase I ESA is often undertaken in the preparation of CEQA documents to identify and disclose hazardous waste issues that may present impacts to the public, workers, or the environment, and which may require further investigation, including environmental sampling and cleanup.

Standards for performing a Phase I ESA have been established by the US EPA and the American Society for Testing and Materials Standards (“ASTM”).¹ Phase I ESAs are conducted to identify conditions that would indicate a release of hazardous substances, like residual pesticides, and include:

- a review of all known sites in the vicinity of the subject property that are on regulatory agency databases undergoing assessment or cleanup activities;
- an inspection;
- interviews with people knowledgeable about the property; and
- recommendations for further actions to address potential hazards.

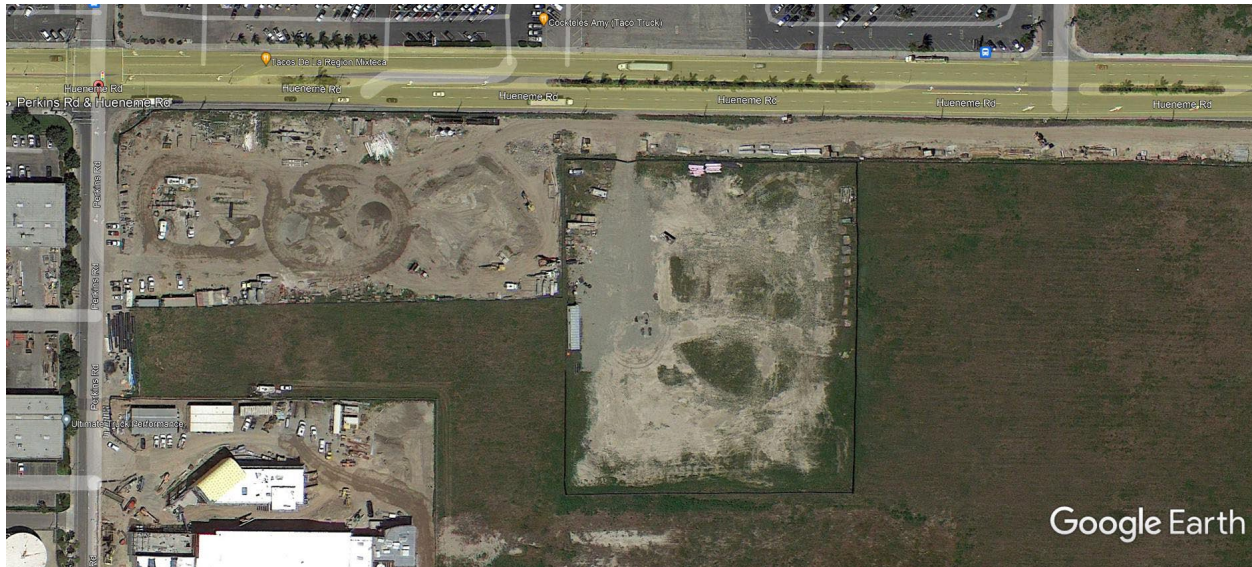
Phase I ESAs conclude with the identification of any “recognized environmental conditions” (“RECs”) and recommendations to address such conditions. A REC is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures or into the ground, groundwater, or surface water of the property. If RECs are identified, then a Phase II ESA generally follows, which includes the collection of soil, soil vapor and groundwater samples, as necessary, to identify the extent of contamination and the need for cleanup to reduce exposure potential to the public.

A Phase I ESA, completed by a licensed environmental professional, is necessary for inclusion in a full CEQA analysis to identify recognized environmental conditions, if any, at the proposed Project site. If past land uses include RECs, a Phase II should be conducted to sample for residual concentrations of contaminants in soil. Any contamination that is identified above regulatory screening levels, including California Department of Toxic Substances Control Soil Screening Levels,² should be further evaluated and cleaned up, if necessary, in coordination with the Regional Water Quality Control Board and the California Department of Toxic Substances Control.

¹ <https://www.astm.org/e1527-21.html>

² <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/04/HHRA-Note-3-June-2020-A.pdf>

A Phase I ESA is especially important to conduct for the Project site because of past agricultural use. A Phase I ESA is necessary to determine if agricultural use has resulted in contamination of soils with residual concentrations of pesticides. A Phase I ESA is also necessary to evaluate all past uses of the site, including what appears to be storage of materials and equipment on the ground surface and the presence of material piles in 2011. Improper storage of materials, including fuels and lubricants may have resulted in release of petroleum compounds and other chemicals into Project site soils.



Source, Google Earth, April 2011

Improper Piecemealing of Project Analysis

According to a letter dated February 28, 2019, the Port of Hueneme states:

“Saybrook Corporate Opportunity Funds, is looking to support this important Multimodal Optimization and Vehicle Efficiency Project by facilitating the private sector investment of \$75,000,000, to be used for the soft and hard costs of the acquisition, development, utilities, entitlements, and permitting for 250 acres of land located just 2.4 miles from the central gate of our port” (p. 1).³

As demonstrated above, the Port of Hueneme proposes a larger Multimodal Optimization and Vehicle Efficiency Project, which involves the acquisition, development, utilities, entitlements, and permitting for 250 acres of land. Furthermore, regarding the Multimodal Optimization & Vehicle Efficiency Project, the Port of Hueneme states:

“This Project will achieve optimal performance metrics; and will address the interconnectivity needs of our south terminal with other areas of the port resulting in increased mobility of cargo volumes to and from nationally significant freight highways and intermodal networks; and increase Port capacity with the acquisition of 250 acres of land and the development of a Multi

³ See Attachment A.

modal Logistics Park including a state of the art Clean Truck Charging & Fueling Station upon it” (p. 1 – 2).⁴

As demonstrated above, the Port of Hueneme intends to increase Port capacity with the acquisition of 250 acres of land. Finally, regarding the proposed Project’s relation to the Multimodal Optimization and Vehicle Efficiency Project, the Port of Hueneme states:

“The stop gap 34-acre measure discussed herein [proposed Project] will also ensure that the City of Oxnard and the PoH will have sufficient time to structure and meet all regulatory requirements for the longer term 250-acre port logistics park with access to rail” (p. 2).⁵

As such, the proposed Project is a temporary measure to allow the City and Port sufficient time to structure and meet all regulatory requirements needed for the larger Multimodal Optimization and Vehicle Efficiency Project. However, this is an example of piecemealing. According to the Association of Environmental Professionals’ (“AEP”) *CEQA Portal Topic Paper* on “Project Description”:

“Piecemealing or segmenting means dividing a project into two or more pieces and evaluating each piece in a separate environmental document, rather than evaluating the whole of the project in one environmental document.”⁶

The guidance goes on to state:

“This is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies.”⁷

As such, by dividing the anticipated Port expansion into smaller projects, the Port of Hueneme minimizes the Project’s environmental impacts. As the proposed Project is only occupies 34 acres, the DEIR fails to account for the long-term regional impacts associated with the consequent larger Multimodal Optimization & Vehicle Efficiency Project, such as the widespread increase in vehicle miles travelled (“VMT”) and the consequent transportation, air quality, and greenhouse gas impacts associated with a Port expansion. Thus, the DEIR’s analysis of the Project’s impacts should not be relied upon. We recommend that an updated EIR be prepared to evaluate the entirety of the Project’s environmental impacts and implement mitigation strategies accordingly.

⁴ See Attachment B.

⁵ See Attachment C.

⁶ “CEQA Portal Topic Paper Project Description.” AEP, February 2020, *available at*: <https://cegaportal.org/tp/CEQA%20Project%20Description%202020%20Update.pdf>, p. 2.

⁷ “CEQA Portal Topic Paper Project Description.” AEP, February 2020, *available at*: <https://cegaportal.org/tp/CEQA%20Project%20Description%202020%20Update.pdf>, p. 2.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2020.4.0 (Vol. I, p. 5.3-10).⁸ CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in the Air Quality and Greenhouse Gas Study ("AQ & GHG Study") as Appendix D to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. Therefore, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Failure to Model All Proposed Land Uses

According to the DEIR:

"A 240-square-foot temporary guard house/office trailer would be installed to provide 24-hour security services for the temporary outdoor vehicle storage facility" (Vol I, p. 1-3).

As demonstrated above, the model should have included 240-SF of office space to account for the proposed guard house/office trailer. However, review of the CalEEMod output files demonstrates that "Port of Hueneme 34-acre Temporary Vehicle Storage Facility" model fails to include the proposed office space (see excerpt below) (Appendix D, pp. 143, 170).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	33.17	Acre	33.17	1,444,885.20	0
City Park	0.53	Acre	0.53	23,086.80	0

As you can see in the excerpt above, the model fails to include the proposed office space. This inconsistency presents an issue, as CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors.⁹ Furthermore, each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions.¹⁰ Thus, by failing to include all

⁸ "CalEEMod User's Guide." CAPCOA, May 2021, available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6.

⁹ "CalEEMod User's Guide, Appendix D." CAPCOA, September 2016, available at: http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2.

¹⁰ CalEEMod User's Guide, available at: http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 14.

proposed land use types, the model may underestimate the Project’s construction-related and operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” model includes several changes to the default individual construction phase lengths (see excerpt below) (Appendix D, pp. 144-145, 171-172).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	45.00	20.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	35.00	11.00
tblConstructionPhase	NumDays	20.00	34.00

As a result of these changes, the model includes the following construction schedule (see excerpt below) (Appendix D, pp. 149, 177):

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Grubbing	Site Preparation	4/1/2022	4/15/2022	5	11
2	Site Preparation	Site Preparation	4/16/2022	4/29/2022	5	10
3	Grading	Grading	4/30/2022	5/29/2022	5	20
4	Building Installation & Fencing	Site Preparation	5/30/2022	7/30/2022	5	45
5	Gravel Installation	Paving	8/1/2022	8/15/2022	5	11
6	Landscaping	Site Preparation	8/16/2022	10/1/2022	5	34

As you can see in the excerpts above, the grubbing phase was decreased by 45%, from a default value of 20 to 11 days; the site preparation phase was decreased by 50%, from a default value of 20 to 10 days; the grading phase was decreased by 56%, from a default value of 45 to 20 days; the building installation and fencing phase was increased by 125%, from a default value of 20 to 45 days; the gravel installation phase was decreased by 69%, from a default value of 35 to 11 days; and the landscaping phase was increased by 70%, from a default value of 20 to 34 days. As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.¹¹ According to the “User Entered Comments & Non-Default Data” table, the justification provided for these changes is:

“Based on Client provided RFI; building install only 240 sf guardhouse, phase mostly installing fencing” (Appendix D, pp. 144, 171).

¹¹ “CalEEMod User’s Guide.” CAPCOA, May 2021, available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6, p. 1, 14.

Furthermore, regarding the Project's anticipated construction schedule, the DEIR states:

"The grading and construction activities are anticipated to take approximately 180 to 200 days" (Vol I, DEIR, pp. 14).

However, these justifications remain insufficient for two reasons.

First, the DEIR and associated documents fail to provide the above-mentioned client-provided Request for Information ("RFI"). As such, until additional information becomes available that substantiates the changes to the individual construction phase lengths, we cannot verify the revised values are accurate.

Second, while the DEIR indicates the total construction duration, the DEIR fails to mention or justify the individual construction phase lengths. This is incorrect, as according to the CalEEMod User's Guide:

"CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA."¹²

Here, as the DEIR only justifies a total grading and construction duration of approximately 180 to 200 days, the DEIR fails to provide substantial evidence to support the revised individual construction phase lengths. As such, we cannot verify the changes.

These unsubstantiated changes present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).¹³

Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

As such, by disproportionately altering the individual construction phase lengths without proper justification, the model may underestimate the peak daily emissions associated with some phases of

¹² CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 12.

¹³ "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 31.

construction. Thus, until the DEIR provides the client-provided RFI or substantiates the individual construction phase lengths, the model should not be relied upon to determine Project significance.

Unsubstantiated Changes to Off-Road Construction Equipment Unit Amounts

Review of the CalEEMod output files demonstrates that the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” model includes several changes to the default off-road construction equipment unit amounts (see excerpt below) (Appendix D, pp. 145, 172).

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

As a result of these changes, the model includes the following off-road equipment (see excerpt below) (Appendix D, pp. 149-151, 177-178).

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Dumpers/Tenders	2	8.00	16	0.38
Grubbing	Generator Sets	1	8.00	84	0.74
Grubbing	Rubber Tired Dozers	1	8.00	247	0.40
Grubbing	Sweepers/Scrubbers	1	8.00	64	0.46
Grubbing	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Dumpers/Tenders	12	8.00	16	0.38
Site Preparation	Generator Sets	1	8.00	84	0.74
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Note: This is only a partial image of the revised off-road construction equipment list.

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.¹⁴ According to the "User Entered Comments & Non-Default Data" table, the justifications provided for these changes are:

"Based on client provided RFI" (Appendix D, pp. 144, 171).

Furthermore, the DEIR states:

"Based on Applicant-provided information, the proposed project would require use of backhoes, dozers, dumpers/tenders, generators, front end loaders, sweepers, and a water truck during the grubbing and site preparation phase" (Vol I, p. 5.3-10).

However, this justification remains insufficient for two reasons.

First, as the DEIR and associated documents fail to provide the above-mentioned client-provided RFI. As such, until additional information becomes available that substantiates the changes to the off-road construction equipment unit amounts, we cannot verify the revised values are accurate.

Second, while the DEIR indicates the types of equipment required during construction, the DEIR fails to mention or justify the unit amounts. As previously stated, this is incorrect, as according to the CalEEMod User's Guide:

"CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA."¹⁵

Here, as the DEIR and associated documents fail to provide substantial evidence to support the revised off-road equipment unit amounts, we cannot verify the changes.

These unsubstantiated changes present an issue, as CalEEMod uses the off-road construction equipment to calculate the emissions associated with construction.¹⁶ By including unsubstantiated changes to the default off-road construction equipment unit amounts, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Vendor Trip Numbers

Review of the CalEEMod output files demonstrates that the "Port of Hueneme 34-acre Temporary Vehicle Storage Facility" model includes several changes to the default vendor trip numbers (see excerpt below) (Appendix D, pp. 146, 173).

¹⁴ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 2, 9

¹⁵ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 12.

¹⁶ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 32.

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

As you can see in the excerpt above, the vendor trip numbers were increased from the default value of 0- to 2-trips. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.¹⁷ According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

"Based on assumptions of 2 water truck (vendor) trips, 10 cy trucks for import material, and hauling distance to soil import site approx. 25 miles" (Appendix D, pp. 144, 171).

However, this justification remains insufficient, as the DEIR cannot simply assume the Project would only result in 2 water truck trips. As previously discussed, according to the CalEEMod User's Guide:

"CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA" (emphasis added).¹⁸

Here, as the DEIR and associated documents fail to provide substantial evidence to support the number of vendor trips required for Project construction, we cannot verify the revised values.

These unsubstantiated reductions present an issue, as CalEEMod uses the vendor trip numbers to estimate the construction-related emissions associated with on-road vehicles.¹⁹ Thus, by including several unsubstantiated changes to the default vendor trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Weekday and Saturday Operational Vehicle Trip Rates

According to the Port Hueneme Outdoor Vehicle Storage Facility Traffic Study:

"The proposed outdoor storage facility would generate 316 peak daily trips, 48 AM peak hour trips and 12 PM peak hour trips" (Appendix J, p. 9).

As demonstrated above, the Project expects to generate 316 daily operational vehicle trips. As such, the Project's emissions modeling should have included trip rates that reflect the estimated number of daily vehicle trips. However, review of the CalEEMod output files demonstrates that the "Port of Hueneme 34-

¹⁷ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 2, 9

¹⁸ CalEEMod Model 2013.2.2 User's Guide, available at: <http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6>, p. 12.

¹⁹ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 34.

acre Temporary Vehicle Storage Facility” model includes only 291.9 weekday and Saturday vehicle trips (see excerpt below) (Appendix D, pp. 164, 192).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
City Park	0.00	0.00	0.00
Parking Lot	291.90	291.90	2.99
Total	291.90	291.90	2.99

As demonstrated in the excerpt above, the weekday and Saturday vehicle trips are each underestimated by 24.1 trips.²⁰ As such, the model is inconsistent with the information provided in the DEIR.

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the operational on-road vehicles.²¹ Thus, by including an underestimated number of average daily vehicle trips, the model underestimates the Project’s mobile-source emissions and should not be relied upon to determine Project significance.

Incorrect Analysis of Mobile-Source Operational Emissions

Review of the CalEEMod output files demonstrates that the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” model includes no primary, diverted, or pass-by trip purpose percentages (see excerpt below) (Appendix D, pp. 164, 192).

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	15.00	85.00	0.00	0	0	0

As a result of these changes, the model fails to calculate annual vehicle miles traveled (“VMT”) (see excerpt below) (Appendix D, pp. 164, 192):

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	291.90	291.90	2.99		
Total	291.90	291.90	2.99		

Thus, by setting the trip purpose percentages to zero, the model negates the emissions associated with the Project’s operational daily vehicle trips. As such, while the average weekday, Saturday, and Sunday vehicle trips are included in the model, they are not accounted for in the emissions calculations. Specifically, CalEEMod utilizes the following equation to calculate VMT:²²

“CalEEMod calculates annual VMT by multiplying VMT_d by 365 days/year.

$$VMT_d = \sum (\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

²⁰ Calculated: (316 total vehicle trips) – (291.9 vehicle trips) = 24.1 underestimation.

²¹ “CalEEMod User Guide.” CAPCOA, November 2017, available at: <http://www.caleemod.com/>, p. 35.

²² Appendix A Calculation Details for CalEEMod, available at: <http://www.caleemod.com/>, p. 22

As demonstrated above, average daily trip rate and average overall trip length both directly impact annual VMT. Furthermore, CalEEMod utilizes the following equation to calculate the average overall trip length:²³

$$\text{Average Overall Trip Length}_i = \text{Link}\%_{\text{primary}} \times \text{TripLength}_{\text{Avg Primary}} + \text{Link}\%_{\text{diverted}} \times 0.25 \times \text{TripLength}_{\text{Avg Primary}} + \text{Link}\%_{\text{passby}} \times 0.1 \text{ mile}$$

Where

Link % = percentage of link types
 Trip Length_{AvgPrimary} = Average primary trip length for each trip type
 i = land use type

As such, given that no primary, diverted, or pass-by trips are included in the model, CalEEMod calculates an average overall trip length of zero, resulting in an annual VMT of zero (regardless of the average daily trip rates). Thus, the model incorrectly evaluates the Project's mobile-source emissions. Until operational vehicle trips are correctly accounted for, the model underestimates the Project's operational emissions and should not be relied upon to determine Project significance.

Incorrect Application of Construction-related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Port of Hueneme 34-acre Temporary Vehicle Storage Facility" model includes the following construction-related mitigation measures (see excerpt below) (Appendix D, pp. 151, 179).

3.1 Mitigation Measures Construction

Water Exposed Area
 Reduce Vehicle Speed on Unpaved Roads

As a result, the model includes an unpaved road vehicle speed of 5 miles per hour ("MPH") (see excerpt below) (Appendix D, pp. 144, 171).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.²⁴ According to the "User Entered Comments & Non-Default Data" table, the justification provided for these inclusions is:

"Default to watering to 2 times per day to abide by SWPPP and VCAPCD Rule 55, 55.1 and 55.2" (Appendix D, pp. 144, 171).

²³ Appendix A Calculation Details for CalEEMod, available at: <http://www.caleemod.com/>, p. 23

²⁴ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 2, 9

Furthermore, the DEIR states:

"The following rules and regulations are applicable to the proposed project [...]

VCAPCD Rule 55 – Fugitive Dust

This rule requires fugitive dust generators to implement control measures to limit the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities.

VCAPCD Rule 55.1 – Paved Road and Public Unpaved Roads

This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public paved road" (p 5.3-3 – 5.3.4).

However, these justifications are insufficient for two reasons.

First, VCAPCD Rule 55 states:

"3. Truck Hauling: No person (including facility or site operator) shall load or allow the loading of bulk materials or soil onto outbound trucks unless at least one of the following dust prevention techniques is utilized:

- a. Use properly secured tarps or cargo covering that covers the entire surface area of the load or use a container-type enclosure.
- b. Maintain a minimum of 6 inches of freeboard below the rim of the truck bed where the load touches the sides of the cargo area and insure that the peak of the load does not extend above any part of the upper edge of the cargo area.
- c. Water or otherwise treat the bulk material to minimize loss of material to wind or spillage.
- d. Other effective dust prevention control measures."²⁵

As the above excerpt demonstrates, the Project is only required to implement at least one of the dust control measures listed above. Furthermore, review of VCAPCD Rule 55 demonstrates that reducing vehicle speed is not a requirement.²⁶ Thus, the "Water Exposed Area" and "Reduce Vehicle Speed on Unpaved Roads" mitigation measures included in the CalEEMod model are not explicitly required by VCAPCD Rule 55, and we cannot verify their inclusion in the model.

Second, simply because the DEIR states that the Project would comply with SWPPP and VCAPCD Rule 55, 55.1, and 55.2 does not justify the inclusion of the above-mentioned construction-related mitigation

²⁵ "RULE 55 – FUGITIVE DUST." Ventura County Air Pollution Control District, June 2018, *available at*: <http://www.vcapcd.org/Rulebook/Reg4/RULE%2055.pdf>, p. 2-3.

²⁶ "RULE 55 – FUGITIVE DUST." Ventura County Air Pollution Control District, June 2018, *available at*: <http://www.vcapcd.org/Rulebook/Reg4/RULE%2055.pdf>, p. 4.

measures in the model. According to the Association of Environmental Professionals (“AEP”) *CEQA Portal Topic Paper* on mitigation measures:

“By definition, mitigation measures are not part of the original project design. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are above-and-beyond existing laws, regulations, and requirements that would reduce environmental impacts” (emphasis added).²⁷

As you can see in the excerpt above, mitigation measures “are not part of the original project design” and are intended to go “above-and-beyond” existing regulatory requirements. As such, the inclusion of the measures, based on the Project’s compliance with SWPPP and VCAPCD Rule 55, 55.1, and 55.2 alone, is unsubstantiated. By including several construction-related mitigation measures without properly committing to their implementation, the model may underestimate the Project’s construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of an Energy-Related Operational Mitigation Measure

Review of the CalEEMod output files demonstrates that the “Port of Hueneme 34-acre Temporary Vehicle Storage Facility” model includes the following energy-related mitigation measure (see excerpt below) (Appendix D, pp. 165, 193).

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.²⁸ According to the “User Entered Comments & Non-Default Data” table, the justification provided for this inclusion is:

“Assuming an 75 percent energy reduction due to use of solar light stands. The use of watch tower and trailer would require other nonrenewable energy sources” (Appendix D, pp. 144, 171).

Furthermore, regarding the use of solar light stands, the DEIR states:

“Nineteen solar powered, mobile, low-intensity LED tower light fixtures would be placed along the perimeter of the property” (Vol I, p. 1-3).

However, this inclusion remains unsupported, as the DEIR cannot simply assume that the nineteen solar light fixtures would result in a 75% energy reduction. As previously stated, according to the CalEEMod User’s Guide:

²⁷ “CEQA Portal Topic Paper Mitigation Measures.” AEP, February 2020, available at: <https://cegaportal.org/tp/CEQA%20Mitigation%202020.pdf>, p. 5.

²⁸ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 13-14.

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”²⁹

Here, as the DEIR and associated documents fail to provide substantial evidence to support the assumption that the Project would reduce energy consumption by 75%, the inclusion of the above-mentioned energy-related operational mitigation measure is incorrect. By incorrectly including an operational mitigation measure, the model overestimates the anticipated reduction to the Project’s operational emissions and should not be relied upon to determine Project significance.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project’s construction-related and operational emissions, we prepared an updated CalEEMod model, using the Project-specific information provided by the DEIR. In our updated model, we included the proposed office land use; proportionately altered the individual construction phase lengths to match the proposed construction duration of 180 days; omitted the unsubstantiated vendor trips and off-road construction equipment unit amounts; corrected the mobile-source trip purpose percentages and the number of operational vehicle trip rates; and excluded the incorrect construction-related and energy related operational mitigation measures.

Our updated analysis estimates that construction-related VOC and NO_x emissions exceed the applicable VCAPCD thresholds of 25-pounds per day (“lbs/day”) (see table below).³⁰

SWAPE Criteria Air Pollutant Emissions		
Model	Construction	
	ROG	NO _x
	(lbs/day)	
DEIR	9.4	24.9
SWAPE	158.5	52.6
% Increase	1,579%	111%
VCAPCD Threshold	25	25
<i>Exceeds?</i>	Yes	Yes

As you can see in the table above, construction-related VOC and NO_x emissions as estimated by SWAPE, increase by approximately 1,579% and 111%, respectively, and exceed the applicable VCAPCD significance thresholds. Thus, our updated model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the DEIR. As a

²⁹ CalEEMod Model 2013.2.2 User’s Guide, available at: <http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6>, p. 12.

³⁰ “Ventura County Air Quality Assessment Guidelines.” VCAPCD, October 2003, available at: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>, p. 3-2.

result, an updated EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the Project would have a less-than-significant health risk impact without conducting a quantified construction or operational health risk analysis (“HRA”) (p. 5.3-14). Regarding the health risk impacts associated with the Project, the DEIR states:

“CARB’s Air Quality and Land Use Handbook: A Community Health Perspective (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). The proposed project would not be classified as a potential source of Toxic Air Contaminants (TACs) as the proposed project is a temporary outdoor vehicle storage facility for vehicles coming to/from the Port. Therefore, the proposed project would not expose nearby sensitive receptors to substantial concentrations of TACs; TAC impacts would be less than significant” (p. 5.3-14).

As demonstrated above, the DEIR concludes that the Project would result in a less-than-significant health risk impact because the proposed land use does not involve toxic air contaminant (“TAC”) emissions. However, the DEIR’s evaluation of the Project’s potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

First, by failing to prepare a quantified construction and operational HRA, the Project is inconsistent with CEQA’s requirement to correlate the increase in emissions that the Project would generate to the adverse impacts on human health caused by those emissions.³¹ As a consequence, the DEIR fails to address how construction of the proposed Project would produce diesel particulate matter (“DPM”) emissions through the exhaust stacks of construction equipment over a potential construction period of approximately 180 to 200 days (Vol I, p. 1-2). Furthermore, the Traffic Study, provided as Appendix J to the DEIR, indicates that the Project would generate approximately 316 daily vehicle trips, which would generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions during Project operation (p. 9, Table 2). However, the DEIR fails to evaluate Project-generated TACs or indicate the concentrations at which such pollutants would trigger adverse health effects. Furthermore, when considering the larger Multimodal Optimization & Vehicle Efficiency Project, health risk impacts would be amplified as DPM emissions associated with construction-related and operational activities would greatly increase. Thus, without making a reasonable effort to connect the Project’s construction-related and operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA’s requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Second, the Office of Environmental Health Hazard Assessment (“OEHHA”), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment*

³¹ “Sierra Club v. County of Fresno.” Supreme Court of California, December 2018, *available at*: <https://cegaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf>.

Guidelines: Guidance Manual for Preparation of Health Risk Assessments in February 2015.³² This guidance document describes the types of projects that warrant the preparation of an HRA. The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors. As the Project's construction duration exceeds the 2-month requirement set forth by OEHHA, it is clear that the Project meets the threshold warranting a quantified HRA under OEHHA guidance. Furthermore, the OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project to estimate individual cancer risk for the maximally exposed individual resident ("MEIR"). As the DEIR indicates that the Project will operate for a maximum of five years, we recommend that health risk impacts from Project operation also be evaluated, as a 5-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. These recommendations reflect the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions be included in an updated EIR for the Project.

Third, by claiming a less than significant impact without conducting a quantified construction or operational HRA for nearby, existing sensitive receptors, the DEIR fails to compare the excess health risk impact to the VCAPCD's specific numeric threshold of 10 in one million.³³ Thus, in accordance with the most relevant guidance, an assessment of the health risk posed to nearby, existing receptors from Project construction and operation should have been conducted.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 62.3 metric tons of carbon dioxide equivalents per year ("MT CO₂e/year"), which does not exceed the SCAQMD threshold of 3,000 MT CO₂e/year (p. 5.8-13). Furthermore, the DEIR's analysis relies upon the Project's consistency with the City's Energy Action Plan ("EAP") in order to conclude that the Project would result in a less-than-significant GHG impact (p. 5.8-13). However, the DEIR's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for the following four reasons.

- (1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
- (2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
- (3) The DEIR fails to identify a potentially significant GHG impact; and
- (4) The DEIR fails to demonstrate consistency with the City's EAP.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 62.3 MT CO₂e/year (Vol I, p. 5.8-13). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ &

³² "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/hotspots2015.html

³³ "Ventura County Air Quality Assessment Guidelines." Ventura County Air Pollution Control District (VCAPCD), October 2003, available at: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>, p. 3-5.

GHG Study as Appendix D to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

2) *Incorrect Reliance on an Outdated Quantitative GHG Threshold*

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 62.3 MT CO₂e/year (Vol I, p. 5.8-13). However, the guidance that provided the 3,000 MT CO₂/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.³⁴ Furthermore, AEP guidance states:

"[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine 17 development and reduction potentials out to the next GHG reduction milestone."³⁵

As it is currently February 2022, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, the SCAQMD bright-line threshold of 3,000 MT CO₂e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon. Instead, we recommend that the Project apply the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, which was calculated by applying a 40% reduction to the 2020 targets.³⁶

3) *Failure to Identify a Potentially Significant GHG Impact*

When applying the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.³⁷ As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 62.3 MT CO₂e/year (p. 5.8-13). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."³⁸ The DEIR estimates that the Project would employ approximately 14 people (Vol I, p. 1-2). As the Project does not

³⁴ HEALTH & SAFETY CODE 38550, available at:

https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=38550.

³⁵ "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, available at:

https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

³⁶ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

³⁷ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

³⁸ CAPCOA (Jan. 2008) *CEQA & Climate Change*, p. 71-72, <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>.

include any residential land uses, we estimate a service population of 14 people.³⁹ When dividing the Project's net annual GHG emissions, as estimated by the DEIR, by a service population of 14 people, we find that the Project would emit approximately 4.45 MT CO₂e/SP/year (see table below).⁴⁰

DEIR Greenhouse Gas Emissions per Capita	
Annual Emissions (MT CO ₂ e/year)	62.3
Service Population	14
Service Population Efficiency (MT CO ₂ e/SP/year)	4.45
2035 SCAQMD Efficiency Target	3.0
<i>Exceeds?</i>	Yes

As demonstrated above, the Project's service population efficiency value, as estimated by the DEIR's provided net annual GHG emission estimates and service population, exceed the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, indicating a potentially significant impact not previously identified or addressed by the DEIR. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared, including an updated GHG analysis and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Demonstrate Consistency with the City of Oxnard's Energy Action Plan

As previously discussed, the DEIR relies upon the Project's consistency with the City of Oxnard's Energy Action Plan to determine GHG significance (Vol. I, p. 5.8-13). Specifically, the DEIR states:

"The proposed project includes 19 solar powered, mobile, low-intensity LED tower light fixtures that would be placed on the perimeter of the property. The guard house would be constructed in compliance with Title 24. And native landscaping would be installed to minimize the use of water needed once the native plants are established, which in turn reduces the need to power landscape water systems. Thus, the proposed project has been designed to minimize water, natural gas, and electrical consumption, and would be consistent with the City's targets identified in the previous paragraph" (Vol. I, p. 5.8-13).

However, simply stating that the proposed Project "has been designed to minimize water, natural gas, and electrical consumption" does not guarantee that the Project will be consistent with the City's EAP. Without including such Project Design Features ("PDFs") as formal mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As such, in order to be consistent with the City's EAP, we recommend the Project include all PDFs as formal mitigation measures.

³⁹ Calculated: 0 residents + 14 employees = 14 service population.

⁴⁰ Calculated: (62.3 MT CO₂e/year) / (14 service population) = (4.45 MT CO₂e/SP/year).

Until then, the DEIR's conclusion that the project would be consistent with the City of Oxnard's EAP is unsubstantiated (Vol. I, p. 5.8-13). Therefore, the Project's GHG analysis is insufficient and the DEIR's less-than-significant impact conclusion should not be relied upon.

Feasible Mitigation Measures under SCAG's RTP/SCS Available to Reduce Emissions

Our analysis demonstrates that the Project would result in a potentially significant air quality and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Therefore, to reduce the Project's emissions, we recommend consideration of SCAG's 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") and Greenhouse Gas Project Level Mitigation Measures ("PMM-GHG-1"), as described below:⁴¹

SCAG RTP/SCS 2020-2045	
Air Quality Project Level Mitigation Measures – PMM-AQ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:	
a) Minimize land disturbance.	
b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.	
c) Cover trucks when hauling dirt.	
d) Stabilize the surface of dirt piles if not removed immediately.	
e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.	
f) Minimize unnecessary vehicular and machinery activities.	
g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	
h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.	
j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet.	
k) Ensure that all construction equipment is properly tuned and maintained.	
l) Minimize idling time to 5 minutes—saves fuel and reduces emissions.	

⁴¹ "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocial_addendum_4_mitigationmeasures.pdf?1606004420, p. 4.0-2 – 4.0-10; 4.0-19 – 4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, available at: <https://scag.ca.gov/peir>.

m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.
n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.
q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.
s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects.
t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.
u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).
w) As applicable for port projects, the following measures should be considered: - Develop specific timelines for transitioning to zero emission cargo handling equipment (CHE) - Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress. - Use short side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives to gradually ramp up the usage of shore power. - Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized. - Maximize participation in the Port of Los Angeles' Vessel Speed Reduction Program or the Port of Long Beach's Green Flag Initiation Program in order to reduce the speed of vessel transiting within 40 nautical miles of Point Fermin. - Encourage the participation in the Green Ship Incentives. - Offer incentives to encourage the use of on-dock rail.
aa) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.
bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible: - Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85% - Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%. - Nonroad diesel engines on site shall be Tier 2 or higher. - Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp.

- Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
- Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.
- The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following:
 - i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
 - ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
 - iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
- The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- The contractor shall maintain a monthly report that, for each on road diesel vehicle, nonroad construction equipment, or generator onsite, includes:
 - i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
 - ii. Any problems with the equipment or emission controls.
 - iii. Certified copies of fuel deliveries for the time period that identify:
 - 1. Source of supply
 - 2. Quantity of fuel
 - 3. Quantity of fuel, including sulfur content (percent by weight)

Greenhouse Gas Project Level Mitigation Measures – PMM-GHG-1

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.

c) Include off-site measures to mitigate a project's emissions.

d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

- i. Use energy and fuel-efficient vehicles and equipment;
- ii. Deployment of zero- and/or near zero emission technologies;
- iii. Use lighting systems that are energy efficient, such as LED technology;
- iv. Use the minimum feasible amount of GHG-emitting construction materials;
- v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
- vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse;
- vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy;

viii. Incorporate design measures to reduce water consumption; ix. Use lighter-colored pavement where feasible; x. Recycle construction debris to maximum extent feasible; xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above.
e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program;
f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;
g) Improving transit access to rail and bus routes by incentives for construction and transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and
h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes.
i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles;
j) Land use siting and design measures that reduce GHG emissions, including: i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees;

iv.	Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and
v.	Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.
k) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible.	
l) Require at least five percent of all vehicle parking spaces include electric vehicle charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in.	
m) Encourage telecommuting and alternative work schedules, such as:	
i.	Staggered starting times
ii.	Flexible schedules
iii.	Compressed work weeks
n) Implement commute trip reduction marketing, such as:	
i.	New employee orientation of trip reduction and alternative mode options
ii.	Event promotions
iii.	Publications
q) Price workplace parking, such as:	
i.	Explicitly charging for parking for its employees;
ii.	Implementing above market rate pricing;
iii.	Validating parking only for invited guests;
iv.	Not providing employee parking and transportation allowances; and
v.	Educating employees about available alternatives.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The updated EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or

otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul E. Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A: The Port of Hueneme letter dated February 28,2019

Attachment B: INFRA FY19: Multimodal Optimization & Vehicle Efficiency Project

Attachment C: City of Oxnard & The Port of Hueneme: Partners in Economic Development

Attachment D: Construction Calculations

Attachment E: CalEEMod Output Files

Attachment F: Matt Hagemann CV

Attachment G: Paul E. Rosenfeld CV

ATTACHMENT 6

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Jay Dobrowalski
City of Oxnard
214 South C Street
Oxnard, California 93030

9 February 2022

RE: Temporary Outdoor Vehicle Storage

Dear Mr. Dobrowalski,

I write to comment on the Draft Environmental Impact Report (DEIR) prepared by City of Oxnard (2021) in support of a proposed temporary outdoor vehicle storage facility on 33.7 acres of open space at the southeast corner of Hueneme Road and Perkins Road. The project would add to the site a gravel base, small structures, 6-foot perimeter security fencing, perimeter lighting for parking imported vehicles for a period of up to 5 years. I also reviewed biological resource reports (Rincon 2018, 2020), and a review of those reports by John Storrer (letter to Jay Dobrowalski, 3 August 2018).

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. I study animal density and distribution, habitat selection, interactions between wildlife and human infrastructure and activities, and conservation of rare and endangered species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-six years. My CV is attached.

SITE VISIT

I visited the proposed project site (Photos 1 – 3) from 14:27 until 17:37 hours on 27 January 2022 and from 06:55 until 09:30 hours on 28 January 2022. Conditions were clear with light breeze and 61° F on the 27th, and clear with strong northeast winds and 62° F on the 28th. Lacking permission to walk over the site, I visually scanned it with the aid of binoculars for 5.75 hours. The site proposed for the project had been disked recently, probably last year (Photos 1 and 2), so the soil was broken and the ground uneven. Willows and scrub border the site along its west side, and large trees grow just outside the southwest corner to provide perching opportunities to raptors foraging the site. Adjacent to the south is scrubland managed by The Nature Conservancy; it provides many opportunities for wildlife to find nest substrate and refugia.



Photos 1 and 2. Views to the northeast (top) and north (bottom) of the project site, 27 January 2022.



Photo 3. View southeast of adjacent shubland owned by The Nature Conservancy, 27 January 2022.

I detected 47 species of vertebrate wildlife, including up to 12 special-status species (Table 1). (I was uncertain whether the savannah sparrows I saw on site were wintering large-billed or resident Belding's.) I observed California ground squirrels (Photo 4), red-tailed hawks (Photo 5), Anna's hummingbirds and Allen's hummingbirds (Photos 6 and 7), merlin, belted kingfishers and western gulls (Photos 8- 10), double-crested cormorants, house finches, and yellow-rumped warblers (Photos 11-13), white-crowned sparrows, Say's phoebes, western meadowlarks and the burrow systems of many pocket gophers (Photos 14-17), and blue-gray gnatcatchers which put on quite the show of flycatching for volant insects (Photos 18-22). Exhibiting courtship behaviors, species such as red-tailed hawks, belted kingfishers and double-crested cormorants flew over the project site. I noticed, however, that the wildlife using the airspace of the project site did not likewise use the airspace over the gravel-covered lot immediately east of the site. Neither did ground squirrels or pocket gophers use the adjacent gravel-covered lot, nor sparrows, western meadowlarks or any other wildlife species other than overflights by western gulls and rock pigeons. Conversely, wildlife often moved between The Nature Conservancy's scrublands and the Ormond Lagoon Waterway and the project site.

Table 1. *Species of wildlife I observed during 5.75 hours of survey on 27-28 January 2022.*

Common name	Species name	Status ¹	Notes
Mallard	<i>Anas platyrhynchos</i>		flyover
Mourning dove	<i>Zenaida macroura</i>		On site and flyovers
Rock pigeon	<i>Columba livia</i>	Non-native	On site and flyovers
Eurasian collared-dove	<i>Streptopelia decaocto</i>	Non-native	On site and flyovers
Vaux's swift	<i>Chaetura vauxi</i>	SSC2	Foraged on site
Anna's hummingbird	<i>Calypte anna</i>		in willows along west side
Allen's hummingbird	<i>Selasphorus sasin</i>	BCC	just off site
American coot	<i>Fulica americana</i>		just off site
Killdeer	<i>Charadrius vociferus</i>		just off site
Shore birds			Flock flew by just off site
Western gull	<i>Larus occidentalis</i>	BCC	all over the site
California gull	<i>Larus californicus</i>	BCC, TWL	On site and flyovers
Double-crested cormorant	<i>Nannopterum auritum</i>	TWL	flyover
Great blue heron	<i>Ardea herodias</i>		tracks
Great egret	<i>Ardea alba</i>		off site
Turkey vulture	<i>Cathartes aura</i>	BOP	foraged over site
Northern harrier	<i>Circus hudsonius</i>	BCC, SSC3, BOP	just off site
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP	pair foraged site and courted
Belted kingfisher	<i>Ceryle alcyon</i>		flyover, courtship
American kestrel	<i>Falco sparverius</i>	BOP	chased Merlin
Merlin	<i>Falco columbarius</i>	TWL, BOP	foraged over site
Say's phoebe	<i>Sayornis saya</i>		SW corner
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC, SSC2	just off site
American crow	<i>Corvus brachyrhynchos</i>		On site and flyovers
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>		just off site
Ruby-crowned kinglet	<i>Regulus calendula</i>		just off site
Hermit thrush	<i>Catharus guttatus</i>		just off site
Northern mockingbird	<i>Mimus polyglottos</i>		in willows along west side
European starling	<i>Sturnus vulgaris</i>	Non-native	On site and flyovers
Cedar waxwing	<i>Bombycilla cedrorum</i>		in Eucalyptus at SW corner
American pipit	<i>Anthus rubescens</i>		On site and flyovers
House finch	<i>Haemorphous mexicanus</i>		On site and flyovers

Lesser goldfinch	<i>Spinus psaltria</i>		flyover
Chipping sparrow	<i>Spizella passerina</i>		Call from on site
White-crowned sparrow	<i>Zonotrichia leucophrys</i>		in willows along west side
Belding's or Large-billed savannah sparrow	<i>Passerculus sandwichensis beldingi</i> or <i>rostratus</i>	CE or SSC2	Likely resident Belding's or wintering large-billed
Song sparrow	<i>Melospiza melodia</i>		Just off site
Lincoln's sparrow	<i>Melospiza lincolnii</i>		Just off site
Western meadowlark	<i>Sturnella neglecta</i>		On site and flyovers
Brewer's blackbird	<i>Euphagus cyanocephalus</i>		On site and flyovers
Orange-crowned warbler	<i>Vermivora celata</i>		in willows along west side
Coyote	<i>Canis latrans</i>		tracks
Raccoon	<i>Procyon lotor</i>		tracks
Botta's pocket gopher	<i>Thomomys bottae</i>		burrows
California ground squirrel	<i>Otospermophilus beecheyi</i>		At burrows on site
Desert cottontail	<i>Sylvilagus auduboni</i>		Just off site

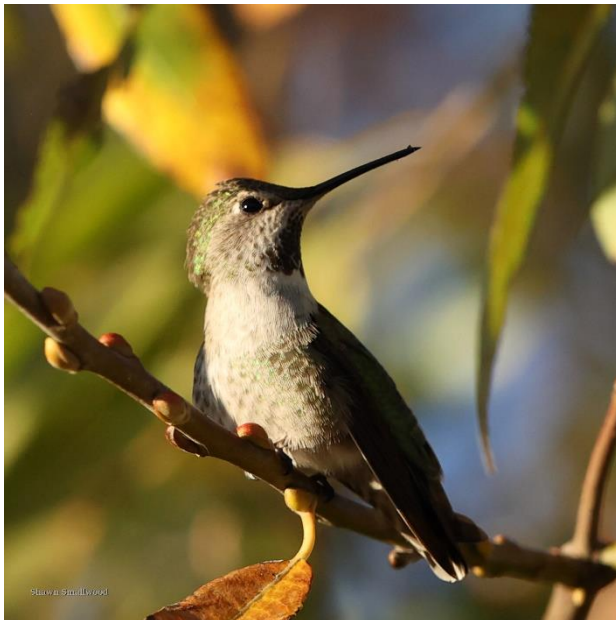
¹ Listed as BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CE = California Endangered, SSC2 and SSC3 = California Bird Species of Special Concern priority 2 or 3 (Shuford and Gardali 2008), TWL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = California Fish and Game Code 3503.5 (Birds of Prey).

Photo 4. Two members of a colony of California ground squirrels on the site, 27-28 January 2022. One of the squirrels is hard to see to the left of the standing squirrel.





Photo 5. Red-tailed hawk on the project site, 27 January 2022.



Photos 6 and 7. Anna's hummingbird (left) and Allen's hummingbird (right) at and next to the project site, 27 January 2022.



Photos 8 and 9. Merlin (left) and belted kingfisher (right) on the project site, 27-28 January 2022.



Photo 10. Western gull on the project site, 27 January 2022.

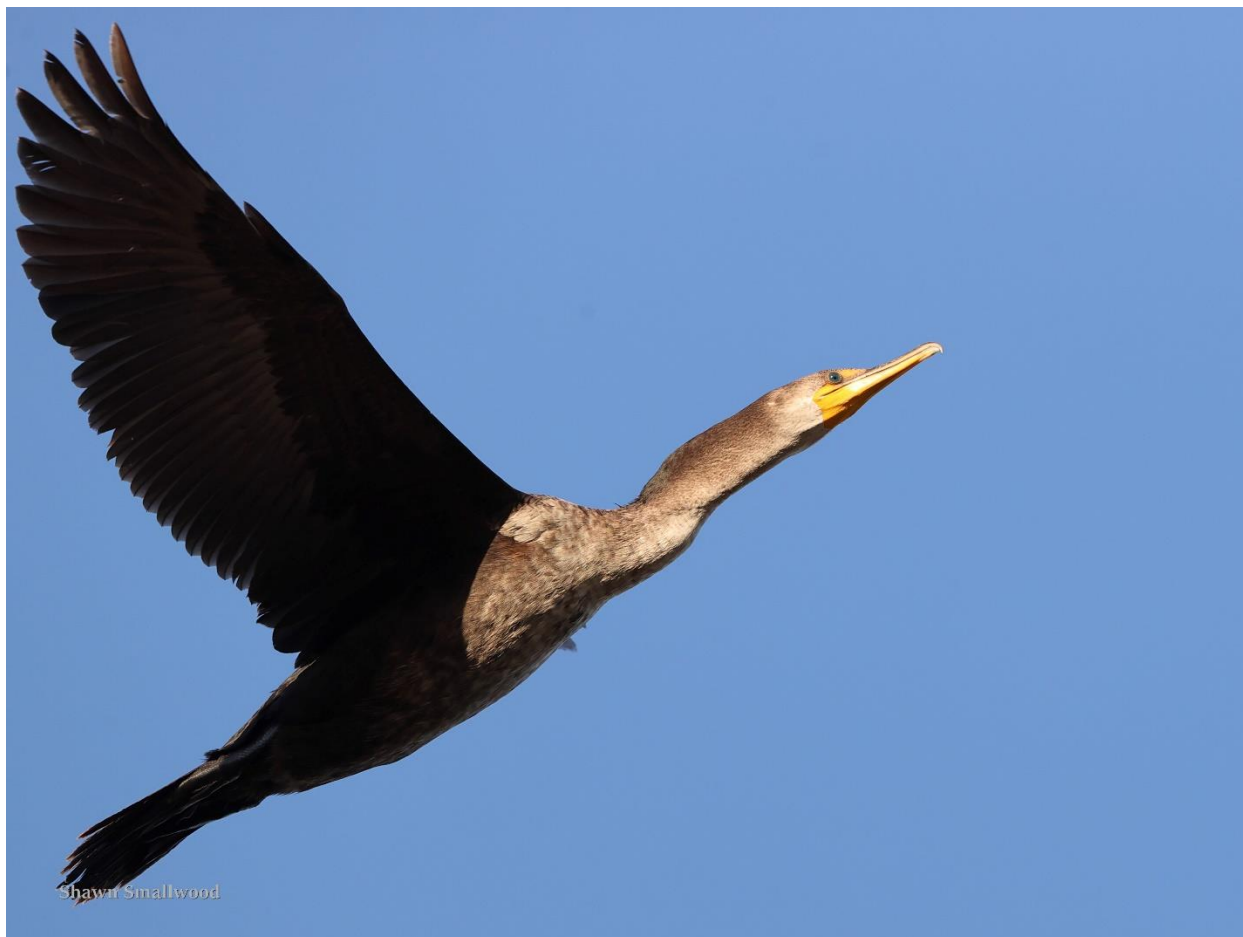


Photo 11. *Double-crested cormorant over the project site, 27 January 2022.*



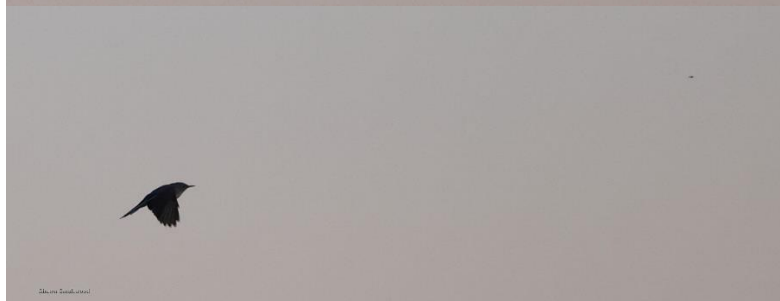
Photos 12 and 13. *House finch (left) and yellow-rumped warbler (right) next to and on the project site, 27 January 2022.*



Photos 14 and 15. *White-crowned sparrow (left) and Say's phoebe (right) on the project site, 27 January 2022.*



Photos 16 and 17. *Western meadowlark (top) and one of many soil mounds of pocket gopher burrow systems on the project site, 27-28 January 2022.*

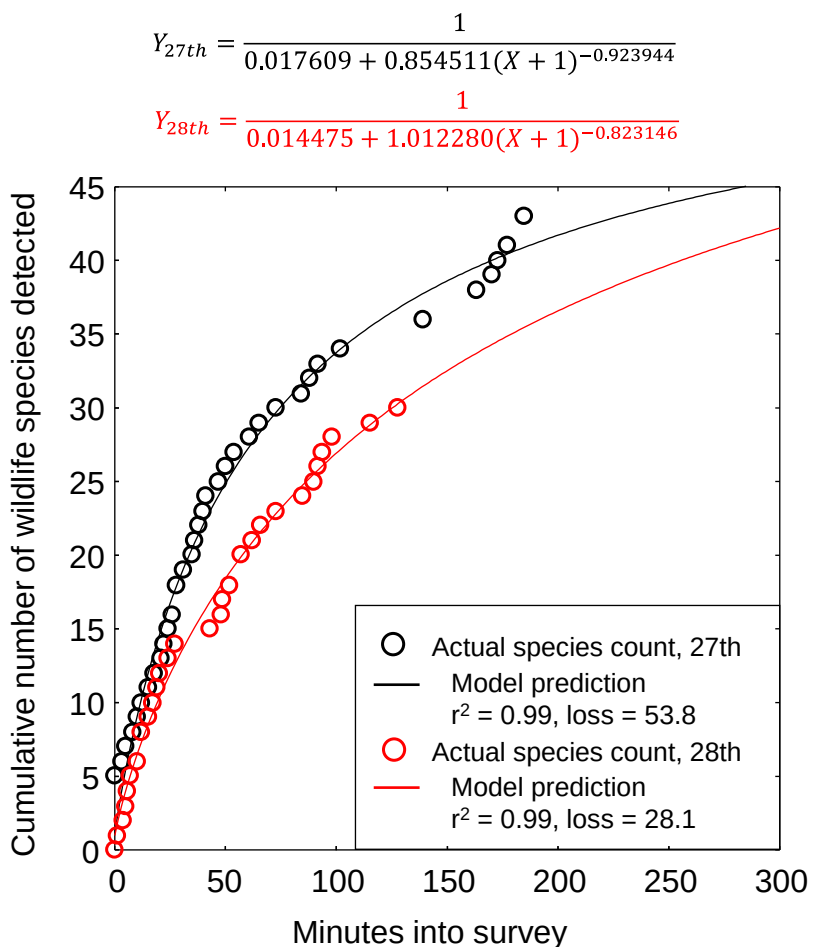


Photos 18–22. *Blue-gray gnatcatcher detects flying insects (left, visible as small specks) and prepares a maneuver to chase one down (below). At lower left, the gnatcatcher catches up with one of the insects, and at lower right, the insect is gone. Along with many other insectivorous birds and bats, blue-gray gnatcatchers provide irreplaceable ecosystem services that benefit the economy and human health and well-being.*

My detections of 47 species of vertebrate wildlife need to be interpreted within the context of the survey effort. No matter who performs a survey, the results of a reconnaissance-level survey qualify as thin empirical foundation for characterizing the environmental setting of any site, including one proposed for a project. Such a survey can serve only as a starting point toward characterization of a site's wildlife community.

There were only so many species I was likely to detect within the short time I had available to perform visual-scan surveys on 27-28 January 2022. However, a focused survey effort in which the times of species detections are noted can inform of the number of species likely to be detected with a larger survey effort of the same methods and the same time of year (Figure 1). This potential is of critical importance when making determinations about occurrence likelihoods of special-status species.

Figure 1. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my visual-scan surveys on 27-28 January 2022. Note that the relationships would differ if the surveys were based on another method or during another season. Also note that the cumulative number of vertebrate species across all methods, times of day, and seasons would increase substantially.

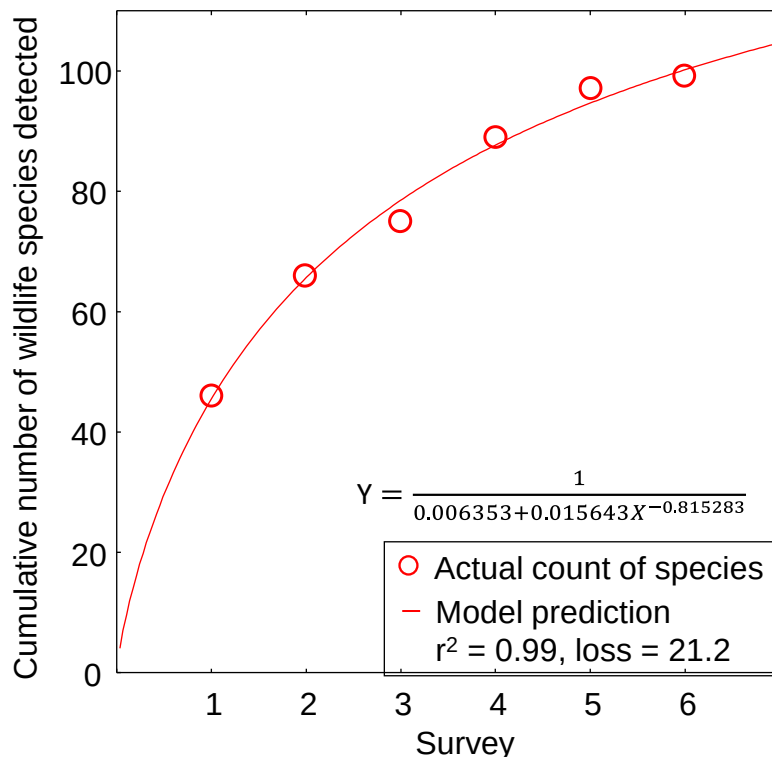


I could have detected many more species than predicted had I also performed surveys at different times of day/night to detect nocturnal and crepuscular species with appropriate methods and technology, or surveys in different seasons and years to detect migrants and species with multi-annual cycles of abundance. My reconnaissance-level surveys inform me that the site is richer in wildlife than the 47 species documented there so far, but also that the environmental setting of the project remains insufficiently characterized as foundation for analysis of impacts to special-status species. How many

more species could I detect by simply repeating the visual-scan surveys on various dates through the year?

To answer the forgoing question, I repeated visual-scan surveys 6 times over the period of one year at a proposed project site near Sacramento, California. Survey outcomes ranged 40 to 67 species per survey, but a least-squares regression model that I fit to the cumulative number of species detections predicted that 157 species of vertebrate wildlife would eventually be detected by continuing to repeat the visual-scan surveys (Figure 2). Repeated surveys achieved diminishing returns, but they were necessary to document the occurrences of the scarcer and more cryptic species. Given the example illustrated in Figure 2, and assuming the pattern of survey returns is robustly represented by Figure 2, the 43 species I detected after my first survey (27 January) at the project site likely represented 29% of the species likely to be detected after six visual-scan surveys. With five more repeat surveys, I would likely detect $43/0.29 = 148$ species of vertebrate wildlife at the site.

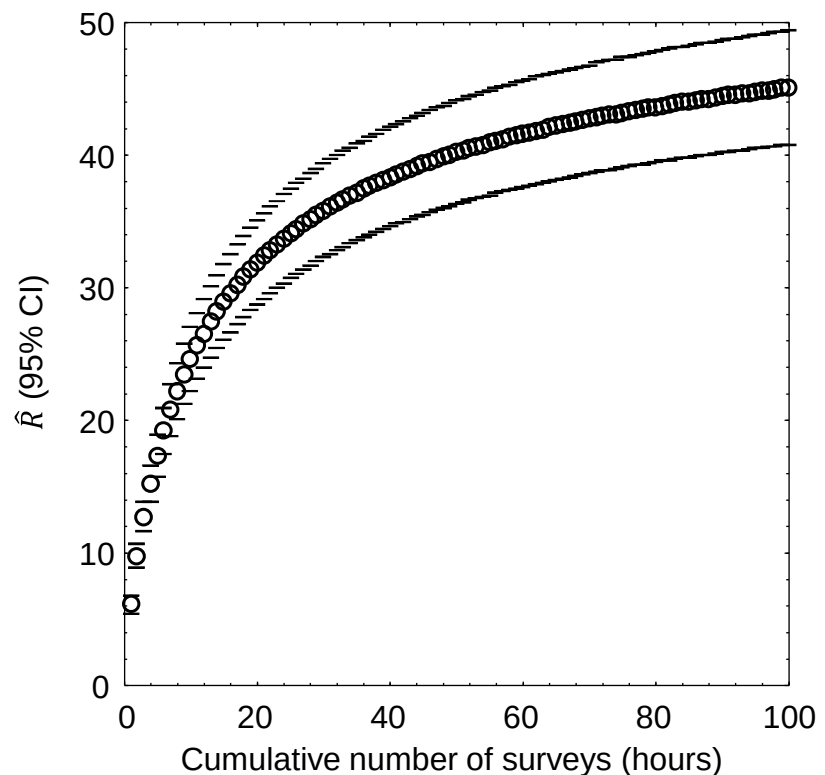
Figure 2. Cumulative number of species detected as a function of the number of visual-scan surveys performed through one year at one site near Sacramento, California.



I completed a much larger survey effort in the annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019, I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of cumulative species

detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b \times (\text{Hours})^c}$, where $\hat{R}$ represented cumulative species richness detected. Coefficients of determination of model-fit ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98). I projected the predictions of each model to 10,000 hours to find predicted asymptotes of wildlife species richness, but I was more interested in predicted species richness at a survey effort within the data range, thereby minimizing bias. I averaged the model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys. On average I detected 17 species over the first 5 hours of surveys in the Altamont Pass, which composed 29.8 % of the total predicted species I would detect with a much larger survey effort. Note that this value is very close the 29% value I obtained from the Sacramento project site that I used as my first example in Figure 2. Given the example illustrated in Figure 3, and assuming the pattern of survey results is much more robustly represented by Figure 3 than it was in Figure 2, the 47 species I detected after my 5 hours of survey at the project site likely represented 29.8% of the species to be detected after many more visual-scan surveys. With many more repeat surveys, I would likely detect $47/0.298 = 158$ species of vertebrate wildlife at the site. Given the much greater robustness of the model derived from the Altamont Pass, it is 158 species of vertebrate wildlife that I predict would be detected at the site after repeat diurnal visual-scan surveys throughout a year.

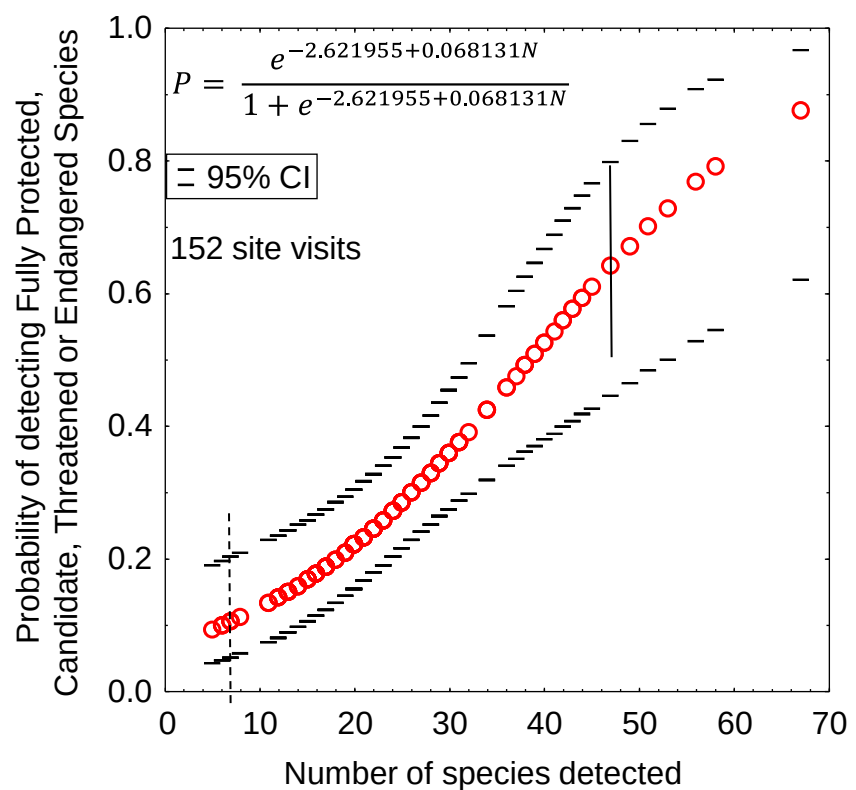
Figure 3. Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019.



There is no question that a larger survey effort would result in a longer list of species documented to use the project site, thereby changing our understanding of the current

environmental setting. But still unknown are which species have yet to be detected, how many of the yet-to-be-detected species are special-status species, and how many are listed species. The likelihood of detecting special-status species is typically lower than that of more common species. This difference can be explained by the fact that special-status species tend to be rarer and thus less detectable than common species. Special-status species also tend to be more cryptic, fossorial, or active during nocturnal periods when reconnaissance surveys are not performed. Another useful relationship from careful recording of species detections and subsequent comparative analysis is the probability of detection of listed species as a function of an increasing number of vertebrate wildlife species detected (Figure 4). (Note that listed species number fewer than special-status species, which are inclusive of listed species. Also note that I include California Fully Protected species and federal Candidate species as listed species.)

Figure 4. Probability of detecting ≥ 1 Candidate, Threatened or Endangered Species of wildlife listed under California or federal Endangered Species Acts, based on survey outcomes logit-regressed on the number of wildlife species I detected during 152 site visits in California. The dashed vertical line represents the number of species detected by Rincon and the solid vertical line represents the number I detected.



As was demonstrated in Figures 1 – 3, the number of species detected is largely a function of survey effort. Greater survey effort also increases the likelihood that listed species will be detected (which is the first tenet of detection surveys for special-status species). Based on the outcomes of 152 previous surveys that I performed at sites of proposed projects, my survey effort at the project site carried a 64% chance of detecting a listed species, whereas the survey effort of Rincon resulted in the detections of many fewer species and therefore carried a 10.5% chance of detecting a listed species. Rincon (2018, 2020) did not detect a listed species, and neither did I, but with another 4 or 5 hours of survey I likely would have. I have no doubt that listed species use the site. Documenting use of the site by listed species would require more survey effort to achieve a reasonable likelihood of detecting them. No reconnaissance-level survey is

capable of detecting enough of the wildlife species that occur at a site to realistically characterize the site's wildlife community. This context bears on my comments regarding potential project impacts to biological resources.

CURRENT ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the species that use the site and its surrounds, species' relative abundances, how species use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze project impacts. Methods to achieve this first step typically include surveys of the site for biological resources and reviews of literature, databases and local experts for documented occurrences of special-status species. In this case, these essential steps remain incomplete and insufficiently informative in the DEIR. Herein I provide a bit more of a characterization of the wildlife community as a component of the current environmental setting, including the identification of special-status species likely to use the site at one time or another. First, however, I comment on the Rincon's effort to inventory biological resources on the site.

Two site visits totaling 3 person-hours were made to the site to inventory biological resources. Three hours were many too few to achieve anywhere close to a realistic inventory of biological resources. Over those 3 person-hours, Rincon (2018, 2020) reported having detected 7 species of vertebrate wildlife. This outcome was 16% of the number of wildlife species that I detected over the same number of person-hours during my first survey, and was only <15% of all the species I detected during both surveys. I must add that Rincon enjoyed full access to the project site, whereas I was relegated to its border. For some reason, and despite their advantage with access, Rincon (2018, 2020) was unable to detect nearly the number of species that I did at the site.

The Rincon survey effort detected only 4.4% of the 158 wildlife species my empirical models predicted based on data from hundreds of other wildlife surveys (see above), and that's just of the species typically detectable during diurnal visual-scan surveys. Many additional wildlife surveys would be detectable by performing nocturnal surveys, trapping, or other methods appropriate to the species. Rincon did not inventory biological resources as reported (Rincon 2018, 2020), but rather saw only a few of the many species that used the site at the times of Rincon's surveys.

Rincon (2018) reported having seen no special-status species during its surveys. This conclusion was inaccurate because the Rincon biologists did see red-tailed hawk and double-crested cormorant, both of which appear on formal lists of species of concern in California. Red-tailed hawk is protected by California Fish and Game Code 3503.5, and double-crested cormorant is on California Department of Fish and Wildlife's The Watch List. Regardless of the status of these species, it was pseudoscientific of Rincon to report having seen no special-status species after having performed no protocol-level detection surveys for such species. If one insufficiently searches for a species, there is a greater chance one will not detect it.

Rincon (2018) also made pseudoscientific use of the California Natural Diversity Data Base (CNDDB). From its CNDDB query, Rincon (2018) reportedly found only 21 special-status species of wildlife documented within 5 miles of the project site. However, Rincon did not explain the context of this query. CNDDB can be helpful for confirming occurrences of special-status species where they have been reported, but it cannot be relied upon for determining absences of species. CNDDB relies on volunteer reporting, and is limited in its spatial coverage by the access of biologists to private properties. The findings reported to CNDDB are not from any sort of randomized or systematic sampling across California, nor does CNDDB collect reports of negative findings. Another limitation of CNDDB is its focus on special-status species. Most members of any of California's wildlife communities are not reported to CNDDB, because CNDDB is not interested in them and Scientific Collecting Permits do not require reporting of them. This means that any species recently designated with special status will not be as well represented in CNDDB as are other species that were assigned special status decades ago. The limitations of CNDDB are well-known, and summarized by CDFW in a warning presented on its CNDDB web site (<https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data>): *"We work very hard to keep the CNDDB and the Spotted Owl Database as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers..."* Rincon's reporting of its CNDDB query presents a factual outcome that was out of context of how CNDDB is supposed to be used.

Rincon (2018, 2020) did not appear to rely on any other sources of wildlife occurrence data other than CNDDB. Had Rincon relied on eBird and iNaturalist, many more special-status species occurrences at and near the project site would have been evident (see below on my use of these data bases). Based on the findings of my own brief survey of the site, Rincon's (2018, 2020) CNDDB query result holds no credibility. In only a few hours, I saw up to 12 special-status species at and right next to the project site.

Perhaps one reason for Rincon's surprisingly cursory efforts to detect special-status species at the site was a predisposition towards the conclusion that special-status species would not occur there. Rincon (2018:7) explained that "special-status wildlife species typically have very specific habitat requirements...", thereby implying that disturbances to the site would have suppressed the very specific habitat requirements of such species. Rincon (2018) furthers this notion by listing habitat requirements of the species identified by their CNDDB query. These habitat requirements pigeon-holed each species into unrealistically narrow portions of the environments actually used by the species. The scientific definition of habitat is that part of the environment used by an organism (Hall et al. 1997, Morrison et al. 1998, Krausman 2016). After a great many changes wrought by recent activities of Californians, most special-status species will make use of whatever remains of the environment in which they evolved, so long as soils have not been covered by impervious surfaces and vegetation can grow to provide forage and cover and nest sites. Special-status species of wildlife are more capable than Rincon

asserts at making use of often-disturbed sites such as the project site. The proof of this is in the species' actual use of the site. To document such use, an adequate survey effort is necessary.

Contrary to Rincon's reporting and despite efforts to disturb the site, my survey results, analyzed in the context of the patterns of species detections as functions of survey effort, indicate the site is relatively rich in wildlife species. Up to 12 (26%) of the 47 species I detected were special-status species, and only 3 (6%) were non-native. In my experience, these percentages are unusually high for special-status species and low for non-native species, indicating the site maintains high ecological integrity. An ecological keystone species – California ground squirrel – occupies the site, thereby increasing the likelihoods of occurrence of species that rely on ground squirrels for forage or on their burrows for refugia. There is certainty that wildlife use the site, that ecological keystone species occur at and around the site, and that many other species of wildlife also use the site but have yet to be documented doing so. What is uncertain is which additional species also use the site but remain undocumented doing so. Additional surveys should be performed to better inform a revised DEIR.

With the presence of ground squirrels, burrowing owls might use the project site. Burrowing owls sometimes reside in cavities other than burrows constructed by fossorial mammals, but in my experience, burrowing owls usually establish nest sites and winter refugia in one or more burrows of a burrow system constructed by burrowing owls (Smallwood et al. 2013, Smallwood and Morrison 2018). Burrowing owls and ground squirrels are mutualists, which means the presence of one species benefits the other. Burrowing owls and ground squirrels mutually alarm-call to alert all present of the approach of predators, and the calls by either of the species is understood by both species of whether the predator approaches by air or land and of the direction of approach. In 2019, I found through monitoring of multiple colonies that where burrowing owls and ground squirrels co-occurred, more squirrels survived through spring and summer, and more of the nesting pairs of burrowing owls succeeded and more of their chicks survived to fledge (Smallwood unpublished data). In my experience, finding ground squirrels is a reliable precursor to finding burrowing owls.

However, detecting burrowing owls residing with ground squirrels is an order of magnitude more difficult in winter as compared to spring and summer. Burrowing owls are much more visible in spring and summer because the male adult guards the nest from prominences. In winter, all burrowing owls residing in ground squirrel burrows remain within the burrows during daylight hours, emerging at night to forage. While surveying for burrowing owls in winter, I learned that one of the most effective strategies for detecting burrowing owls during winter surveys is to periodically stop walking along transects and turn to see owls changing burrow locations after I walked past them. But even with this trick, my estimate is that only 10% of available burrowing owls can be detected during winter surveys. And winter is when I happened to visit the project site. Further diminishing my likelihood of detecting burrowing owls at the site was my lack of access to the ground squirrel burrows to check for burrowing owl sign. Given that ground squirrels occupy the project site, detection surveys for burrowing

owls are warranted. The surveys should comply with the survey standards of CDFW (2012). These surveys should be completed to inform a revised DEIR.

Rincon (2018) offers no survey findings of wildlife on adjacent properties, such as the property to the south that is undergoing habitat restoration by The Nature Conservancy. Neither Rincon (2018) nor the DEIR discusses the project's potential impacts to a California Endangered species known to be nesting on The Nature Conservancy property immediately to the south of the project site (Zembal and Hoffman 2010). In fact, the savannah sparrows I saw on the project site might have been foraging members of the Belding's subspecies, although it was also possible that they were wintering large-billed savannah sparrows. Regardless, the DEIR remains deficient for not discussing potential project impact to Belding's savannah sparrows and to other special-status species reside just south of the project site.

Based on my review of publicly available data bases of species occurrences, I determined that 87 special-status species of wildlife have the potential to occur at the project site, including 85 species of vertebrate wildlife (Table 2). I would not expect many of these species to co-occur at the site at any given time, but rather at one time or another or periodically by season. With 12 special-status species documented at the site, 47 documented within about 1.5 miles, another 13 within several miles, and 11 more species within about 30 miles of the site, there is ample reason to expect significant impacts to special-status species of wildlife should the project go forward as proposed. These impacts would happen without any plan to mitigate them other than to begin construction outside the avian breeding season or after performing a preconstruction survey for nesting birds. The DEIR needs to be revised to appropriately characterize the current environmental setting as a baseline for impacts analysis.

BIOLOGICAL IMPACTS ANALYSIS

Determination of occurrence likelihoods of special-status species is not, in and of itself, an analysis of potential project impacts. An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, or the whole of a species. In the following, I analyze several types of impacts likely to result from the project, and almost none of which are analyzed in the DEIR.

HABITAT LOSS

The DEIR does not address the loss of wildlife that would result from habitat loss caused by the project. No mention is made of habitat fragmentation, nor of the project site role as stopover and staging opportunities for migratory wildlife. No mention is made of what happens to the existing habitat once the 5-year temporary use of the site ends. Most likely, the gravel would remain, or the site would be proposed for another industrial use that covers the soils with impervious surface.

Table 2. Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird (<https://eBird.org>), where “very close” indicates within 1.5 miles of the site, “nearby” indicates within several miles, and “in region” indicates within 30 miles or so.

Common name	Species name	Status ¹	Data base records, Site visits
Monarch	<i>Danaus plexippus</i>	FC	Nearby (obscured)
Crotch’s bumble bee	<i>Bombus crotchii</i>	CE candidate	Nearby (obscured)
Redhead	<i>Aythya americana</i>	SSC3	Very close
Common loon	<i>Gavia immer</i>	SSC	Very close
Brant	<i>Branta bernicla</i>	SSC2	Very close
Western grebe	<i>Aechmophorus clarkii</i>	BCC	Very close
Clark’s grebe	<i>Aechmophorus occidentalis</i>	BCC	Very close
American white pelican	<i>Pelecanus erythrorhynchos</i>	SSC	Very close
Brown pelican	<i>Pelecanus occidentalis</i>	CFP	Very close
Double-crested cormorant	<i>Phalacrocorax auritus</i>	WL	On site
White-faced ibis	<i>Plegadis chihi</i>	WL	Very close
Willet	<i>Tringa semipalmata</i>	BCC	On site
Turkey vulture	<i>Cathartes aura</i>	BOP	On site
Osprey	<i>Pandion haliaetus</i>	WL, BOP	Very close
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA, BOP	Very close
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA, BCC, CFP	Nearby
White-tailed kite	<i>Elanus luecurus</i>	CFP, WL, BOP	Very close
Sharp-shinned hawk	<i>Accipiter striatus</i>	WL, BOP	Very close
Cooper’s hawk	<i>Accipiter cooperii</i>	WL, BOP	Very close
Northern harrier	<i>Circus cyaneus</i>	SSC3, BOP	On site
Red-shouldered hawk	<i>Buteo lineatus</i>	BOP	Very close
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP	On site
Ferruginous hawk	<i>Buteo regalis</i>	WL, BOP	Nearby
American kestrel	<i>Falco sparverius</i>	BOP	On site
Merlin	<i>Falco columbarius</i>	WL, BOP	On site
Peregrine falcon	<i>Falco peregrinus</i>	CFP, BOP, BCC	Very close
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	Very close

Common name	Species name	Status¹	Data base records, Site visits
Mountain plover	<i>Charadrius montanus</i>	BCC, SSC	Nearby
Whimbrel	<i>Numenius phaeopus</i>	BCC	Very close
Long-billed curlew	<i>Numenius americanus</i>	BCC, WL	Very close
Marbled godwit	<i>Limosa fedoa</i>	BCC	Very close
Red knot	<i>Calidris canutus</i>	BCC	Very close
Short-billed dowitcher	<i>Limnodromus griseus</i>	BCC	Very close
Heermann's gull	<i>Larus heermanni</i>	BCC	Very close
Western gull	<i>Larus occidentalis</i>	BCC	On site
California gull	<i>Larus californicus</i>	BCC, WL	On site
California least tern	<i>Sternula antillarum</i>	FE, CE	Very close
Elegant tern	<i>Thalasseus elegans</i>	WL	Very close
Caspian tern	<i>Hydroprogne caspia</i>	BCC	Very close
Black skimmer	<i>Rynchops niger</i>	BCC, SSC ₃	Very close
Xantus's murrelet	<i>Synthliboramphus hypoleucus</i>	CT, BCC	In region
Rhinoceros auklet	<i>Cerorhinca monocerata</i>	WL	In region
Western screech-owl	<i>Megascops kennicotti</i>	BOP	Nearby
Barn owl	<i>Tyto alba</i>	BOP	Nearby
Burrowing owl	<i>Athene cunicularia</i>	BCC, SSC ₂ , BOP	Very close
Great horned owl	<i>Bubo virginianus</i>	BOP	Very close
Short-eared owl	<i>Asio flammeus</i>	BCC, SSC ₃ , BOP	Very close
Sandhill crane	<i>Antigone canadensis tabida</i>	CT, CFP	Nearby
Vaux's swift	<i>Chaetura vauxi</i>	SSC ₂	On site
Costa's hummingbird	<i>Calypte costae</i>	BCC	In region
Allen's hummingbird	<i>Selasphorus sasin</i>	BCC	Very close
Rufous hummingbird	<i>Selasphorus rufus</i>	BCC	Very close
Lewis's woodpecker	<i>Melanerpes lewis</i>	BCC	Nearby
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC	Very close
Purple martin	<i>Progne subis</i>	SSC ₂	Nearby
Bank swallow	<i>Riparia riparia</i>	CT	Very close
Olive-sided flycatcher	<i>Contopus cooperi</i>	BCC, SSC ₂	Nearby

Common name	Species name	Status¹	Data base records, Site visits
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	SSC2	Very close
Willow flycatcher	<i>Empidonax trailii</i>	CE	Very close
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC, SSC2	On site
California horned lark	<i>Eremophila alpestris actia</i>	WL	Very close
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, CE	Nearby
Oak titmouse	<i>Baeolophus inornatus</i>	BCC	Very close
Clark's marsh wren	<i>Cistothorus palustris clarkae</i>	SSC2	Very close
California gnatcatcher	<i>Polioptila c. californica</i>	CT, SSC	In region
Yellow warbler	<i>Dendroica petechia</i>	BCC, SSC2	Very close
Yellow-breasted chat	<i>Icteria virens</i>	SSC3	Very close
Summer tanager	<i>Piranga rubra</i>	SSC1	Very close
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	BCC, SSC	In region
Oregon vesper sparrow	<i>Pooecetes gramineus affinis</i>	SSC2	Very close
Brewer's sparrow	<i>Spizella breweri</i>	BCC	Nearby
Bell's sparrow	<i>Amphispiza b. belli</i>	WL	In region
Belding's savannah sparrow ²	<i>Passerculus sandwichensis beldingi</i>	CE	On site ²
Large-billed savannah sparrow ²	<i>Passerculus sandwichensis rostratus</i>	SSC2	On site ²
Grasshopper sparrow	<i>Ammodramus savannarum</i>	SSC2	Very close
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	SSC3	Very close
Tricolored blackbird	<i>Agelaius tricolor</i>	CT, BCC	Very close
Bullock's oriole	<i>Icterus bullockii</i>	BCC	Very close
Lawrence's goldfinch	<i>Spinus lawrencei</i>	BCC	Very close
Pallid bat	<i>Antrozous pallidus</i>	SSC, WBWG H	In region
Townsend's western big-eared bat	<i>Plecotus t. townsendii</i>	SSC, WBWG H	In range
Western red bat	<i>Lasiurus blossevillei</i>	SSC, WBWG H	In range
Small-footed myotis	<i>Myotis cililabrum</i>	WBWG: M	In range
Miller's myotis	<i>Myotis evotis</i>	WBWG: M	In region
Fringed myotis	<i>Myotis thysanodes</i>	WBWG: H	In range
Long-legged myotis	<i>Myotis volans</i>	WBWG: H	In region

Common name	<i>Species name</i>	Status¹	Data base records, Site visits
Yuma myotis	<i>Myotis yumanensis</i>	WBWG: LM	In region
Western mastiff bat	<i>Eumops perotis</i>	SSC, WBWG H	In region

¹ Listed as FE = federal endangered, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CE = California endangered, CT = California threatened, CFP = California Fully Protected (CDFG Code 3511), SSC = California species of special concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = California Fish and Game Code 3503.5 (Birds of Prey).

² Uncertain of subspecies, but either resident Belding's or wintering large-billed savannah sparrows.

Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity (Smallwood 2015). For example, two study sites in grassland/wetland/woodland complexes had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. The environmental conditions of these two study sites differed from the project site by including woodland, but they exemplify the high productivity of avian habitat. Assuming the nest density at the project site is half the densities of the two study sites I cited, 17.15 nests/acre multiplied against 33.7 acres would predict a loss of 578 bird nests. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, then the project would prevent the production of 1,676 fledglings per year. After 100 years and assuming an average generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from the following formula: $\{(nests/year \times chicks/nest \times number\ of\ years) + ((2\ adults/nest \times nests/year) \times (number\ of\ years \div years/generation))\}$. In the case of this project, and given my stated assumptions, this formula predicts **the project would deny California 190,720 birds over the next century due solely to loss of terrestrial habitat**. This predicted loss of 1,907 birds/year would be substantial, and would qualify as a significant impact that has not been addressed in the DEIR.

The project would eliminate much of the remaining open-space habitat currently available to numerous special-status species, including western gull, merlin, loggerhead shrike and other species I detected at the project site and many others I would likely detect with an extended survey effort. The project would eliminate much of the remaining habitat in the area that is currently useful to many special-status species listed in Table 2, including burrowing owl. Winter migrants such as merlin would lose access to nearly 34 acres of forage that is critical to their ability to successfully breed come spring. Nearly 34 acres is a lot of habitat space that has been used for thousands of years by what are now designated as special-status species. Once the site is covered by gravel, the habitat values of the site would be lost, and the habitat value of the scrubland managed by The Nature Conservancy would be degraded. The DEIR should be revised to appropriately analyze habitat loss as a potential project impact to birds.

Artificial Light Impacts on Wildlife

The project would add 19 security lights around the site's perimeter. The light from these lights would penetrate the scrubland south of the project site, illuminating surface areas normally traversed by nocturnal wildlife that rely on darkness for stealth. Penetrating light would also generate stark light/shadow contrasts that can be confusing to wildlife. Artificial lighting causes a variety of substantial impacts on a variety of wildlife species (Rich and Longcore 2006), including interference with circadian rhythm, disruption of foraging activity, disruption of movement patterns, navigational interference and lethal attraction of flying birds, and altered development of eggs and juveniles/larvae. Added lighting could cause displacement or altered activity patterns of at least some species, resulting in habitat degradation and additional habitat loss. The DEIR needs to be revised to address this suite of potential project impacts.

COLLISION MORTALITY ALONG FENCES

The DEIR makes no mention of, and thus provides no analysis of, bird-fence collision mortality along the proposed project's 1,835-m of 6-foot-tall fence. Based on scientific fatality monitoring among California's utility-scale solar energy projects, collision and entanglement mortality along security fences averaged 14.435 (95% CI: 10.880–20.339) birds/km/year (Smallwood 2020). Applying this rate to the proposed 1.835 km of fence would predict 26.5 bird fatalities per year (14.435 bird fatalities/km/year × 1.835 km of fence at the project site). Given that the fence would remain after the temporary vehicle storage at the site ends, this estimated collision and entanglement mortality would continue for as many years as the fence remains. Fencing kills wildlife (Photo 23) and it interferes with the movement of non-volant species, so it needs to be addressed in a revised DEIR.



Photo 23. *A great-horned owl died after becoming entangled on the razor wire placed on top of this cyclone fence surrounding a substation in Alameda County. Photo by Joanne Mount.*

WILDLIFE MOVEMENT

The DEIR (page 5.4-25) asserts that “the probability that wildlife would utilize the project site or the immediate area for regional movement is unlikely given the urban nature of the project site and the surrounding vicinity.” But that is not what I saw at the project site. I witnessed a constant use of the site for wildlife movement. California gulls and western gulls flew over it all the time. The gulls did not merely fly over it, however. They used it to gain lift for long-distance glides. I saw gulls repeatedly arrive to the site, and then circle while ascending in the thermals generated by the natural soils of the site. I also witnessed many double-crested cormorants making use of the site for travel, as well as mallards, belted kingfishers, merlin and many other birds.

The DEIR focuses its analysis on wildlife movement corridors as the only issue that would determine whether the project would interfere with wildlife movement in the

region. The DEIR adopts a CEQA standard of analysis that does not exist. The CEQA standard is whether a project will “Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors...” The primary phrase of the standard goes to wildlife movement regardless of whether the movement is channeled by a corridor or a linkage. And anyhow, corridors are typically regarded in science as human-created landscape structures intended to reduce the effects of habitat fragmentation, and only infrequently as a channelization of wildlife movement caused by landscape structure (Smallwood 2015).

Wildlife movement in a region is often diffuse rather than channeled (Runge et al. 2014, Taylor et al. 2011) unless anthropogenic changes have forced channeling or targeting of “island” patches of habitat (Smallwood 2015). Wildlife movement must include stopover opportunities for birds and bats (Taylor et al. 2011), and staging habitat (Warnock 2010) during dispersal, migration or home range patrol. Based on what I saw of wildlife activity at the site and considering the site’s proximity to the coast, a stream channel and wetlands, and considering that the site is nearly an island of open space surrounded by human-altered landscape, many species of wildlife likely use the site of the proposed project for movement across the region. The project, with its fencing, gravel and parked cars would cut wildlife off from stopover and staging opportunities, and would lengthen the distances that wildlife must travel before finding alternate stopover habitat. The project, therefore, would interfere with wildlife movement in the region.

ROAD MORTALITY

The DEIR makes no mention of the project’s potential contributions to one of the most substantial anthropogenic sources of wildlife mortality, and that is wildlife-automobile collision mortality. With the proposed use of the site as an outdoor storage, the DEIR is grossly deficient for providing no analysis of traffic impacts to wildlife. The very purpose of the site is to store cars that would be driven one by one to and from the site, thereby endangering wildlife along the way as wildlife have to cross roads for various reasons (Photos 24-26). Species at risk would be those listed in Table 2 as well as many other special-status species that occur along roads that would be used in support of the project as far from the site as cars would travel to and from the site. The DEIR makes no mention of this, nor does it provide an analysis of wildlife-automobile collision mortality. However, as will be described, a basis for predicting wildlife mortality can be found in the prediction of annual vehicle miles traveled (VMT).

Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America, traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

Photo 24. *A Gambel's quail dashes across a road on 3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.*



Photo 25. *A mourning dove killed by vehicle traffic on a California road. Photo by Noriko Smallwood, 21 June 2020.*



Photo 26. *Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

The nearest study of traffic-caused wildlife mortality was performed along a 2.5 mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study right next to Vasco Road (Brown et al. 2016). The Brown et al. (2016) adjustment factors were similar to those for carcass persistence of road fatalities (Santos et al. 2011). Applying searcher detection rates estimated from carcass detection trials performed at a

wind energy project immediately adjacent to this same stretch of road (Brown et al. 2016), the adjusted total number of fatalities was estimated at 12,187 animals killed by traffic on the road. This fatality number translates to a rate of 3,900 wild animals per mile per year killed along 2.5 miles of road in 1.25 years. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic on roads within the City of Oxnard and County of Ventura would similarly result in intense local impacts on wildlife.

Predicting project-generated traffic impacts to wildlife

The DEIR offers no clear prediction of project-generated VMT, but it does provide the bases for calculating most of it. Assuming the average employee commute would be 20 miles, the project would add 376,790 annual VMT (1.65 miles per trip x 262 trips per day x 365 = 157,790 VMT for car transport and shuttle + 20 miles per trip x 30 trips per day x 365 = 219,000 VMT for employee commute). This would be a lot of mileage to be driven at great peril to wildlife that must cross roads to go about their business of foraging, patrolling home ranges, dispersing and migrating. But it can also serve as a basis for predicting impacts to wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although despite the nearness of the Mendelsohn et al. (2009) study to the project site, it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 11.7% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species).

During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was $19,500 \text{ cars and trucks} \times 2.5 \text{ miles} \times 365 \text{ days/year} \times 1.25 \text{ years} = 22,242,187.5 \text{ vehicle miles}$ per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into the annual VMT predicted above, I predict the project would cause 206 wildlife fatalities per year. **Operations over 5 years would accumulate 1,030 wildlife fatalities.** It remains unknown whether and to what degree vehicle tires contribute to carcass removals from the roadway, thereby contributing a negative bias to the fatality estimates I made from the Mendelsohn et al. (2009) fatality counts.

Based on my assumptions and simple calculations, the project-generated traffic would cause substantial, significant impacts to wildlife. The DEIR should be revised to include

an appropriate analysis of traffic-caused road mortality as a potential project impact to wildlife.

CUMULATIVE IMPACTS

The DEIR adopts a flawed approach to analysis of cumulative impacts. It implies that cumulative impacts are really just residual impacts of incomplete mitigation. On page 5.4-29, it explains that “potential impacts from the proposed project and other related projects would be site-specific, and evaluations of potential impacts would be conducted on a project-by-project basis, and mitigation would be included to address any impacts.” If cumulative impacts were merely residual impacts of incomplete mitigation, then cumulative effects analysis would be merely an analysis of mitigation efficacy. The DEIR’s implied standard is not the standard of analysis of cumulative effects. CEQA defines cumulative impacts, and it outlines two general approaches for performing the analysis.

Given that North America has lost nearly a third of its birds over the past half century (Rosenberg et al. 2019), an appropriate cumulative effects analysis is warranted. The DEIR needs to be revised so that it includes a cumulative effects analysis that meets the standards of CEQA. It should consider the cumulative loss of habitat by extending the types of calculation I made above (under the subtitle, Habitat Loss) to the cumulative areas of habitat at issue within the geographic scope of the cumulative impacts analysis. The analysis should extend the calculations I used above to predict wildlife mortality based on the cumulative VMT within the geographic scope of the cumulative impacts analysis. It should also consider the cumulative effects of additional fencing that could interfere with wildlife movement and cause collision and entanglement mortality. To do this, the DEIR ought to apply the same scientifically-founded rate of bird fatalities/km of fence that I used above, but this time for all the fencing that occurs or is anticipated to occur within the geographic scope of the cumulative impacts analysis. These quantitative approaches to cumulative effects analysis are feasible, and need only be informed by estimates of habitat loss, VMT and length of fencing in the study area.

MITIGATION

The DEIR proposes construction timing and preconstruction, take-avoidance surveys to avoid impacts to breeding birds (MM BIO-1). Whereas I agree that preconstruction surveys would be appropriate, it must be understood by decision-makers and the public that such surveys typically detect small fractions of the animals targeted. Nesting birds are highly adept at concealment to avoid predation. It is very difficult to find hummingbird nests. Grassland birds such as western meadowlark establish nest sites under grass, and these nests are so well-hidden that they are only detected when a parent bird flushes from the nest as a biologist steps right next to it. Burrowing owls can misdirect biologists by perching at sites well away from their nests and otherwise waiting for the observer to leave before returning to the nest. Similarly, loggerhead shrikes will fly to various locations other than the nest site while under observation (Smallwood and Smallwood 2021). With so many trees and shrubs around the site and so many acres of grassland on the site, the notion that more than a few animals would

be detected would be fantasy. Furthermore, preconstruction, take-avoidance surveys ultimately fail to prevent the impacts of habitat loss, resulting in the loss of productive capacity of the site.

Preconstruction surveys should not be performed without first having performed detection surveys. Preconstruction surveys are no substitute for detection surveys. Species detection surveys are needed to (1) support negative findings of species when appropriate, (2) inform preconstruction surveys to improve their efficacy, (3) estimate project impacts, and (4) inform compensatory mitigation and other forms of mitigation. Detection survey protocols and guidelines are available from resource agencies for most special-status species. Otherwise, professional standards can be learned from the scientific literature and species' experts. To detect nest sites, long hours of observation are needed by qualified behavioral ecologists to note the patterns and destinations of delivery of nest material and food items. Long hours are needed to note where birds are defending nest territories. And long hours are needed to allow for birds to relax their concern over the presence of the observers, and to hence exhibit behaviors other than those intended to distract or mislead the observers. Preconstruction surveys simply do not provide sufficient time for these patterns to be realized.

RECOMMENDED MEASURES

Habitat Loss: If the project goes forward, compensatory mitigation would be warranted for habitat loss. An equal area of open space should be protected in perpetuity as close to the project site as possible. The impacts of artificial lighting and interference with wildlife movement by the security fence should be minimized by reducing the number of lights, directing more of the lighting inward to the project, and using fencing that increases opacity and minimizes the risk of entanglement. The fence should also include gaps to enable non-volant wildlife to pass through.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that will be caused by the project's contribution to increased road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with automobiles.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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Photo 27. A pair of house finches on the south side of the project site, 27 January 2022.

Photo 28. A Say's phoebe found some food on the project site, 27 January 2022.



ATTACHMENT 7

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Jay Dobrowalski
City of Oxnard
214 South C Street
Oxnard, California 93030

18 October 2022

RE: Temporary Outdoor Vehicle Storage

Dear Mr. Dobrowalski,

I write to reply to the Final Environmental Impact Report's (FEIR's) responses to my 9 February 2022 comments on the Draft Environmental Impact Report (DEIR) in support of a proposed temporary outdoor vehicle storage facility on 33.7 acres of open space at the southeast corner of Hueneme Road and Perkins Road.

The FEIR assigns comment numbers throughout my letter, to which responses are likewise numbered. I disagree with the splitting of certain paragraphs into separate comments, but this splitting is unimportant to me. Thus, I replied according to the numbering the FEIR assigns to my comments. What is important, however, is that the responses characterized many of the numbered comments as statements or as introductions to comments to follow. In all of these instances, the FEIR concludes that no further response is required. In other words, many of my comments, which were acknowledged as such by the FEIR's numbered labels, were then disqualified as comments in order to avoid having to respond to them. Except for two or three introductory paragraphs, which the FEIR should not have assigned comment numbers, the paragraphs I wrote were comments on the DEIR, and as comments, they merited serious responses. To many of my comments, City of Oxnard fails to provide good-faith, reasoned analyses in their responses.

My replies mostly follow the numbered responses in the order they appear in the FEIR. I consolidated a few of those that the FEIR address redundantly.

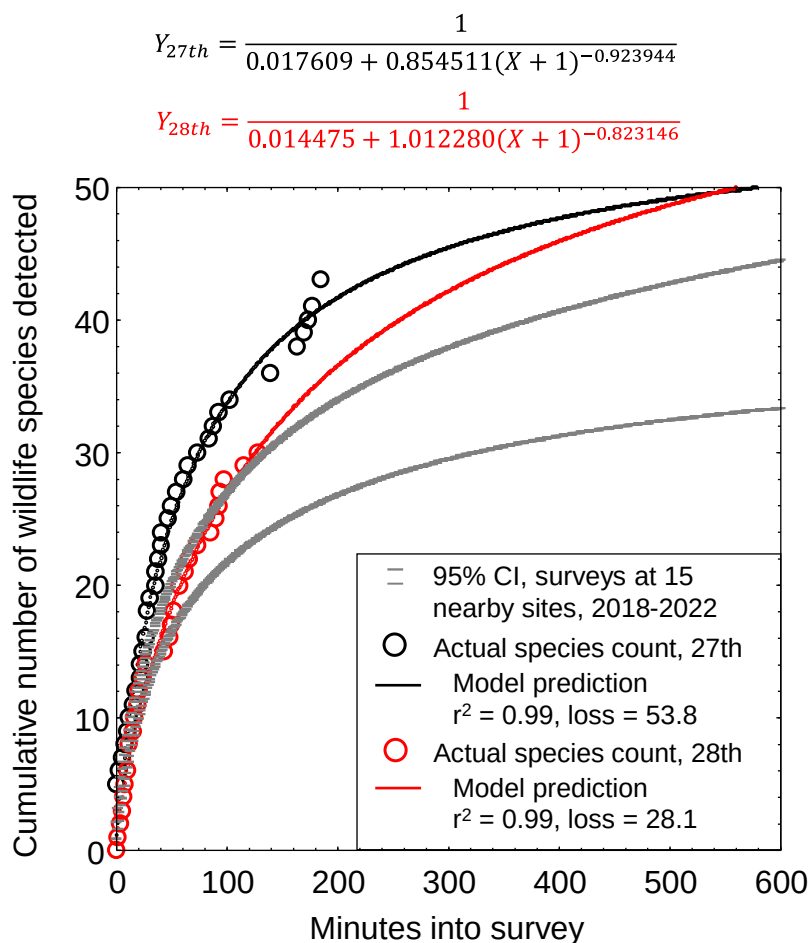
Response 206-94: "The project site is not topographically diverse and can be characterized as flat. ... the site is regularly disturbed through tilling and mowing activities... As a result, the reconnaissance-level surveys conducted by Rincon in the spring of 2018 and fall of 2020 were general in nature." And, "the site visit and conditions suggested that no special-status plant species were expected due to the disturbed nature of the site, high degree of urbanization in the vicinity of the project site and project site's soil profile"

Reply: In other words, a determination was made in advance that the site would provide no biological value. A grossly inadequate survey effort was then directed to wildlife at the project site, thereby confirming the pre-determination that a flat, often-disturbed site does not support wildlife. My survey demonstrates otherwise. I did not

survey for very long, as I was only there during one evening and the following cold-and-windy early morning. Despite my brief time there and the less-than-ideal conditions, I detected 47 species of vertebrate wildlife, including 12 with special status.

The number of species I saw at the project site was about twice the number I usually detect during reconnaissance-level surveys. Furthermore, that 26% of the species I detected were special-status species was unusually high in my experience. For greater context, I updated Figure 1 from my comment letter so that it includes the 95% confidence interval based on reconnaissance surveys that my daughter and I (my daughter works for me) have completed at 15 other proposed project sites in the area between Ventura and Burbank (Figure 1). Note that the data and model predictions representative of the project site exceed the upper bound of the 95% CI. In other words, the project site supports more species of wildlife than do most other project sites I have surveyed in the area.

Figure 1. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my visual-scan surveys on 27-28 January 2022. This version of the Figure also includes 95% confidence intervals (CI) based on reconnaissance surveys my daughter and I completed at 15 other sites between Ventura and Burbank.



Response 206-94: “Reconnaissance surveys document existing conditions and assess the habitat suitability for special-status species, which informs whether or not further surveys are necessary. The survey’s site visits were timed for performing a general reconnaissance survey, which can be performed any time of the year.”

Reply: According to the response, the surveys were timed to achieve the standard of general reconnaissance surveys being completed at any time of year; in other words, the survey timing met no standard at all. In fact, no standard for the timing of general reconnaissance surveys exists as they apply to wildlife, just as no protocol or guidance exists for general reconnaissance surveys directed to wildlife. The scientific literature is silent on general reconnaissance surveys, because such surveys have been invented by the environmental consulting industry and lack scientific vetting. These surveys have been contrived to achieve objectives that are scientifically indefensible. Below I explain why these surveys are inappropriate to the purpose that City of Oxnard applies them.

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, it helps for both the analysis and the public to be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

There are three types of survey for wildlife at a project site that are typical of CEQA review. One is known as a species-specific **detection survey**, which follows a methodological protocol formulated by experts on the species. The protocol balances cost against a reasonable likelihood of detection should the species be present. If the protocol is followed, but the species is not detected, then the negative outcome of the detection survey can serve as support for an absence determination, i.e., the species at issue can be determined absent from the site for however long the protocol specifies. It is therefore important that the details of the detection survey be reported so that the reader can compare these details to the minimum standards of the detection survey protocol. In this case, no detection surveys were completed for any special-status species.

Two other types of survey for wildlife at proposed project sites are known as **reconnaissance survey**, otherwise known as **general survey**, and **habitat assessment**. The typical objective of reconnaissance survey is to inventory the species that compose the wildlife community, whereas that of habitat assessment is to assign occurrence likelihoods to special-status species based on documented associations between each species and environmental settings. Unlike the carefully formulated protocols of detection surveys, reconnaissance surveys and habitat assessments lack formal standards of implementation and interpretation. The outcome of a 5-minute reconnaissance survey should not be afforded the same credibility as that of a 5-hour reconnaissance survey, but no guidance is available on how long a reconnaissance survey should last or what its findings should mean. It is therefore very important that the methodological details of reconnaissance surveys and habitat assessments be reported. It is just as important that the standards of interpretation be reported, along with sources of uncertainty and bias.

Sources of potential uncertainty and bias abound in reconnaissance surveys for the purpose of wildlife species inventory. Biologists vary in their skill at detecting wildlife species, and all are imperfect observers. After all, some species are large, loud, colorful

or abundant, and can readily be seen during diurnal surveys, whereas others are tiny, quiet, cryptic or rare, or are detectable only by night or by trapping or use of remote-sensing technology. In my experience, some species typically do not reveal themselves until I have been on the survey station for 20 minutes, 30 minutes, or for hours. The inventory will be the product of the amount of survey time and the range of survey methods invested. As examples, because nocturnal surveys and trapping with live bait are rarely implemented as part of reconnaissance surveys, bats and shrews rarely find their places on species inventories at proposed project sites. Membership on an inventory can also carry different meanings based on how each species occurs at the site. Whereas some species are resident year-round, others can be seasonal or ephemeral in their occurrences at a site. Should a species be included on an inventory depends on the analyst's standard of what counts as presence, but that standard should be reported so that the public can decide whether to agree with it. (The DEIR reports no such standard.) In short, reconnaissance survey can only sample the true suite of wildlife species of a site, and most often, the sample will be biased against the rare, sensitive and threatened or endangered species that CEQA is most concerned about.

Reconnaissance surveys occasionally reveal the presence of special-status species, sometimes due to the skill of the observer but often due to luck of survey timing. What these surveys cannot reveal is the absences of any species whose geographic ranges overlap the site and whose habitat associations at all resemble conditions of the site. And it is habitat associations that consulting biologists often rely upon to determine likelihoods of occurrence of special-status species. Unfortunately, habitat associations often poorly comport with the habitat concept, which is that habitat is that part of the environment that is used by a species (Hall et al. 1997), and which is described by scientists through measurement (Smallwood 2002). Habitat associations defined by consulting biologists typically lack foundation in actual measurements of habitat use, and are therefore speculative and prone to error. One source of error is to map vegetation complexes as habitat types, to which consulting biologists assign species by association without concern for the unrealistically hard boundaries that divide the mapped habitat types (see Figure 2 of Rincon 2018). Another source of error is to pigeon-hole species into unrealistically narrow portions of the environment, which can then be said not to exist on the project site (for examples, see wildlife habitat descriptions in Appendix FA Follow-Up Biological Resources Inventory – 2022). A third source of error is to assign functions to habitat for the purpose of dividing habitat into unrealistic functional parts, such as between breeding habitat versus foraging habitat (for examples, see wildlife habitat descriptions in Appendix FA Follow-Up Biological Resources Inventory – 2022). Primacy is assigned to breeding habitat, which often can be said not to exist on the project site. In reality, all parts of an animal's habitat are essential to breeding success, regardless of where breeding opportunities occur.¹

¹ Animals unable to find sufficient forage, refugia, or travel opportunities are just as unable to reproduce as those unable to find sufficient nest-site opportunities. Per the precautionary principle of risk analysis and consistent with the habitat concept, CEQA review should be based on the broadest of available habitat characterizations, which should be interpreted on the whole rather than contrived functional parts. Any detections of a species on or over a site, regardless of time of year, should be interpreted as that species' use of habitat, any part of which is critical to breeding success.

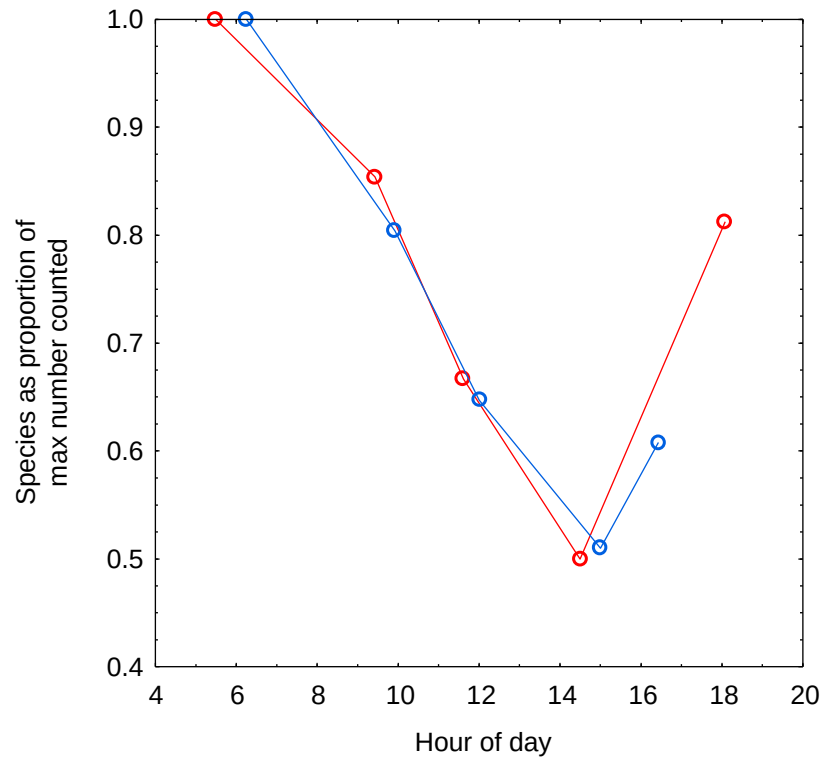
Given the true cost of species inventory, the temptation to shortcut the analysis of occurrence likelihoods is understandable. In the spirit and intent of CEQA, a reasonably feasible sampling of the species inventory should be the first objective of reconnaissance surveys. Several approaches to sound interpretation of the sampled inventory are defensible. One is to commit to a survey effort that results in the detection of a sufficient number of species to accurately estimate the number of species yet to be detected, which is the approach I applied in my comment letter. A second approach is to honestly report the uncertainties and biases of the characterizations of the species inventory and of the likelihoods of occurrence of special-status species. In the third approach, the analyst can assume species are present until suitable evidence is acquired in support of an absence determination. This last approach would be consistent with the precautionary principle of risk analysis directed toward rare and precious resources (National Research Council 1986) and with the tenets of protocol-level detection surveys formulated by experts on each special-status species. Regardless of the approach, most important is to refrain from determining species are absent before sufficient survey has been completed, and to refrain from asserting certainty in the species inventory when that certainty is unjustified.

Returning to the response's point that reconnaissance surveys can be performed any time of the year, I concur. One can perform a reconnaissance survey any time of year or any time of day. I have completed hundreds of wildlife surveys in all seasons of the year and all times of day and night. But I also quantify the effects of survey timing, because survey timing bears strongly on survey findings. The scientific literature is full of seasonal patterns of occurrence and abundance of many wildlife species. Recently I tested for time-of-day effects on the outcomes of reconnaissance-level surveys. To compare the data between surveys at two sites, I normalized the number of species detected as a proportion of the maximum number detected across all 5 surveys per site. Figure 2 shows a mirrored relationship between number of species detected and time of day when each 2-hour visual-scan survey began. Temperature could explain some of the variation in survey outcomes, but the effect of time of day was strongest and appears robust. Although one can perform reconnaissance surveys at any time of year and any time of day, one needs to interpret the survey outcomes in light of seasonal and time-of-day patterns of species detection likelihood.

Response 206-97: "...site conditions are unlikely to support sustained ground squirrel populations or associated burrowing owl populations."

Reply: This response does not comport with the ground squirrels I saw and photographed in the middle of the project site (see Photo 4 of my comment letter). Ground squirrels inhabit burrow complexes at the rate of 1.89 adults per burrow complex on average (Smallwood unpublished data), and burrow complexes support many generations over long periods of time. That ground squirrels occur in the middle of the project site is evidence of a sustained ground squirrel population despite disturbances to the site.

Figure 2. Numbers of species detected as proportion of the maximum number detected among the 5 surveys per project site, and as a function of start time during the day. The red symbols represent Greentree and the blue symbols represent the comparison project site.



Response 206-97: “As described in the updated assessment, burrowing owls are only known to winter in the Oxnard Plains.”

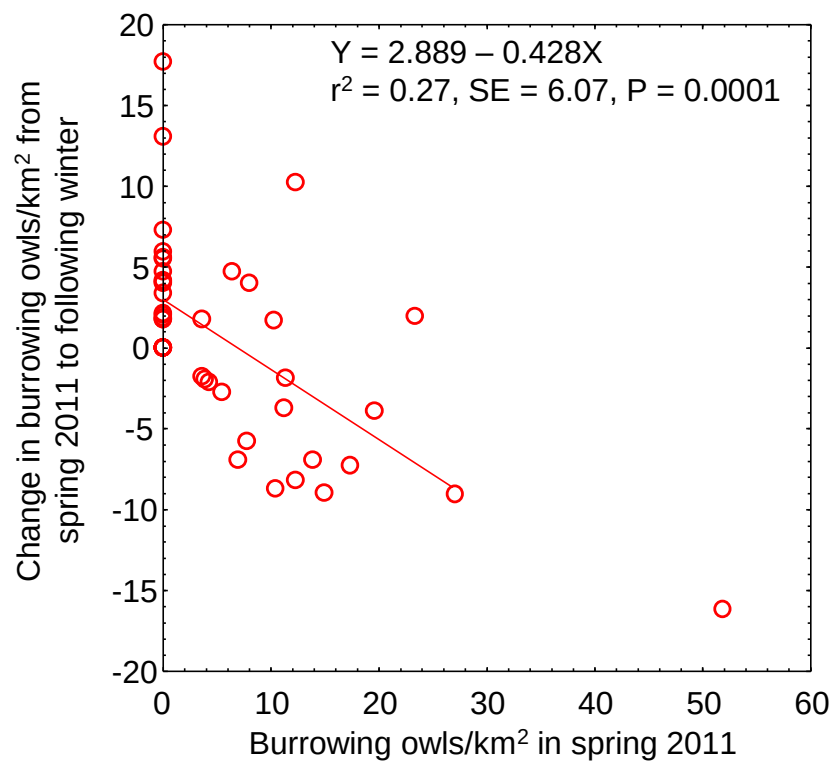
Reply: As I commented in my 9 February comment letter, records of burrowing owl occurrence are “very close” to the project site. The blue teardrop symbols in Figure 3 represent locations of 29 burrowing owl occurrence records within only 1 mile of the site. That the records are winter occurrences qualifies them as no less important to burrowing owl nest success than had they represented nest sites. Burrowing owls that cannot acquire sufficient forage over winter, or cannot survive the winter, cannot successfully breed.

Burrowing owls naturally shift locations between breeding and non-breeding seasons. I studied the phenomenon over one full year of repeat surveys across a large study area in Alameda and Contra Costa Counties (Smallwood et al. 2013), where I found that the relocation of burrowing owls from nesting colonies to over-wintering sites was density-dependent (Figure 4). The negative density-dependent relationship suggest that burrowing owls need to rest their prey-base in breeding areas, or they need to find more abundant prey where they did not breed, or they need to escape predator or parasite loads, or all of the above. Whatever, the reason, winter sites are of high importance to burrowing owls, and should not be minimized as they are in the FEIR.

Figure 3. eBird occurrence records of burrowing owl within 1 mile of the project site. The blue teardrop symbols are where 29 sightings have been reported.



Figure 4. Among 46 sampling plots across a 167-km² study area in the Altamont Pass, burrowing owl density in winter was a negative function of density in the breeding season, meaning that burrowing owls needed to leave breeding-season locations to winter where fewer burrowing owls nested in spring.



Response 206-97: “the California Natural Diversity Database (CNDDDB) (August 2022) and eBird.org (August 2022) occurrences suggest that burrowing owls utilize Ormond Beach and the game preserve, areas with little disturbance and higher quality habitat for this species.”

Reply: The CNDDDB and eBird records provide no such evidence. Twelve of the eBird records were at the beach, where disturbance is a defining feature of the beach. Sixteen of the eBird records were located along Edison Drive, bordered on both sides by agricultural fields – fields mostly used for sod production. Photos of the owls depict bare ground and packed earth indicative of disturbance. The conditions where these burrowing owls were reported mirror conditions I myself have many times found and recorded burrowing owls. Burrowing owls are often characterized as disturbance-adapted species.

Furthermore, the CNDDDB and eBird records are based on locations where volunteer reporters of the records happened to visit. They do not represent any sort of scientific survey of the project area. As noted by CNDDDB, “*The CNDDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present.*”² The conclusion drawn in Response 206-97 cannot be supported by species occurrence databases, and therefore is purely speculative. Without completion of detection surveys that meet the standards of CDFW (2012), the FEIR cannot defend a conclusion of absence nor even of low likelihood of occurrence.

Response 206-97: “Although the site may support a small temporary population of insects and small rodents in between disturbance activities, the site is unlikely to support sustained and abundant prey populations due to the disturbances. In addition, prey resources are likely more abundant in the adjacent open space areas which would likely attract any burrowing owl traversing across the region.”

Reply: The response is speculative; it is unsupported by evidence. The site supports ground squirrels, which are not small mammals that come and go between disturbances. Considering that ground squirrels persist through disturbances of the site, it is reasonable to conclude that many other species of wildlife, include arthropod populations, also persist through disturbances.

Response 206-97: “The preconstruction wildlife survey would similarly be sufficient to document any wintering burrowing owls or California horned lark, should they occur on-site.”

Reply: The response is incorrect. As I commented in my 9 February 2022 letter, wintering burrowing owls are difficult to detect. At minimum, the surveys would need to

² State of California Department of Fish and Game, California Natural Diversity Database, CNDDDB Data Use Guidelines, p. 12. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=27285&inline>.

achieve the standards of CDFW (2012), but more realistically, the surveys carry about a 10% chance of detection of wintering burrowing owls. I will add that horned larks can also be missed during preconstruction surveys.

Response 206-105: “Given the temporary use of the site for outdoor vehicle storage for a maximum of 5 years and that the proposed project does not include permanent structures, the proposed project does not preclude future non-industrial uses.”

Reply: After 5 years of cover by gravel and cars, the soils would be dead, meaning the living constituents of soil would be dead. All animal burrow would be destroyed. The biologically productive capacity of the site would be severely depleted.

Response 206-107: “...no special-status species are expected to be present on site.”

Reply: Special-status species are already present on site, as documented in my comment letter. On and over the site I observed Vaux’s swift, California gull, western gull, double-crested cormorant, turkey vulture, red-tailed hawk, American kestrel, merlin, and either Belding’s or Large-billed savannah sparrow. Just off site I observed Allen’s hummingbird, northern harrier, and loggerhead shrike. But these are not the only special-status species occurring at and next to the site (most likely, those I saw next to the site also use the project site – I just did not see them do so while I was there). Using an analytical bridge to a large research effort I completed in Northern California, I predicted in my comment letter that over the course of a year or longer, repeated visual-can surveys would eventually detect at least 158 species of vertebrate wildlife. Assuming my ratio of special-status to non-special-status species was to hold with through the detections of all 158 species predicted by my analytical bridge between my survey outcome and the larger research effort in Northern California, then continued surveys would eventually detect 41 special-status species of vertebrate wildlife.

Response 206-110 and Response 206-313: “The project proposes to establish 20-foot tall security lighting around the perimeter of the site. The placement of the lights is intended to minimize lighting impacts to the natural habitat south of the project site.”

Reply: Even so placed, the security lighting would add light pollution to the protected habitat area to the south. If the project goes forward, minimization of impacts should be implemented, but as I commented in my letter of 9 February 2022, I recommend reducing the number of lights. Compensatory mitigation would be warranted for the impacts of artificial lighting that could not be avoided despite minimization measures.

Response 206-111 and Response 206-314: The response opines that landscaping along the fence would prevent bird-fence collision and entanglement mortality.

Reply: The response provides no evidence that landscaping would accomplish the impact minimization it asserts. I am not aware of any evidence that would support the FEIR’s response. In fact, I do not see any reason why landscaping along the fence would not increase bird-fence collision and entanglement mortality. While recently visiting a proposed project site not far from this one, my daughter came upon yet another

collision/entanglement victim (Photo 1). My prediction remains. Based on empirical evidence from fatality monitoring along fences, I predict 26.5 (95% CI: 20–37) bird fatalities per year. Adult birds killed on the fence could also leave behind chicks on the nest, which would be at greater risk of dying on the nest. As the FEIR stands, these fatalities would not be mitigated, and in my opinion, they would qualify as a significant impact to birds.

Photo 1. *Fledgling house finch that fatally collided with a perimeter security fence in Oxnard, California, 26 June 2022. Photo by Noriko Smallwood.*



Response 206-112: “During this temporary project, the project site will not offer any foraging habitat except for the perimeter vegetation, and it will be unlikely that wildlife would utilize the interior of the site. The probability that wildlife would utilize the project site or the immediate area is unlikely given the urban nature of the project site and the surrounding vicinity.”

Reply: Even with cars and gravel covering what was once productive soil, wildlife would use the site, just not in all the same ways nor at the same level. The airspace over the site composes part of the aerosphere (Kunz et al. 2008). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate (Davy et al. 2017, Diehl et al. 2017). The aerosphere is habitat (Kunz et al. 2008). Birds would continue to fly over the site, and some would perch on security lights, the security fence, on the office structure, and on cars.

Response 206-112: “The project includes fencing around the perimeter of the site and fencing will function to redirect birds such as raptors to fly higher if they are flying near the road.”

Reply: Again, demonstrating the hazard of speculation, the response mischaracterizes how birds react to fences and other structures when passing over them. I have long studied this phenomenon, including how birds react to powerlines, wind turbines and fences. Birds typically flap hard to ascend high enough to pass over the barrier, and then once cleared, immediately drop in altitude on the other side of the barrier (Photo 2). (I have many photos of this behavior, but Photo 2 was the easiest to find and present.) This behavior contributes to how birds often collide with auto traffic. After clearing a structure such as powerlines, a fence, or even a large shipping truck, birds temporarily lose some flight control and have difficulty avoiding secondary obstacles.



Photo 2. *White-faced ibises flap hard to ascend to avoid colliding with distribution lines before descending after having cleared the lines. Photos by Shawn Smallwood.*

Response 206-114: In response to the issue raised about the DEIR’s flawed analysis of whether the project would interfere with wildlife movement, the FEIR writes “Please refer to response in comment 206-111. Also, as discussed on page 5.10-12 of the Draft EIR, through implementation of Standard Conditions SC HYD-1 through SC HYD-4, the project would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit requirements which is consistent with the Clean Water Act. In addition, as stated on page 5.10-17 of the Draft EIR, the project would adhere to the NPDES requirements for the Construction General Permit and implement a Stormwater Pollution Prevention Program that includes required best management practices (BMPs) and good housekeeping practices, for the protection of the adjacent wetlands.”

Reply: Response 206-111 bears only on the security fence allowing small mammals to pass through gaps left in the fence, but otherwise has not bearing on the issue. The remainder of the response, which refers to various permits the project applicant would obtain regarding pollution discharge and construction, has no bearing on the issue of

wildlife movement. It would seem the preparers of the FEIR put this part of the response in the wrong place.

Response 206-120: “The project will have a negligible effect on adjacent wetlands due to the temporary nature of the project...”

Reply: I suggest revising the EIR to more convincingly assure that the project would be temporary. The surest way to assure of the temporary nature of the project is to add a mitigation measure to restore the soils of the site to full productive capacity, including the capacity to support native vegetation, fossorial mammal burrows and species of wildlife appropriate to the area.

Response 206-285: “The City acknowledges the comment as a statement.”

Reply: My comment was a comment. And my comment posed implications for the accuracy of the DEIR’s characterization of the project’s environmental setting. Only 3 person-hours of reconnaissance-level survey were committed to the project site, during which time only 7 species of vertebrate wildlife were reportedly detected. I detected 6.7 times the number of species at 3.5 times the number of species per hour than did Rincon (2018). My comment noted that I consider my own survey effort as merely a starting point toward characterizing the environmental setting, which means that Rincon’s (2018) survey effort had yet to reach any sort of starting point. Of the 158 species of vertebrate wildlife my comment letter predicts as a minimum number of species using the project site, Rincon (2018) detected 4.4%. From this level of sampling of the species inventory, the EIR is incapable of accurately characterizing the wildlife community as part of the existing environmental setting.

Response 206-286: “The City acknowledges the comment as a statement.”

Reply: My comment was for the need to appropriately interpret reconnaissance survey results. Rincon (2018) and then the DEIR treat the Rincon (2018) survey results as if they were determinant regarding the likelihoods of occurrence of many species of wildlife. For example, Response 206-306 includes the assertion, “Reconnaissance surveys documented existing conditions and assessed the habitat suitability for special-status species.” The surveys did not accomplish either of these outcomes. Seeing only 7 wildlife species did not document existing conditions. The results of the Rincon (2018) surveys are treated as if they were protocol-level detection surveys, which they were not. The DEIR is misleading in its interpretation of Rincon’s (2018) survey results.

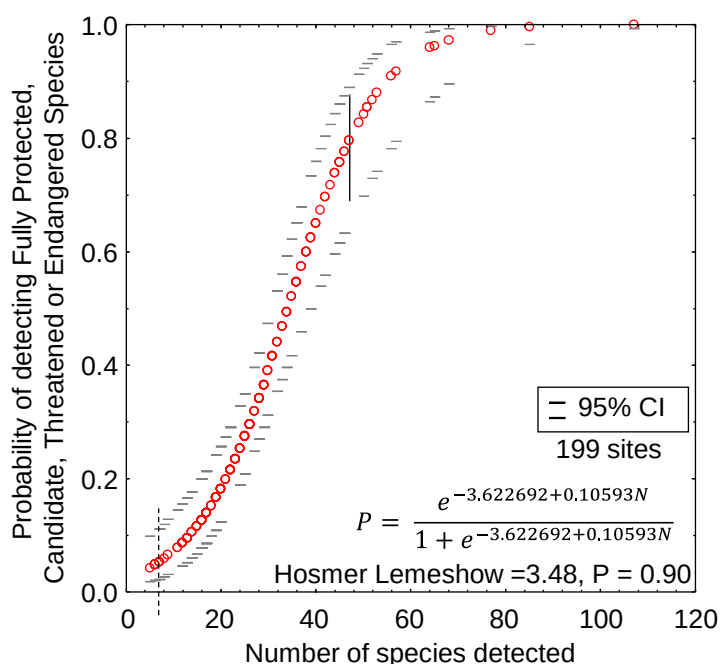
Response 206-288: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. My analysis led to a predicted number of species of vertebrate wildlife likely to use the site over the long-term – much longer than the very brief surveys completed by both Rincon (2018) and myself. The DEIR presents no similar analysis, which leaves the reader with the false impression that the 7 species seen by Rincon (2018) were all the species to be seen on the project site.

Response 206-289: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. This analysis goes to the probability of detection of special-status species, which the DEIR does not address. A brief survey is unlikely to detect many of the special-status species that use a particular site, but an empirical foundation is available to calculate the probability of detection of a special-status species based on a survey outcome. My comment provided an example that was directed toward listed species including California Fully Protected species. Since my comment letter, I updated my analysis based on a larger data set. My larger data set predicts an 80% probability of detecting a listed species at the project site based on my survey effort, but only a 5% probability of doing so based on the survey effort of Rincon (2018). If the savannah sparrows I saw on site were Belding’s savannah sparrows, then I beat the odds. It probably would have taken many surveys by Rincon (2018) to detect a listed species, due to their relatively unproductive survey, but the point of my comment is that Rincon’s failure to detect a listed species is likely more of a reflection of their insufficient survey effort than it is of wildlife species occurrences.

Figure 5. Probability of detecting ≥ 1 Candidate, Threatened or Endangered Species of wildlife listed under California or federal Endangered Species Acts, based on survey outcomes logit-regressed on the number of wildlife species I detected during 199 site visits in California. The dashed vertical line represents the number of species detected by Rincon and the solid vertical line represents the number I detected.



Response 206-291: “The City acknowledges the comment as a statement.”

Reply: My comment was an analysis, not a statement. Henceforth, I will not reply to responses that mischaracterize my comments as statements.

Response 206-292: “According to the most recent CDFW Special Animal’s List (July 2022), the red-tailed hawk is not designated as a special-status species, and double-crested cormorants are a Watch List species for nesting colonies.”

Reply: The response warrants a review of which species need to be considered as special-status species. §15380 of the CEQA Guidelines defines special-status species as Endangered, Rare, or Threatened, and it further defines each of these terms. Rare is defined as “(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in the Federal Endangered Species Act.” Thus, rare species need not be listed species.

Importantly, CEQA Guideline 15125(c) provides that in describing the environmental setting “special emphasis should be placed on environmental resources that are rare or unique to the region and would be affected by the project.”

The California Resources Agency’s Guidelines for Implementation of CEQA includes Appendix G, which requires that the proposed project be evaluated for whether it may have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife and US Fish and Wildlife Service.

The California Department of Fish and Wildlife in turn defines a Species of Special Concern to be a species that:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

The species I identified as special-status species are consistent with how CEQA defines special-status species.

The meanings of CEQA’s defining terms for a species’ special status differ, but their differences also broaden the suite of species that CEQA intends should be considered as special-status species. The meanings of the terms Rare and Sensitive also often underly the inclusions of species on special-status species lists compiled by resource agencies. Rareness can apply to species that have been diminished in abundance or geographic extent, or it can apply to species that are naturally scarce owing to their position at the top of the food-chain or to some other ecological factor. Rareness can also apply to species that are endemic to a region, even though such species can be abundant within their limited geographic range, e.g., yellow-billed magpie and Nuttall’s woodpecker. Sensitive can apply to species that respond more adversely than other species to changes

to their environment, often due to susceptibility to pollutants or pathogens or to the loss or degradation of a narrow portion of the environment on which the species relied. For example, burrowing owls often but not always depend on ground squirrels for the squirrels' provisions of burrows as nest sites and for their mutual predator-alarm calling. Therefore, burrowing owls are sensitive to human changes to the environment that diminish ground squirrels.

The CEQA definition is consistent with how I identified special-status species in Table 2 of my comment letter. I rely on the status assigned each species in California's Special Animal List (California Department of Fish and Wildlife, Natural Diversity Database, November 2021, Special Animals List, Periodic publication) – a list that is updated annually and often relied upon for CEQA reviews. The Special Animals List compiles designations of special status to species from various agencies and for various reasons. According to policy of the California Department of Fish and Wildlife regarding species of special concern (SSC) (<https://www.wildlife.ca.gov/Conservation/SSC#394871319-how-are-sscs-addressed-under-the-california-environmental-quality-act>), “SSCs should be considered during the environmental review process. The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from “projects” in the State. Section 15380 of the CEQA Guidelines clearly indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein. Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning “impact significance” to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.”

The US Fish and Wildlife Service circulates a list of Birds of Conservation Concern. This list is of “all migratory nongame birds that without additional conservation action are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” Factors contributing to this list are “population abundance and trends, threats on breeding and nonbreeding grounds, and size of breeding and nonbreeding ranges.” I rely on this list.

Raptors are protected by California Fish and Game Code 3503.5, otherwise known as the Birds of Prey Code. Raptors are protected by this Code because raptors are top predators wherever they live. Their positions in the food chain naturally require that they are rare, which is one of the key conditions – and one of the key words – that meets the CEQA definition of special-status species. Species that are naturally rare, such as species of raptor, are more likely identified as special-status species, e.g., California condor, bald eagle, peregrine falcon, burrowing owl, spotted owl, whereas fewer of the naturally abundant species are so identified, such as songbirds. I consider raptors protected by CFG Code 3503.5 to be special-status species.

Some species of bat are listed or designated as California Species of Special Concern, but others are assigned conservation priority rankings the Western Bat Working Group (WBWG), which California Department of Fish and Wildlife relies upon and which CDFW tracks in its list of California' special animals. I consider bats with WBWG conservation priority rankings of medium and high to be special-status species.

And then there are the bird species assigned to the Taxa to Watch List in California. These assignments are again assignments of special status; otherwise, there would be no point to assigning them to the Taxa to Watch List. Specifically, they are species that were earlier assigned special concern, but which did not rank as high as those species currently on the list of Species of Special Concern (Shuford and Gardali 2008). Nevertheless, CDFW commissioned the development of this list, and would not have done so without concern for the rarity and sensitivity of the species listed. I rely on this list.

For the reasons summarized above, the FEIR response relies on a flawed premise for its scope of analysis of potential impacts to biological resources, and for its accusation that I defined special status too broadly.

Response 206-294 and Response 206-295: “An updated biological assessment considering special-status species potential to occur was performed and is provided as Appendix FA to the Final EIR. This updated assessment expanded the database review for the USGS quadrangles including the project site and surrounding eight quadrangles (“nine-quad search”).”

Reply: Appendix FA of the FEIR screens out species from further consideration if CNDDDB occurrence records do not exist within USGS 7.5-minute topographic quadrangles including and adjacent to the site. By relying on CNDDDB records to determine species' absences, the DEIR misapplies CNDDDB. CNDDDB was not designed to support absence determinations or to screen out species from characterization of a site's wildlife community.

Response 206-296: “An updated biological assessment considering species potential to occur was performed and is provided as Appendix FA to the Final EIR.”

Reply: The response does not address my comment, which was about the need to complete an adequate survey effort. My comment was not suggesting more database review and speculation about species occurrence likelihoods, but it instead suggested more visits to the project site to actually survey for wildlife.

Response 206-300: “The City acknowledges the comment as an introduction to comments that follow.”

Reply: My comment was not an introduction to comments that followed. It was a stand-alone comment, pointing out that based on years of experience studying

burrowing owls, the occurrence of ground squirrels is a good precursor to finding burrowing owls. The response does not address my comment.

Response 206-301: “The reconnaissance-level surveys conducted by Rincon were general in nature. Reconnaissance surveys document existing conditions and assess the habitat suitability for special-status species, which informs whether or not further surveys are necessary.”

Reply: With ground squirrels on the project site, protocol-level detection surveys are warranted. Presence of ground squirrels is just the sort of finding that typically prompts implementation of the CDFW (2012) survey guidelines. However, I am the one who found and reported ground squirrels on the project site. Rincon (2018) did not report having detected ground squirrels, and the DEIR makes no mention of ground squirrels occurring on site. In other words, the reconnaissance surveys missed an easily detectable species, which was also an ecological keystone species, the presence of which typically prompts implementation of the burrowing owl survey guidelines. This outcome goes to show that the premise of Response 206-301 is grossly flawed. The general reconnaissance survey failed to accurately assess the site’s habitat potential for burrowing owls.

Response 206-301: “Burrowing owls are opportunistic feeders and primarily feed on insects (e.g., grasshoppers, crickets, moths, beetles) and small mammals; and pursue other prey as opportunities arise.” And “the site is unlikely to support sustained and abundant prey populations due to the disturbances. ... Therefore, the proposed project is not anticipated to significant affect burrowing own [sic] foraging habitat or significantly affect prey populations.”

Reply: This characterization of foraging behavior is inaccurate. I have studied burrowing owl foraging behavior for years, during both day and night. At night, burrowing owls actively forage at specific locations for specific types of animals. Burrowing owls will also prey on species as opportunities arise, but their principal foraging strategy is targeted, active hovering over specific locations. They often travel 400 m and farther from their burrows to forage.

Response 206-302: “The comment states that Rincon (2018) per the Draft EIR offers no survey findings of wildlife on adjacent properties, such as the property to the south that is undergoing habitat restoration by The Nature Conservancy. At the closest point, the Ormond Lagoon Waterway is located approximately 110 feet of the very southeast edge of the project parcel. However, as shown on Exhibit 5.1-5 of the Draft EIR (Photometric Plan), the proposed lighting will not directly spill into the adjacent open space.”

Reply: The comment addressed by the Response had nothing to do with lighting. My comment was directed toward the adequacy of the characterization of the existing environmental setting; I had not even gotten to potential project impact yet.

Response 206-303: “Please refer to response to comment 206-302.”

Reply: My comment about Belding's savannah sparrow (or possibly large-billed savannah sparrow) had nothing to do with the potential impacts of lighting at this point in my letter. I was addressing the adequacy of the characterization of the existing environmental setting.

Response 206-308: "Please refer to response to comment 206-111."

Reply: I fail to understand what Response 206-111 has to do with my comment on the impact of habitat loss to total bird nesting density.

Response 206-308: "following project operations, the proposed vehicle parking area, guard house, portable restroom, perimeter site lighting, and gravel surface would be removed, allowing for other types of development to be proposed."

Reply: I fail to understand how preparation of the site for its next stage of development is going to do anything to avoid, minimize, rectify or compensate for the impact of habitat loss on total bird nest density.

Response 206-308: "For the aforementioned reasons, because impacts are less than significant, mitigation measures are not required."

Reply: Nothing about the response indicates that my impact prediction would be any less than I presented in my comment.

Response 206-310: "Please refer to response to comment 206-308."

Reply: Response 206-308 does not address my predicted annual loss of 1,907 birds that would be caused by the project. Since my comments of 9 February 2022, my method for estimating total bird density and the number of birds that would be denied California due to habitat loss was peer-reviewed and published (Smallwood 2022).

Response 206-311 and Response 206-312: "Please refer to response to comment 206-308."

Reply: Response 206-308 does not address my comment, especially my comment on specific species likely to lose habitat as a result of the project. Also, I must point out that Response 206-308 is confusing and therefore of little informative value. According to the Response, "...following project operations, the proposed vehicle parking area, guard house, portable restroom, perimeter site lighting, and gravel surface would be removed, allowing for other types of development to be proposed. Given the temporary use of the site for outdoor vehicle storage for a maximum of 5 years and that the proposed project does not include permanent structures, the proposed project does not preclude future non-industrial uses." The Response says that the proposed project would clear the way for a subsequent develop project, which does not preclude non-industrial uses. In other words, anything can happen. What would not happen, however, is a return to the

productive capacity for wildlife that the site provides now. The soil would be dead after being covered by gravel and cars for 5 years.

Response 206-315: “The City acknowledges the comment as a statement. No further response is required.”

Reply: My comment was a comment. I identified special-status species of birds that I witnessed flying over the project site. I photographed some of these birds and inserted the photos to my comment letter as substantial evidence in the record. The FEIR does not seriously address my comment.

Response 206-316: “Please refer to response to comment 206-308.”

Reply: The FEIR provides no response specific to my comment that the DEIR adopts a false CEQA standard to analyze potential project interference with wildlife movement in the region.

Response 206-317: “During this temporary project, the project site will not offer any foraging habitat, and it will be unlikely that species would utilize the site. The project includes fencing around the perimeter of the site and fencing will function to redirect species such as raptors.”

Reply: The impact of which I commented – wildlife-automobile collision mortality – would not take place on the project site, but rather on the roads traversed by traffic generated by the project. The response is misdirected and entirely misses the meaning of my comment.

Response 206-317: “The additional biological analysis will take all potential impacts into consideration.”

Reply: The meaning of this response is lost on me. I found no additional biological analysis in the FEIR, nor did I find any analysis of automobile collision mortality.

Response 206-319: “The City acknowledges the comment as an introduction to comments that follow. No further response is required.”

Reply: My comment was not an introduction to comments to follow. It presented an analysis leading to a prediction of vehicle miles traveled (VMT) for the purpose of predicting wildlife mortality that would result from project-generated traffic. I included my analysis because VMT is an important predictor variable in my analysis of wildlife-automobile mortality caused by project-generated traffic. The DEIR failed to report a prediction of VMT, so based on my experience with reviewing VMT predicted for other proposed projects, I predicted VMT based on the average miles attributed to commuting employees and based on daily vehicle delivery mileage reported in the DEIR.

In response to comments on the DEIR, the FEIR (pages 12-13 and 12-14) reports a prediction of 475 daily VMT attributed to vehicle deliveries to and from the project site.

The FEIR does not report VMT attributed to employee commute, so I will continue to rely on my assumption of my original analysis to again predict 219,000 annual VMT for employee commute. This latter rate added to the revised 173,375 annual VMT for vehicle deliveries yields 392,375 annual VMT for the project, which is a larger VMT than I had predicted in my 9 February 2022 comment letter. I therefore update my wildlife mortality prediction. Based on the methods summarized in my comment letter, I predict 215 wildlife fatalities per year caused by project-generated traffic. In my opinion, based on the evidence provided by the Mendelsohn et al. (2009) study and my prediction of the project's annual VMT on local roads, it is my opinion that the project's toll on wildlife due to wildlife-vehicle collision mortality would qualify as an unmitigated significant impact to wildlife.

Response 206-320: “The City acknowledges the comment as a statement. No further response is required.”

Reply: An analysis resulting in an impact prediction is not merely a statement in the context of comments on an DEIR.

Response 206-322: “The City acknowledges the comment as a statement. No further response is required.”

Reply: I commented on a major flaw of the DEIR's analysis of cumulative impacts. My comment was not a mere statement.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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ATTACHMENT 8



WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

February 14, 2022

City of Oxnard, Planning Division

Attn: Jay Dobrowalski, Associate Planner

214 South C Street

Oxnard, CA 93030

jay.dobrowalski@oxnard.org

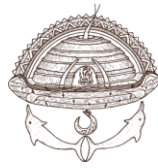
Dear Jay Dobrowalski,

On Behalf of the Wishtooyo Foundation ("Wishtooyo") we submit the following comments on the Draft Environmental Impact Report SCH NO. 2020069039 (DEIR) for the Port of Hueneme Temporary Outdoor Vehicle Storage Project ("Project").

Founded in 1997, Wishtooyo Foundation is a California 501(c)(3) nonprofit public interest organization with members composed of Chumash Native Americans, First Nations People, and Santa Barbara, Ventura, and Los Angeles County residents. Wishtooyo is place, organization, and movement inspiring people to live in harmony with our Earth again. Wishtooyo serves as a "rainbow bridge" linking Chumash and Indigenous lifeways with the protection of natural and cultural resources, utilizing traditional ecological knowledge to provide environmental and cultural preservation and justice, education, research, and advocacy.

Project Description and Piecemeal

The DEIR has failed to properly disclose and analyze the full Project to include 1) the temporary vehicle storage facility discussed in this DEIR as Phase I and 2) the 250-acre permanent vehicle storage facility as Phase II of the Project. Separating these two phases is an impermissible

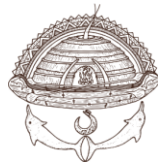


piecemeal of projects under the California Environmental Quality Act (“CEQA”) environmental review process. The CEQA Guidelines define “project” broadly as “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment” (Guidelines, § 15378, subd. (a)). Further, environmental analysis must include the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.

Phase II is a reasonably foreseeable consequence of the Project because the only purpose of the initial temporary facility is to serve as a bridge to the Port’s expansion of vehicle storage capabilities while the Port seeks the necessary approvals for the second facility. The Project is just Phase I of the Port’s expansion and is only being proposed in anticipation for the Port to expand its operations permanently. Officials from the Port have been clear about this with certain members of the community and the City. (See Attachment A¹). While the Port has disclosed this two-phase approach to some, it and the City failed to include this necessary information in the DEIR and failed to provide the legally mandated environmental review of all aspects of the Project, including Phase I and Phase II. Thus, because the City and the Port knew and have been planning on implementing Phase I and Phase II of the Port’s vehicle storage expansion since the beginning, Phase II is a reasonably foreseeable consequence of the Project.

The future expansion of Phase II will also change the scope and nature of the environmental effects of the Project. First, Phase II will be a permanent vehicle storage facility, not a five-year Project as analyzed in the DEIR. The DEIR did not analyze the environmental impacts of a permanent vehicle storage facility. The DEIR must be conducted including analysis on the temporary and potential permanent siting of Phase I at the Project’s current location and the permanent siting of Phase II of the Project. The location of the Phase II vehicle storage facility must be disclosed in this DEIR to fully inform the public of its environmental impacts. Second, Phase II will very likely include more driving and parking of vehicles not analyzed in the DEIR, thus increasing the traffic impacts, air and water pollution associated with driving and parking,

¹ See Attachment A for Declaration of Lucas Zucker



environmental justice concerns, impacts to Chumash cultural and natural cultural resources, and be further inconsistent with the City's general plan and wetlands restoration plans. Lastly, the DEIR misled the public into thinking the whole Project would be a minimal temporary hindrance to their community, instead of the hidden reality that the Project is just Phase I of the Port's expansion and a much larger and permanent vehicle storage facility.

Tribal Cultural Resources

The County failed to adequately analyze the impacts of the project on cultural resources. The DEIR expresses a clear bias against the recognition that the Chumash people live in Oxnard and near the Project area today; that they have strong relationships with the Project area; that they currently utilize natural cultural resources throughout the Project area; and that Chumash tribes, bands, and clans are sovereign entities.

The EIR misuses the term "cultural site" by using it synonymously with "archeological site" showing a clear lack of understanding of what a cultural site is. Archeological sites are locations identified to be of archeological value to researchers. Cultural sites include archeological sites, but also include many locations that are of little interest to archeologists, such as village sites where the ground has been previously disturbed and areas where sedimentation has relocated Chumash artifacts. Furthermore, cultural sites also include but are not limited to sacred sites, gathering locations, and cultural landscapes.

Further, the City abused its discretion when failing to locate Tribal Cultural Resources widely known to likely be present in the Project area through the use of the best available and widely used technology and methods. Wishtooyo requests that specially trained forensic canines in combination with ground penetrating radar are utilized to identify the location of all Native American burials and cultural remains within the project site. These techniques were used to reliably identify the location of Ohlone/Esselen burials in the KB Homes Development in Santa Cruz and for other development projects. Wishtooyo used forensic canines to detect the presence of Chumash ancestral remains/burials for the Santa Clara River Estuary / McGrath State Beach Campground Relocation and Estuary Restoration Feasibility Study with California



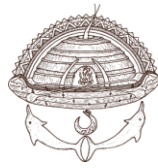
State Parks. (Attachment 1²) The use of specially trained canine forensics and ground penetrating radar, represent the best available technology and most reliable means for the identification of Native American burials, and thus should be used to identify potential impacts to Chumash Tribal Cultural Resources and to mitigate those impacts to a less than significant effect.

Under CEQA and California law, when cultural resources are identified, the preferred mitigation measure is avoidance, and if avoidance is not feasible, preservation in place as defined by the local Native nations. (CEQA Guidelines §15126.4). Avoidance and preservation in place mitigation measures cannot be implemented if Tribal Cultural Resources are not identified before the approval of the Project and its CEQA documents. Therefore, the Project's mitigation measure MM CUL-2 is an insufficient mitigation of potential impacts to cultural resources. The presence of a Native American Monitor only during subsurface grading, trenching, and construction will not avoid impact to cultural resources. This is because once construction begins and no commitments to avoidance or preservation in place are secured, a monitor can only do so much (if anything) to secure lesser protections (such as movement of the resource to another location away from its Village location or burial ground, or recovery of the resource for storage or display in a museum) for the resources which are often damaged or destroyed by the excavating activity that resulted in its discovery. Additionally, the DEIR's use of monitors is flawed because the DEIR fails to identify the process of selecting the Native American Monitor, and fails to contain procedures to ensure monitors from the proper Chumash Nations will be present during construction to best protect un-detected Chumash remain from harm and to help determine proper actions that must be taken to protect and preserve the Chumash remains encountered.

The DEIR has completely failed in its analysis of Project impacts to Tribal cultural resources and must properly categorize the finding of unidentified Tribal Cultural Resources and ancestral remains as a "potential significant impact" that must have adequate mitigation measures to ensure the proper consultation protocols and protections are in place.

Water Quality and Wetlands

² See Attachment 1 for the Santa Clara River Estuary / McGrath State Beach Campground Relocation and Estuary Restoration Feasibility Study showing Wishtoyo's use of canine forensic dogs.

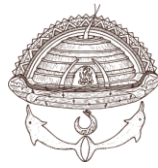


1. No analysis of Specific Water Quality Impacts

The DEIR failed to analyze the type and amounts of hazardous materials and toxic metals associated with vehicle liquids and fluids (fuel, coolant, oil, etc.), vehicle tires, vehicle brake pads, vehicle paint, and the environmental impact these hazardous materials and metals will have on the wetlands. Southern California Coastal Water Research Project (SCCWRP) conducted a study on water quality and toxicity of runoff from parking facilities during storm events. (Attachment 2³) The study found that runoff from these sites have high concentrations of Iron, Zinc, Copper, and Lead. (Id. at ii.) These pollutants are derived from the wear of breaks, tires, and other exposed auto parts, and spills of automotive fluids. Parking facilities also tend to accumulate wind and atmospheric transported pollutants over time (Id. at 1). Furthermore, because this Project is located on the coast, the salt in the air at the Project site will wear the paint and metal parts of the cars at an accelerated rate, leading to increased concentrations of metals discharged from the site in stormwater during rain events. Metal pollutants have acute, chronic, and sub-lethal effects on marine and aquatic life in the Pacific Ocean and Ormond Beach Wetlands. (Id. at 32). They can also biomagnify in the food chain, and cause these acute, chronic, and sublethal impacts on avian species. Without this necessary analysis on hazardous materials and metal pollutants that would be contained in stormwater discharges from the Project site, the City has not informed the public on the environmental impacts of the Project, needed mitigation to prevent impacts to aquatic and avian species in receiving waters, and should not have found less than significant impact in the DEIR. The DEIR provides no information regarding hazardous materials for the public and decision makers to evaluate and comment on, thus failing to meet the requirements of CEQA. The DEIR must fully analyze the impacts of the Project on Ormond Beach Wetlands and specifically, the impacts of metals and hazardous materials discharged from the Project site during storm events.

The DEIR failed to analyze whether the stormwater discharges from the Project site during or after construction will meet Clean Water Act Water Quality Standards; will harm wildlife, recreational, cultural, or tribal ceremonial beneficial uses; and will cause or contribute to harms to Clean Water Act 303(d) listed impaired waterways. As detailed above, sufficient information exists that indicates the contaminants in stormwater discharges from the Project will harm the

³ Southern California Coastal Water Research Project, *Technical Report 343, Characteristics of Parking Lot Runoff Produced by Simulated Runoff* (July, 2001).

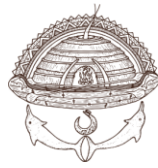


beneficial uses of the Ormond Lagoon Waterway, Ormond Lagoon, and the Pacific Ocean. In addition, further analysis is required because the Ormond Lagoon Waterway / Lagoon are listed by the U.S. EPA and State Water Resources Control Board on the Clean Water Act 303(d) list as impaired for bacteria, pH, and trash. (Attachment 3⁴) Thus, a comprehensive analysis is needed that ensures the project is not causing or contributing to these impairments. For instance, as detailed above, an analysis of impacts of metals and other pollutants in stormwater discharges from the Project is needed in part to see if the Project's discharges will cause or contribute to the pH impairments in the Ormond Beach Lagoon identified on the 303(d) list. In addition, a comprehensive EIR analysis is needed, along with a comprehensive analysis of mitigation measures, to prevent the Project from accumulating and discharging trash into Ormond Lagoon Waterway and Ormond Lagoon, and the Pacific Ocean.¹⁷ This is especially the case because it is critical the Project does not cause or contribute to trash pollution of these waters, which are already 303(d) listed for trash. (See attachment 3.) Without this analysis, it is likely that the well-known trash littering and accumulation problem that plagues these waters and Oxnard's streets near the wetlands, will be deposited onto the Project site (via littering / dumping activities, or via wind), and then will be conveyed either by wind or stormwater discharges from the Project's graded and graveled surfaces into the adjacent Ormond Lagoon Water Way, Ormond Lagoon, tšumaš Creek, or the Pacific Ocean.

The City failed to implement necessary mitigation measures that would reduce the environmental impacts of metals, trash and hazardous materials to less than significant levels. As discussed in the SCCWRP report, best management practices are needed to reduce the toxicity of stormwater runoff from parking facilities. (Attachment 2 at iii.) Best management practices could include bioretention areas that allow runoff from the Project to pond and filter through vegetation and soil. The Project could also include sand beds to filter the runoff and planted wetland vegetation to naturally treat and filter runoff before it enters Ormond Lagoon Waterway (Attachment 4⁵). The DEIR failed to analyze or require any, and the necessary, best management practices for stormwater runoff to ensure the hazardous materials, trash, and

⁴ February 5, 2018 State Water Board Transmittal to the U.S. EPA – that includes relevant excerpts from the State Water Board's 303(d) list approvals and 2014 / 2016 California Integrated report; U.S. EPA Approved California 2014-2016 Clean Water Act 303(d) List of Impaired Waters dated April 6, 2018.

⁵ Stormwater Management Practices at EPA Facilities (February 2017), (last accessed 1/28/2019) available at <https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

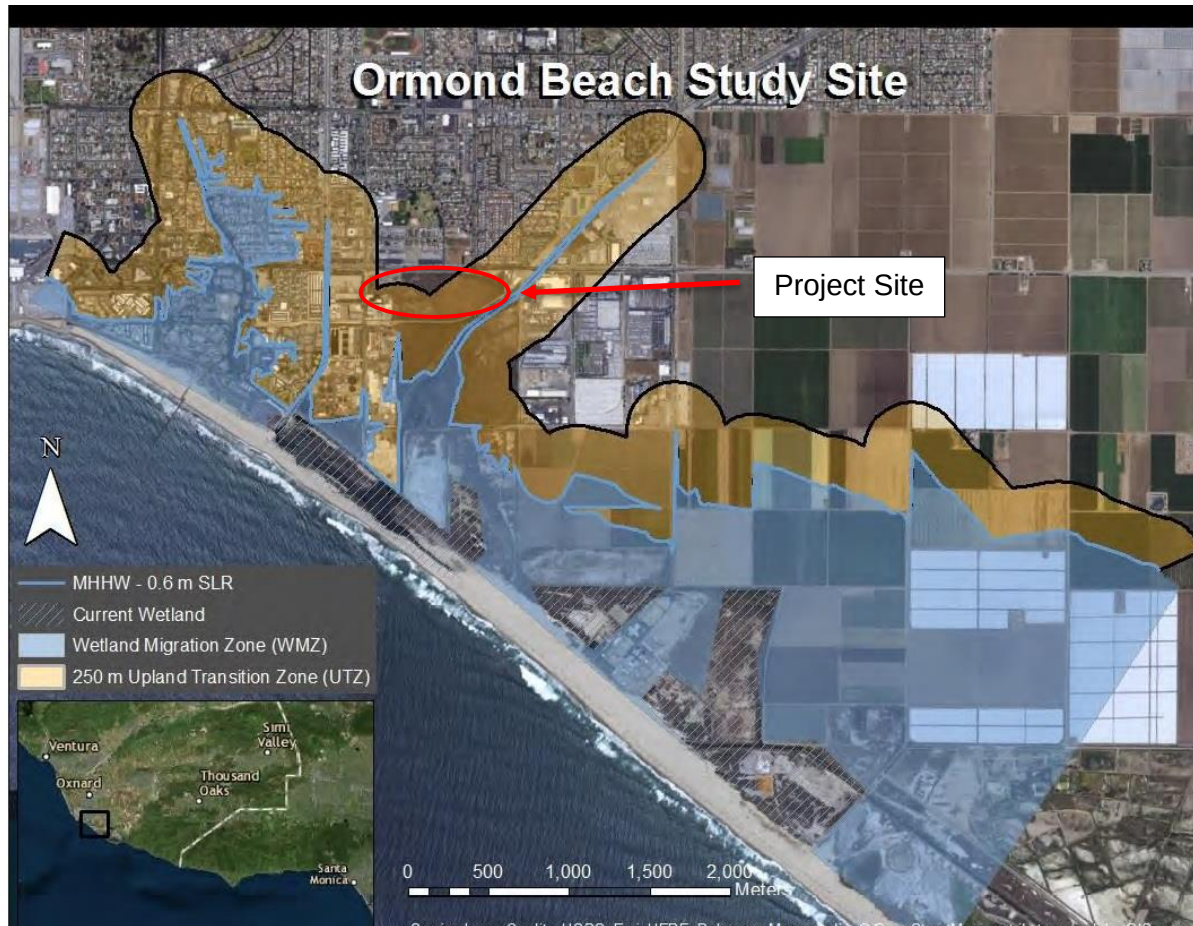
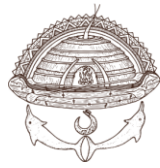


metals associated with the Project would not impact water quality or the wetlands, during or after construction of the Project.

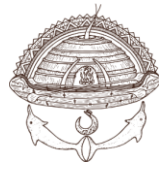
2. No analysis of Wetland Retreat in Response to Sea Level Rise

The DEIR did not properly consider the Project's consistency with Oxnard's certified Local Coastal Plan ("LCP") and the other approvals that may be required. If any portion of the project site is within the coastal zone, a coastal development permit and possibly an LCP amendment will be necessary. According to a study conducted by UCLA, the project site is located in the future Upland Transition Zone ("UTZ") of Ormond Beach Wetlands (Attachment 5⁶ ("UCLA Study" or "Study")). The Study predicts that the mean sea level will rise 0.6 m by 2050 due to projected impacts from climate change. (Id. at 11). The UCLA Study predicted that Southern California wetland habitat will naturally retreat inland. The preservation of habitat inland of these wetland areas is essential for their successful retreat. The project lies in an important location for UTZ wetland habitat (Id. at 37, Figure 14). The construction of this temporary parking facility and disturbance of this land would significantly degrade the suitability of this habitat for future sea level rise conditions, and would impair and prevent future reclaiming of the Ormond Beach wetlands Project site needed for the wetland habitat and the endangered wildlife (see below) that depends on it to exist. The DEIR failed to consider any projections of sea level rise or wetland retreat, the associated impacts of the Project on future Ormond Beach Wetlands habitat and the endangered species that rely on the Ormond Beach Wetlands, and City of Oxnard must prepare a full EIR to further analyze the Project's impacts on retreating wetlands and UTZ habitat.

⁶ UCLA Institute of the Environment and Sustainability, *Evaluating Physical Suitability, Land Use, and Cost Feasibility for Acquiring Land for Wetland Transgression in Selected Southern California Wetlands*, (last accessed 1/28/2022) available at https://www.ioes.ucla.edu/wp-content/uploads/wetlandspracticum_finalreport.pdf.



Furthermore, the DEIR must evaluate the Project's direct, indirect, and cumulative impact on all community restoration and public access plans for the Ormond Beach Wetlands, including The Ormond Beach Restoration and Public Access Plan. While an EIR is required (1) to analyze the Project's impacts on all restoration and public access plans for the Ormond Beach Wetlands, and to ensure consistency and no impacts to these plans, and (2) that includes scoping with the Oxnard community, California government agencies (such as the Coastal Conservancy), and nonprofits (such as the Nature Conservancy involved in such restoration plans to inform this analysis), the DEIR fails to analyze the impacts on all restoration and public access plans for the Ormond Beach Wetlands, and fails to analyze whether the Project will make the Ormond Beach Wetlands less or non-tourist/visitor friendly (a critical element to improving the local economy and providing a fulfilling experience that attracts residents and visitors), thereby being harmful or inconsistent with the Ormond Beach Restoration and Public Access Plan. For instance, see attached presentation of the Ormond Beach Restoration and Public Access Plan. (Attachment



6⁷). A comprehensive analysis must be undertaken as to how the Project impacts public access to the Wetlands and enjoyment of the Wetlands, such as interaction with wildlife, aesthetic enjoyment and views when walking through and enjoying the wetlands, and spiritual enjoyment. Further, the Project must be considered, and if it moves forward, planned in conjunction with any Ormond Beach Wetlands preservation, public access, and restoration project.

Harms to Wildlife

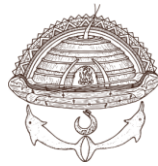
1. Poor Survey and Literature Review Informing the DEIR's Biological Resources Analysis

The DEIR utterly fails in its analysis of the Project's impacts to sensitive wildlife and surrounding ecosystems. The DEIR fails to even mention more than 20 listed or special status species that are known to exist in the area. The literature review and reconnaissance-level surveys conducted in 2018 and 2020 proved to be woefully inadequate in determining the full scope of impacts this project would have on wildlife and sensitive species habitats.

The reconnaissance-level surveys were conducted in April 2018 and October 2020. The 2018 survey was conducted between 10 and 11 am and the 2020 survey was conducted between 9:30 and 10:30 am. Both of these surveys were conducted too late in the day for representative avian species observations. April is typically too early for representative breeding bird surveys and October does not represent breeding season counts, and is too late in the year for a representative list of fall-migrating avian species. The description of these surveys included no standardized methodology for how these surveys were conducted, making them impossible to replicate or determine if observed species were identified and quantified properly. No nocturnal surveys were conducted to determine the presence of anuran species in the project location and no special status anuran species are mentioned in the DEIR. No surveys were conducted to determine bat species presence near the Project area and no special status bat species are mentioned in the DEIR.

2. Listed and Special Status Species Missing from DEIR

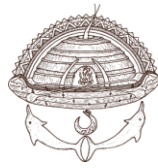
⁷ For additional information regarding the Ormond Beach Restoration Project please see attachments 18-22



The DEIR's lack of analysis of impacts to biological resources in the Project area and adjacent Ormond Beach Wetlands demonstrates the City's complete ignorance of local ecology and biological resources. The use of the CNDDDB and poorly conducted reconnaissance surveys provided meek species lists that are not at all representative of the project site or Ormond Wetlands. The DEIR failed to analyze the Project's full impact on listed and special status species that exist in the Project area.

More than 200 bird species are known to use the Ormond Beach Wetlands for breeding, foraging, roosting, and migration. Among these avian species are multiple species of "birds of prey" which are protected under California Fish and Game Code section 3503.5. Birds of prey that exist in the project area and adjacent wetlands that are not included in the DEIR include: White-tailed Kite, Northern Harrier, Red-tailed Hawk, Red-shouldered Hawk, Cooper's Hawk, Sharp-shinned Hawk, American Kestrel, Peregrine Falcon, Merlin, and Osprey. A Red-tailed Hawk was even observed during a reconnaissance survey, but was not included as a special status species. All of these species have been observed either in the project area, or in the adjacent wetlands. All of these species are protected under California law and the DEIR must include analysis on the Project's impacts to birds of prey.

Salt marsh and coastal wetland habitats have declined up to 90% in California, making Ormond Beach Wetlands a rare gem and an exceptionally important area for sensitive and endangered plants, invertebrates, fish, amphibians, reptiles, mammals, and birds. The Project may have a significant impact on the ecosystems on which these species rely. The Project will have stormwater runoff exit the facility and drain into Ormond Lagoon Waterway, and eventually into Ormond Lagoon. As mentioned in the Water Quality and Wetlands section, the Project area will be in the Upland Transitional Zone according to sea level rise and wetland retreat projections. Species that rely on mixed vegetation communities will also need to retreat with wetlands, and will not be able to do so if the proposed Project area is disturbed further. As observed in the reconnaissance surveys performed for the DEIR, the Project area provides habitat for multiple prey species including small song birds and gopher snakes. If a parking lot, even temporary, is built here, this will limit foraging habitat for birds of prey and may increase the likelihood of harm from Project associated toxins or vehicle strikes.



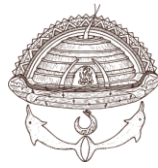
The DEIR failed to include an impact analysis of multiple California Species of Special Concern and Fully Protected species that are known to occur in and near the Project Area. The fully protected species the DEIR failed to analyze, or even mention, are the White-tailed Kite and Peregrine Falcon. As well as birds of prey, these species are also fully protected under California law FGC 3511. Species of Special Concern that are known to occur in and near the Project area, but do not appear in the DEIR are: San Diegan tiger whiptail, Blainville's horned lizard, coast patch-nosed Snake, south coast garter snake, California glossy snake, western spadefoot, western pond turtle, and coast range newt. As these species are listed as species of special concern in California and are known to exist in the project area and surrounding habitats, the DEIR must include these species and analyses of Project impacts to these sensitive species.

The DEIR failed to include an impact analysis of multiple federally listed species that are known to occur in and near the Project Area. These species include California orcutt grass, Gambel's watercress, marsh sandwort, spreading navarretia, Marbled Murrelet, Southwestern Willow Flycatcher, and vernal pool fairy shrimp. The DEIR must include these listed species and an analysis of Project impacts to these sensitive species and their habitats.

3. Impacts to Sensitive Wildlife and Their Habitats

Of great concern are the Project's hazardous materials, trash, and metals entering the Ormond Lagoon Waterway and Ormond Lagoon through stormwater runoff, polluting the waters and harming the endangered tidewater goby that reside in the two water bodies. The U.S. Fish and Wildlife Service lists Ormond Lagoon Waterway and tšumaš Creek in the LA/Ventura Recovery Unit in their Recovery Plan for the endangered tidewater goby. (Attachment 7⁸ at Figure B-17). The DEIR provides no analysis of direct, indirect, and cumulative impacts from the Project on the tidewater goby, even though the project will discharge stormwater into the goby's habitat which is located only 125 feet from the proposed Project site. Vital habitat for the tidewater goby has been lost or impacted by metal and industrial pollution in other streams. There is precedent

⁸ Pacific Region U.S. Fish and Wildlife Service, Recovery Plan for the Tidewater Goby (December, 2005)



of tidewater goby habitat becoming “Water Quality Limited” due to pollution associated with metal toxicity. The State Water Quality Control Board lists tidewater goby habitat in Goleta Slough as “Water Quality Limited”; partially due to metal pollutants which harm the species (Id. at C-26). The US Fish and Wildlife Service specifically lists “watercourse contamination resulting from vehicular activity in the vicinity of lagoons” as a threat to the tidewater goby’s habitat (Attachment 8 at pg. 3⁹) The hazardous materials from the Project, including Iron, Zinc, Copper, trash, and Lead, will contaminate the goby’s habitat and will contribute to the take of the tidewater goby, violating the Endangered Species Act and preventing the recovery of the species. The City must analyze the impact the Project will have on water quality of Ormond Lagoon Waterway and Ormond Lagoon and the Project’s impact on tidewater goby and its habitat.

The hazardous materials, trash, and metals discharged during storm events from the Project will also have a significant impact on the endangered California Least Tern. California Least Terns nest at Ormond Beach Wetlands from mid-April to late September. (Attachment 9¹⁰ at 1). Ormond Lagoon Waterway flows into Ormond Lagoon, which is an important foraging habitat for California Least Terns. Toxins and metals introduced from the Project’s runoff during storm events can accumulate in the tissues and gills of small fish species which are eaten by California Least Terns and fed to their young. Southern California Coastal Water Research Project (SCCWRP) conducted a study on aquatic toxicants and their presence in seabird eggshells. The study focused on four seabird species including the California Least Tern (Attachment 10¹¹ at 2). Heavy metals, as well as other toxicants were found in all of their California Least Tern eggshell samples (Id. at 7). California Least Terns are susceptible to the biomagnification of these toxicants due to their foraging habits in near-shore environments (Id. at 23). The MND failed to analyze the Project’s direct, indirect, secondary, and cumulative impacts from metal and other hazardous materials entering into waterways during storm events, accumulating in small fish and benthic macroinvertebrates, and impacting the endangered

⁹ U.S. Fish and Wildlife Service, *Tidewater Goby*, Humboldt Bay, (last accessed 1/28/2019) available at https://www.fws.gov/refuge/Humboldt_Bay/wildlife_and_habitat/TidewaterGoby.html.

¹⁰ California Department of Fish and Game South Coast Region, California Least Tern Breeding Survey 2009 Season (July, 2010)

¹¹ Southern California Coastal Water Research Project, *Technical Report 944, Contaminant Bioaccumulation in Seabird Eggs of the Southern California Bight* (September, 2016).



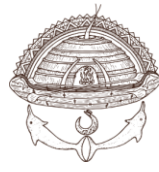
California Least Tern. The City must prepare a full EIR because the Project may harm endangered species, a harm that must be adequately analyzed.

The DEIR completely failed to analyze the Project's potential impacts on the Peregrine Falcon, a California fully protected species. The DEIR does not even mention Peregrine Falcons in the Biological Resources section, even though they are found throughout the region and observed frequently at Ormond Beach and in Oxnard. The Project description includes 240 vehicle trips to the temporary vehicle storage facility per day. Though the DEIR claims this is fewer trips and vehicle miles in the region because the site is closer to the Port than existing storage facilities, this is increasing vehicle traffic to a site adjacent to the Ormond Beach Wetlands and important hunting habitat for Peregrine Falcons. Studies on Peregrine Falcon mortality have found that collisions with motorized vehicles make up a significant percentage of deaths for fledgling, juvenile, and adult falcons (Attachment 11¹²). As mentioned in the water quality impacts section of this letter, the bioaccumulation of metals and other pollutants originating from this Project may impact California Least Terns and other foraging sea and shore birds. Terns, plovers, and other shore birds are important sources of prey for Peregrine Falcons, which are apex predators that specialize in hunting avian species. Bioaccumulation of metals and toxicants could have an even more severe effect on falcons since they prey on birds that are already affected by bioaccumulation. Heavy metals can significantly limit immune mechanisms in birds of prey, and increase their susceptibility to bacteria and parasite infection (Attachment 12¹³). Since the DEIR completely failed to recognize the Peregrine Falcon and its habitat in the Project and surrounding areas, there was no analysis on potential impacts to the fully protected species. The DEIR must include an analysis of impacts on Peregrine Falcons and must include Mitigation Measures for these impacts.

Further, the Project's location is connected to a greater wildlife corridor and the MND failed to analyze how the Project will impact wildlife accessing and using the neighboring wetlands. The

¹² Gahbauer, Marcel & Bird, David & Clark, Kathleen & French, Tom & Brauning, Dan & McMorris, F.. (2015). Productivity, Mortality, and Management of Urban Peregrine Falcons in Northeastern North America. *The Journal of Wildlife Management*. 79. 10.1002/jwmg.803.

¹³ Pyzik, E., Dec, M., Stępień-Pyśniak, D., Marek, A., Piedra, J., Chałabis-Mazurek, A., Szczepaniak, K., & Urban-Chmiel, R. (2021). The presence of pathogens and heavy metals in urban peregrine falcons (*Falco peregrinus*). *Veterinary world*, 14(7), 1741–1751. <https://doi.org/10.14202/vetworld.2021.1741-1751>



Project's proximity to Ormond Beach Wetlands and future designation as Upland Transitional Zone habitat makes the Project area an important habitat for wetland species and species that rely on transitional habitat zones. UTZs provide wildlife habitat, high tide refugia for wetland species, and vital space for the wetland to migrate in response to climate change and sea level rise (Attachment 13¹⁴, pg. 3-427). The City must conduct an analysis to determine the impacts of vehicle storage, grading, fencing, and hazardous materials entering the waterways on the wildlife corridor associated with the area and the wetlands.

DEIR also completely failed to analyze the Project's impacts on the White-tailed Kite, a fully protected species under California Law. There is no mention of the White-tailed Kite in the DEIR, even though the species is found frequently in Ventura County, Ormond Beach Wetlands, and hunting in open spaces and along roadways. The DEIR completely failed to analyze potential impacts the project may have on any raptor species in the Project area. 1) The project will be grading and graveling 34 acres of open space. Though this lot may be disturbed, the Project site is habitat for prey species like mice, voles, gophers, snakes, song birds, and ground squirrels. Left as it is, the space is 34 acres of hunting habitat for White-tailed Kites, Cooper's Hawks, Sharp-shinned Hawks, Northern Harriers, Red-shouldered Hawks, Red-tailed hawks, Great Horned Owls, Barn Owls, Burrowing Owls, Merlins, American Kestrels, and Peregrine Falcons. 2) The project will be increasing vehicle traffic with 240 vehicle trips to the Project site per day. A study conducted on North American urban raptor species found that vehicular strikes were the leading cause of mortality for 39% of the raptor species studied (Attachment 14¹⁵). 3) The temporary vehicle storage facility may introduce heavy metals pollution to the site and increase these pollutants' concentrations in the adjacent waterways and wetlands. A review of bioaccumulation of heavy metals in the food web found that carnivorous birds experience the highest concentration of toxic heavy metals as a result of bioaccumulation of these pollutants (Attachment 15¹⁶). The DEIR completely failed to look into possible pathways for the Project's pollutants to enter the food web and impact sensitive birds of prey like the White-tailed Kite.

¹⁴ Brian Fulfrost, Meg Marriott, Christina Sloop, David Thomson, Laura Valoppi, Management of Marsh-Upland Transitional Habitats

¹⁵ Hager, Stephen. (2009). Human-Related Threats to Urban Raptors. *Journal of Raptor Research*. 43. 210-226. 10.3356/JRR-08-63.1.

¹⁶ Hazrat Ali & Ezzat Khan (2019) Trophic transfer, bioaccumulation, and biomagnification of non-essential hazardous heavy metals and metalloids in food chains/webs—Concepts and implications for



Though the DEIR included the Burrowing Owl in its meager species list, it did not include any analysis of impacts to the species. As mentioned above, the Project site comprises 34 acres of habitat used by multiple rodent species, including ground squirrels. Burrowing Owls depend on burrowing mammal species, especially ground squirrels, for their breeding habitat and burrows. Burrow availability is a key limiting resource for Burrowing Owls. Ground squirrels are essential for providing habitat and the recovery of the Burrowing Owl (Attachment 16¹⁷). By grading, graveling, and turning this area into a vehicle storage facility, the Project will remove 34 acres of possible breeding, burrowing, and foraging habitat for the Burrowing Owl.

Without analyzing the negative impacts that the Project will have on wildlife, especially endangered and threatened species, the City failed to provide sufficient disclosure of the Project's environmental effects to allow the public and decision makers to evaluate and comment on the project's environmental consequences.

Air Quality

The DEIR's analysis of air quality and greenhouse gas impacts lacks any information regarding increased emissions from cold-starting engines. If 240 vehicles per day will be started and driven to the vehicle storage facility, that is 240 cold-starts per day. These vehicles will also be started and driven off the parking facility to distributors and customers regularly. The DEIR also states that up to 30,000 vehicles will be stored at this facility annually, bringing the total to at least 60,000 cold starts per year (engine ignition when leaving the Port, and engine ignition when leaving the storage facility). Catalytic systems that vehicles use to reduce greenhouse gas emissions are only designed to work at the vehicles' normal operating temperature. When a vehicle is cold started, carbon monoxide and total hydrocarbon emissions increase significantly

wildlife and human health, *Human and Ecological Risk Assessment: An International Journal*, 25:6, 1353-1376, DOI: 10.1080/10807039.2018.1469398

¹⁷ See Attachment 16 for the Field Notes Entry from the Carlsbad Fish and Wildlife Office.



over normal driving conditions (Attachment 17¹⁸). The DEIR must include a full analysis of the Project's greenhouse gas emissions, including increased emissions associated with cold-start.

While the DEIR did analyze specific localized emissions, there is no discussion on how the emissions will contribute to climate change and sea level rise contributing to the retreating wetlands. Further there is no discussion on how the Project hindering the goals of Assembly Bill 32 "in reducing ... annual emissions of 14 tons of carbon dioxide equivalent for every man, woman and child in California down to about 10 tons per person by 2020... [and the fact that] [e]very part of California's economy needs to play a role in reducing greenhouse gas emissions."¹⁹ The DEIR fails to mitigate against or analyze the significant direct, indirect, and cumulative impacts, thus the DEIR must fully analyze the issue and provide the necessary mitigation measures needed.

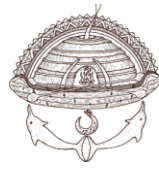
Traffic Congestion

The DEIR misleads the public concerning the Project's impacts on traffic congestion in South Oxnard. The DEIR states that there will be less than significant impact on traffic congestion because these vehicles would normally be sent to other facilities in the region. This is misleading and a poor analysis of the Project's impacts. There will be 240 vehicle trips to the Project site per day associated with this project. That is 240 more vehicles on the road per day traveling to the Project site. Current operations have these vehicles moving to storage by car carrier to other facilities and impacting traffic elsewhere in the county. The DEIR fails to analyze specific impacts to traffic congestion in the community surrounding the Project area. South Oxnard is already burdened by an industrialized coastline and continuous shipping of freight and cargo along Hueneme Rd. The DEIR must include this analysis, focused on South Oxnard and the cumulative traffic impacts to which this project would contribute.

DEIR is Inconsistent with the City of Oxnard's duty to address Environmental Justice in Government Planning

¹⁸ Christos Dardiotis, Giorgio Martini, Alessandro Marotta, Urbano Manfredi. Low-temperature cold-start gaseous emissions of late technology passenger cars. *Applied Energy*. Volume 111. 2013. Pages 468-478. ISSN 0306-2619. <https://doi.org/10.1016/j.apenergy.2013.04.093>.

¹⁹ *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 220.



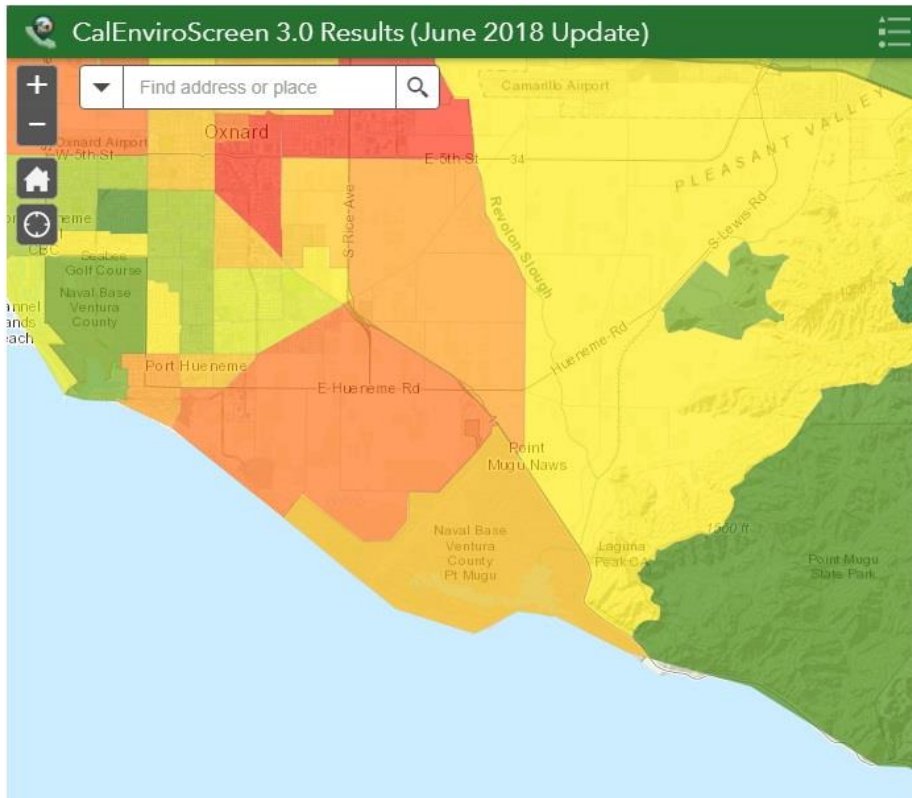
WISHTOYO
CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE

The DEIR fails to mention the City of Oxnard's requirement to address Environmental Justice in the City's General Plan, as is required by SB 1000. The Project would have major impacts on disproportionately burdened communities in South Oxnard. According to the Office of Environmental Health Hazard Assessment (OEHHA) and their program, CalEnviroScreen 3.0, Oxnard is a community disproportionately burdened by environmental pollution. The program identifies the region, where the Project is located, is in the 98th percentile for the pollution burden rating. This census district had the highest Pollution Burden Percentile out of the Oxnard districts and is considered to be a disadvantaged community under SB535. The DEIR ignored the community's comments and requests that the DEIR analyze the extent to which the Project's cumulative impacts on air quality, traffic congestion, aesthetics, and impacts from discharge of hazardous materials (including trash and metals) into receiving waterways will increase the pollution burdens felt by the Oxnard disproportionately burdened community. The City must conduct further analysis of the Project's cumulative impacts on the Oxnard community, as a disadvantaged community that is already disproportionately burdened by environmental pollution. Failure to include this analysis would result in the DEIR being inconsistent with the City of Oxnard's 2030 General Plan and the City's failure to comply with SB 1000.



WISHTOYO

CHUMASH FOUNDATION
FIRST NATIONS ECOLOGICAL CONSERVATION ALLIANCE



Census Tract: 6111004715

Population:	5,020
CalEnviroScreen 3.0 Percentile:	80-85%
Pollution Burden Percentile:	98
Population Characteristics Percentile:	53
Ozone:	40
PM 2.5:	41
Diesel:	56
Pesticides:	100
Toxic Releases:	77
Traffic:	17
Drinking Water:	85
Cleanups:	96
Groundwater Threats:	89
Hazardous Waste:	67
Impaired Water:	81
Solid Waste:	93
Asthma:	29
Low Birth Weight:	52
Cardiovascular Rate:	26
Education:	79
Linguistic Isolation:	72
Poverty:	71
Unemployment:	61
Housing Burden:	59

Conclusion

As discussed at length in this letter, the DEIR utterly failed to analyze the full impacts the Project would have on cultural resources, water quality, wetlands, biological resources, air quality, traffic congestion, and environmental justice. The DEIR also failed to analyze the project as a whole and failed to inform the public of the Port of Hueneme's full expansion plan, which includes the 250-acre permanent vehicle storage facility. The EIR must be redrafted to include this full analysis, and must include a complete analysis of the Project's impacts to the environment. The City of Oxnard cannot proceed with this woefully inadequate environmental review.

Mati Waiya
Executive Director
Wishtooyo Chumash Foundation

Tevin Schmitt
Watershed Scientist
Wishtooyo Chumash Foundation

Eva Pagaling
Watershed Science Intern
Wishtooyo Chumash Foundation

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OXNARD UPHOLDING THE PLANNING COMMISSION DECISION CERTIFYING ENVIRONMENTAL IMPACT REPORT NO. 22-01 (SCH #2020069039) AND APPROVING THE FINDINGS OF FACT AND THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE PORT OF HUENEME - TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christina Birdsey (the "Applicant" and/or "Permittee") submitted a request to approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located at the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the "Project"); and

WHEREAS, a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) was issued on June 25, 2020, soliciting public input regarding a DEIR for the Project; and

WHEREAS, the public comment period on the NOP ran for thirty (30) days commencing on June 25, 2020 and ending on July 24, 2020; and

WHEREAS, a DEIR reflecting input received in response to the NOP was prepared and released for public and agency review on December 16, 2021; and

WHEREAS, the public comment period on the DEIR ran for sixty-one (61) days commencing on December 16, 2021 and ending on February 14, 2022; and

WHEREAS, after the close of the comment period on the DEIR, the DEIR was modified as set forth in the response to comment document and Chapter 1.1 of the FEIR, Summary Of Changes To The DEIR and Appendices; and

WHEREAS, in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, the City has prepared Final EIR No. 22-01 containing all comments received on the DEIR, written responses to all substantive comments, and necessary changes to the text of the DEIR; and

WHEREAS, Final EIR No. 22-01 was mailed to commenting agencies, organizations and individuals and made available for public review on or before October 10, 2022; and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the Final EIR, and voted to certify the Final EIR, approve the Findings of Fact, and approve the Mitigation Monitoring and Reporting Program; and

WHEREAS, on November 7, 2022, the Appellant filed an appeal of the decision of the Planning Commission to certify Final EIR No. 22-01, approve the Findings of Fact, and approve the Mitigation Monitoring and Reporting Program; and

WHEREAS, the City Council of the City of Oxnard has thoroughly considered Final Environmental Impact Report No. 22-01 (State Clearinghouse No. 2020069039) (the “EIR”) for the Port of Hueneme - Temporary Outdoor Vehicle Storage Project, which has been prepared in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, on December 6, 2022, the City Council of the City of Oxnard conducted a duly noticed public hearing to consider the Applicant’s request to certify Final EIR No. 22-01, approve the Findings of Fact, and approve the Mitigation Monitoring and Reporting Program; and

WHEREAS, the comments of the Councilmembers, agencies, interested groups, and members of the public have received adequate responses.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF OXNARD:

SECTION 1. Based on the entire record before the City Council and all written and oral evidence presented, including the City Council Staff Report and all attachments thereto, the City Council:

1. Certifies that Final Environmental Impact Report No. 22-01 is adequate and was completed in compliance with CEQA and the State CEQA Guidelines and reflects the City of Oxnard’s independent judgment and analysis.
2. That the City Council has been presented with all of the information described in the Recitals and Final EIR 22-01 and has considered this information prior to adopting this Resolution.
3. Approves the Findings of Fact in satisfaction of State CEQA Guidelines Section 15091, which are attached hereto as Exhibit A and incorporated herein by reference
4. Approves the Mitigation Monitoring and Reporting Program contained in the Final EIR in satisfaction of State CEQA Guidelines Section 15091(d), which is attached hereto as Exhibit B and incorporated herein by reference.

SECTION 2. The City Council, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation

measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. The decision of the City Council shall be final.

SECTION 4. The City Clerk shall certify the adoption of this Resolution.

PASSED, AND ADOPTED by the City Council of the City of Oxnard on this 6th day of
December 2022, by the following vote:.

AYES:

NOES:

ABSENT:

ABSTAIN:

RECUSED:

John C. Zaragoza, Mayor

ATTEST:

Rose Chaparro, City Clerk

APPROVED AS TO FORM:

Stephen M. Fischer, City Attorney

Exhibit 1: Findings of Fact

Exhibit 2: Mitigation Monitoring and Reporting Program

FINDINGS OF FACT

PORT OF HUENEME – TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY PROJECT ENVIRONMENTAL IMPACT REPORT

SCH No. 2020069039



CITY OF OXNARD
214 South C Street
Oxnard, California 93030

September 2022

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1.0 INTRODUCTION

These Findings of Fact (Findings) for the Port of Hueneme – Temporary Outdoor Vehicle Storage Facility Project (project) are made pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), specifically PRC Sections 21081, 21081.5, and 21081.6, and the CEQA Guidelines (14 CCR 15000 et seq.), specifically Sections 15091 and 15093. The Final Environmental Impact Report (EIR) examines the full range of potential effects of construction and operation of the project, identifies standard mitigation practices that could be employed to reduce, minimize, or avoid those potential effects, and evaluates alternatives to the project. The Final EIR is incorporated into these Findings by reference.

1.1 PURPOSE

PRC Section 21081, and CEQA Guidelines Section 15091 require that the lead agency, in this case the City of Oxnard (City), prepare written findings for identified significant effects, accompanied by a brief explanation of the rationale for each finding. Specifically, CEQA Guidelines Section 15091 states, in part, that:

- a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
 - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - 3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

In accordance with PRC Section 21081, and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the decision-making agency is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable.” In that case, the decision-making agency may prepare and adopt a Statement of Overriding Considerations, pursuant to the CEQA Guidelines. State CEQA Guidelines Section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. Implementation of the proposed project would not result in any impacts that are considered significant, adverse, or unavoidable. All environmental issues were determined to result in less than significant impacts or can be reduced to less-than-significant levels with the incorporation of mitigation measures. Thus, the City is not required to adopt a statement of overriding considerations.

Section 15093 of the CEQA Guidelines states the following:

- a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The Final EIR for the project identified potentially significant effects that could result from the project. The City finds that the inclusion of certain mitigation measures as part of the approval of the project would reduce these effects to less-than-significant levels.

The City also finds that the Mitigation Monitoring and Reporting Program for the project, which is incorporated by reference and made part of these Findings, meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the proposed project.

Pursuant to PRC Section 21082.1(c)(3), the City also finds that these Findings reflect the City’s independent judgment as the lead agency for the project.

1.1.1 Custodian and Location of Records

The documents and other materials that constitute the Record of Proceedings for the City’s actions related to the project are located at the City of Oxnard, 214 South C Street, Oxnard, California 93030. The City is the custodian of the Record of Proceedings for the proposed project.

1.2 PROJECT DESCRIPTION

The project would include the construction and operation of a temporary outdoor vehicle storage facility (vehicle storage facility or facility) for a maximum of 5 years on the approximately 34-acre project site. The facility would include the following:

- Vehicle parking area with gravel base
- Temporary guard house
- Portable restroom
- Perimeter site lighting

- Security fencing (6-feet-high)
- Landscaping
- Site drainage
- Associated infrastructure improvements (e.g., curb cuts, apron)

The temporary outdoor vehicle storage facility includes approximately 27.5 acres to accommodate parking for up to 4,944 vehicle spaces, which equates to a ratio of 180 spaces per acre.

Various permits, approvals, and actions by the City of Oxnard and various public agencies may be required to execute and implement the proposed project. The permits from the lead agency that are necessary include:

- City of Oxnard approval of Special Use Permit
- City of Oxnard issuance of Grading Permit
- City of Oxnard issuance of Building and Safety Permits
- City of Oxnard Fire Department approval of proposed site improvement
- City of Oxnard – water, sewer, and storm drain connection permits

1.2.1 Project Objectives

The Applicant has identified the following objectives for the project.

1. Facilitate commercial success for Port clients to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future.
2. Reduce and consolidate, where feasible, Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations. The consolidation of vehicle storage closer to the Port would enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement.
3. Provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

1.2.2 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The project would require consideration of the following discretionary actions by the City:

- Certification of the Final EIR and adoption of a Mitigation Monitoring and Reporting Program
- Approval of the Special Use Permit

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2.0 CEQA FINDINGS OF INDEPENDENT JUDGEMENT

2.1 INDEPENDENT REVIEW AND ANALYSIS

Under CEQA, the lead agency must (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the EIR or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (PRC Section 21082.1[c]).

These Findings reflects the City’s independent judgment. The City has exercised independent judgment in accordance with CEQA Section 21082.1(c)(3) in retaining its own environmental consultant in the preparation of the EIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Having received, reviewed, and considered the information in the EIR, as well as any and all other information in the record, the City hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

2.2 SUMMARY OF IMPACTS

The EIR identified a number of direct and indirect potentially significant environmental effects (or “impacts”) resulting from the project. These potentially significant effects can be reduced to a less than significant level through the adoption of feasible mitigation measures.

As identified in Chapters 4, 5, 6, and 7 of the EIR, significant environmental impacts would not occur with regard to the following issues: agriculture and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, parks and recreation, wildfire and fire protection, schools, water, wastewater, and solid waste. Additionally, significant environmental impacts would not occur with regard to the following issues: biological resources (federally protected wetlands, wildlife movement, consistency with an adopted habitat conservation plan; and cumulative impacts to biological resources); cultural resources (historical resources; paleontological resources; and cumulative impacts to cultural resources); geology and soils (rupture of an earthquake fault; unstable soils–landslides; expansive soil; seiches and tsunamis; dredging and other maintenance activities); noise (exceedance of established or applicable standards in the local general plan or noise ordinance or other agencies resulting in a temporary, periodic, or permanent increase in ambient noise levels; groundborne vibration or noise; excessive noise levels within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu; or cumulative noise impacts); police protection (impacts during operations); or transportation (within the airport land use plan for Oxnard Airport or within 2 miles of Naval Base Ventura County Point Mugu to excessive noise levels; Level of Service standards; change in air traffic patterns; hazards due to a design feature or incompatible uses; emergency access during operations; conflict with adopted policies, plans, or programs supporting alternative transportation; CEQA Guidelines Section 15064.3 Subdivision (B); and cumulative traffic impacts). State CEQA Guidelines section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. As such, these issue areas are not discussed further within this document.

As identified in Chapters 4, 5, 6, and 7 of the EIR, the project would mitigate, avoid, or substantially lessen to below a level of significance direct, indirect, and/or cumulative potentially significant environmental effects with regard to the following issues: aesthetics (visual character/quality), biological resources (nesting birds), cultural resources (archaeological resources; human remains; tribal cultural resources), geology and soils, noise (non-human species), police protection during construction, and transportation (emergency access).

2.3 IMPACTS DETERMINED TO BE LESS THAN SIGNIFICANT WITH MITIGATION

The following summarizes the potentially significant impacts of the proposed project identified in the Final EIR that would be less than significant with implementation of mitigation measures.

2.3.1 Aesthetics

2.3.1.1 AESTHETIC IMPACT TO VISUAL CHARACTER/QUALITY OF THE SITE AND ITS SURROUNDINGS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to the visual character/quality of the site and its surroundings.

MITIGATION MEASURE(S) AND STANDARD CONDITION(S)

Standard Conditions

- | | |
|----------|--|
| SC AES-1 | Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. |
| SC AES-2 | Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. |
| SC AES-3 | Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. |
| SC AES-4 | The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. |
| SC AES-5 | All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. |
| SC AES-6 | The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. |

- SC AES-7 The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.

Mitigation Measures

- MM AES-1 The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.
- MM AES-2 In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.
- MM AES-3 Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.
- MM AES-4 The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.

Findings

As discussed in Section 5.1, Aesthetics, of the EIR, the proposed project would be compatible with surrounding development, including the Hueneme Industrial Park, shopping center, and the City of Oxnard Advanced Water Purification Facility, and the proposed use is allowed in the M-1-PD (Light Manufacturing Zone with Planned Development Additive Zone) zone. While the proposed project incorporates screening and landscape measures, it is important that the proposed measures are properly installed and maintained. Thus, visual character/quality impacts are considered potentially significant. The proposed project would be subject to Standard Conditions SC AES-1 through SC AES-7 that require landscape and irrigation plans, and the proper installation and maintenance of site landscaping and irrigation systems in compliance with City Code Section 16-165, and Mitigation Measures MM AES-1 through MM AES-4, that ensure the site landscaping and the fencing provide adequate screening. Thus, implementation of Standard Conditions SC AES-1 through SC AES-7 and Mitigation Measures MM AES-1 through MM AES-4 would result in less than significant visual character/quality impacts associated with the project.

2.3.2 Biological Resources

2.3.2.1 BIOLOGICAL RESOURCES IMPACT TO NESTING BIRDS

DESCRIPTION OF POTENTIAL IMPACT

The project would have a substantial adverse impact to suitable habitat for the burrowing owl (*Athene cunicularia*) and the California horned lark (*Eremophila alpestris actia*) and to ground-nesting bird species, including the western meadow lark (*Sturnella neglecta*), burrowing owl, and the California horned lark.

Mitigation Measure(s)

- MM BIO-1 To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code

(CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.

Findings

As discussed in Section 5.4, Biological Resources, of the EIR, potential ground nesting species, such as the western meadow lark, identified on-site during the field reconnaissance survey, could nest on-site. Additionally, there is the potential for the burrowing owl, known to winter in the Oxnard Plain, and California horned lark to occur on site. Construction activities associated with the proposed project could adversely affect nesting birds if they are present on or adjacent to the site, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and California Fish and Game Code Section 3503. Thus, implementation of the proposed project would result in potentially significant impacts to the following ground-nesting bird species: western meadow lark, burrowing owl, and California horned lark. Mitigation Measure MM BIO-1 would reduce project-related impacts to less than significant by encouraging site disturbance and construction activities outside of the bird breeding season or a pre-construction nesting bird survey and application of the biologist's recommendations during the site disturbance and construction activities. Implementation of MM BIO-1 would reduce impacts to suitable habitat for the burrowing owl and the California horned lark, and impacts to ground-nesting bird species, including the western meadow lark, burrowing owl, and the California horned lark to less than significant.

2.3.3 Cultural and Tribal Cultural Resources

2.3.3.1 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO ARCHEOLOGICAL RESOURCES

DESCRIPTION OF POTENTIAL IMPACT

The project could result in impacts to potentially undiscovered archaeological resources.

Mitigation Measure(s)

MM CUL-1 Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the project. Existence and importance of adherence to this Plan shall be stated on all project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.

MM CUL-2 Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of

one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, archival research indicated that there is one known archaeological site within a 0.25-mile radius of the project site boundaries. A foot reconnaissance of the project site in 2020 indicated two clusters (Locus¹ 1 and 2) of low density weathered marine shell, one chert biface fragment, and one weathered elasmobranch fish vertebra. Subsurface testing of the areas identified as Locus 1 and Locus 2 was performed and found that no known cultural resources exist within the proposed project site and based on the presence of disturbed and/or fill soils to depths below proposed depths of disturbance for the project, no impacts to known or unknown cultural resources are expected. Nonetheless, the proposed project involves minimal on-site ground-disturbing activities (approximately 1/10th inch to 1.95 feet)² for grubbing, grading, or other activities. In addition, the installation of site drainage infrastructure could require grading of small areas to a depth of 24 inches (2 feet). On-site areas that would not be disturbed include the site's periphery that has been previously disturbed by pipelines, roads, and the Ventura County Rail Road right-of-way. These activities could result in impacts to undiscovered archaeological resources. Mitigation Measures MM CUL-1 and MM CUL-2 require archaeological and Native American monitoring during ground disturbing activities to avoid or document any artifacts or archaeological features that may be encountered. Implementation of Mitigation Measures MM CUL-1 and MM CUL-2 reduce potentially significant impacts to less than significant.

2.3.3.2 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO HUMAN REMAINS

DESCRIPTION OF POTENTIAL IMPACT

The project could disturb human remains, including those interred outside of dedicated cemeteries.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

¹ "Locus" is defined as the place where something is situated or occurs: site, location a center of activity, attention, or concentration. Source: Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/locus>, accessed March 1, 2021.

² Source: Jensen Design & Survey, Inc., Cut & Fill Depths Analysis | Grading Plan, August 2019.

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no human remains or cemeteries are known to exist in or near the project site. However, there is always the possibility that subsurface construction activities associated with the proposed project improvements, such as trenching and grading, would potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; *Health and Safety Code* Section 7050.5; *Public Resources Code* Section 5097.94 and Section 5097.98 must be followed. Implementation of Mitigation Measure MM CUL-2 would reduce potentially significant impacts associated with the discovery of human remains to less than significant.

2.3.3.3 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN THE LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K)

DESCRIPTION OF POTENTIAL IMPACT

The project would cause a substantial adverse change in the significance of previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

As discussed in Section 5.5, Cultural Resources, of the EIR, no Native American Tribes have requested formal notification from the City pursuant to AB 52. The City also reviewed the results of the archaeological study that included a records search, archival and background research as well as a pedestrian survey and subsurface testing of the project site to further inform and consider the potential of tribal cultural resources to exist within the project site. All efforts to determine whether tribal cultural resources originating from the project site exist and may be impacted by proposed project implementation returned negative. Given the presence of the Ventureño Chumash in and around the City of Oxnard over millennia, and the proximity of a known site within 0.25 miles of the project site, there is the potential for construction of the project to impact unidentified tribal cultural resources. Thus, ground-disturbing activities, such as grading or excavation, could disturb previously unidentified subsurface resources. Implementation of Mitigation Measure MM CUL-2 would reduce any potentially significant impacts to previously undiscovered tribal cultural resources to less than significant.

2.3.3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT TO TRIBAL CULTURAL RESOURCES DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO

THE CRITERIA SET FORTH IN SUBDIVISION (C) OF PUBLIC RESOURCES CODE SECTION 5024.1

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potentially significant impacts to previously undiscovered tribal cultural resources.

Mitigation Measure(s)

MM CUL-2 (see Section 2.3.3.1, above)

Findings

Refer to Section 2.3.3.4, above.

2.3.4 Geology and Soils

2.3.4.1 GEOLOGICAL IMPACT TO SEISMIC GROUND SHAKING

DESCRIPTION OF POTENTIAL IMPACT

The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Mitigation Measure(s)

MM GEO-1 Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, there are a number of potentially active/active faults in the region including the Oak Ridge, Pitas Point-Ventura, Anacapa, and Malibu Coast faults; however, these faults are located approximately 1.5 miles to 10 miles from the City. Although some structural damage is typically not avoidable during a large earthquake, the proposed project would be constructed to meet existing construction ordinances and the California Building Code in order to protect against building collapse and major injury during a seismic event. The California Building Code includes specific design measures, which are based on the determination of Site Classification and Seismic Design Categories specific to the project site. These design measures are intended to maximize structural stability in the event of an earthquake. Thus, adherence to the California Building Code requirements, as well as Mitigation Measure MM GEO-1 would reduce impacts related to strong seismic shaking to less than significant.

2.3.4.2 GEOLOGICAL IMPACT RESULTING FROM UNSTABLE SOILS AND LIQUEFACTION

DESCRIPTION OF POTENTIAL IMPACT

The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and result in unstable soils and on- or off-site liquefaction.

Mitigation Measure(s)

MM GEO-1 (see Section 2.3.4.1, above)

Findings

As discussed in Section 5.7, Geology and Soils, of the EIR, a majority of the City of Oxnard is susceptible to liquefaction as a result of underlying thick alluvial deposits and high groundwater levels. In addition, the City of Oxnard is located in a Seismic Hazard Area for liquefaction according to seismic hazard mapping conducted by the California Geological Survey. To ensure that the temporary on-site structures do not experience structural damage due to liquefaction, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

In addition, the on-site soils are characterized as unstable soils. To ensure that the temporary on-site structures do not experience structural damage due to unstable soils, the Applicant shall implement the recommendations in the soils, geologic, and structural evaluation report required per Mitigation Measure MM GEO-1 and adhere to the California Building Code requirements for the guard house, which reduce potentially significant impacts to less than significant with mitigation incorporated.

2.3.5 Noise

2.3.5.1 NOISE IMPACT TO NON-HUMAN SPECIES

DESCRIPTION OF POTENTIAL IMPACT

The project would result in noise impacts to special-status species, including the western meadow lark, burrowing owl, and the California horned lark, as well as suitable habitat for the burrowing owl and the California horned lark.

Mitigation Measure(s)

MM BIO-1 (see Section 2.3.2.1, above)

Findings

The proposed project would result in a potentially significant impact to suitable habitat for the burrowing owl and the California horned lark, as well as a potentially significant impact to ground-nesting bird species: western meadow lark, burrowing owl, and the California horned lark. With the implementation of Mitigation Measure MM BIO-1, project-related impacts to these special-status species or habitat are reduced to less than significant.

2.3.6 Police Protection

2.3.6.1 POLICE PROTECTION IMPACTS DURING CONSTRUCTION

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts on the California Highway Patrol, which regulates traffic in the City.

Mitigation Measure(s)

MM PP-1 Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:

- At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
- At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
- If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.

Findings

Construction-related traffic on the project site also is not expected to result in impacts on the California Highway Patrol, which regulates traffic in the City. Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. However, this would not result in a significant impact on traffic flows because construction-related traffic would only occur during short periods of time during the day and would cease upon completion. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and would reduce potentially significant impacts to less than significant.

2.3.7 Transportation

2.3.7.1 TRANSPORTATION IMPACTS ASSOCIATED WITH INADEQUATE EMERGENCY ACCESS

DESCRIPTION OF POTENTIAL IMPACT

The project would result in potential construction-related traffic impacts.

Mitigation Measure(s)

MM PP-1 (see Section 2.3.6.1, above)

Findings

Slow-moving construction-related traffic on adjacent roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the area. In order to prevent construction-related traffic impacts, Mitigation Measure MM PP-1 has been included to prepare a construction traffic control plan prior to the initiation of any construction activities and reduce potentially significant impacts to less than significant.

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3.0 FINDINGS ON PROJECT ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of the project, that could feasibly attain the basic objectives of that project, and to evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by “a rule of reason” (14 CCR 15126.6[a], [f]). CEQA directs that the scope of alternatives considered shall be limited to ones that would avoid or substantially lessen the significant effects of the project (14 CCR 15126.6[f]). Notably, this project does not result in any significant and unavoidable impacts.

3.1 ALTERNATIVES CONSIDERED AND ELIMINATED DURING THE SCOPING/PROJECT PLANNING PROCESS

The CEQA Guidelines provide that an EIR should “identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency’s determination” (14 CCR 15126.6[c]). The following is a discussion of the project alternatives proposed during the scoping and planning process and the reasons they were not selected for detailed analysis in the EIR.

With respect to the feasibility of potential alternatives to the proposed project, CEQA Guidelines Section 15126.6(t)(l) states, “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.”

In determining an appropriate range of proposed project alternatives to be evaluated in the EIR, a number of possible alternatives were initially considered and then rejected. Proposed project alternatives were rejected because they could not accomplish the basic objectives of the proposed project, or they would not have resulted in a reduction of significant adverse environmental impacts.

REDUCED PROJECT ALTERNATIVE

The City considered a Reduced Project Alternative that would reduce the site acreage and would not utilize more than 50% of the approximately 34-acre site. The reduction in total acres would also reduce the acreage for temporary outdoor vehicle storage capacity from approximately 27.5 acres under the proposed project to approximately 14 acres. This would reduce the vehicle storage capacity from 4,944 to 2,472 vehicle spaces.

This Alternative does not fulfill a key project objective to reduce and consolidate Port vehicle customer reliance on Off-Port storage locations, nor would this Alternative eliminate the need for car carrier truck movement to distribute vehicles to those Off-Port storage locations.

In addition, fewer new jobs would be created under this Alternative, thus not fulfilling a second key project objective regarding employment in the region.

Finding

The City rejects the Reduced Project Alternative on the following grounds, which provides sufficient justification for rejection of this alternative: the Reduced Project Alternative fails to meet most of the project objectives. Thus, the Reduced Project Alternative was rejected from further consideration in the EIR.

ELECTRIC CAR CARRIER TRUCKS ALTERNATIVE

The City considered an alternative that assumes that electric car carrier trucks would be used by the Port Customer to transport vehicles to existing Off-Port storage locations.

An electric truck is an electric vehicle powered by batteries designed to deliver cargo. The recent development of lithium batteries has broadened the applicability of electric trucks due to the increased range of several hundred miles. Battery powered electric vehicles have no exhaust emissions, but emissions are created from the production and distribution of the energy used to charge them.

At this time, the Port Customer is not using electric car carrier trucks to transport vehicles to existing Off-Port storage locations, nor would car carrier trucks be used for the proposed project. While the use of electric trucks would reduce greenhouse gas emissions, the financial implications to the Port Customer to rent or purchase such equipment is unknown at this time, and as such, this Alternative is infeasible. Additionally, to the knowledge of the Port Customer, there are no commercially available electric car carrier trucks. Therefore, it would not be financially possible for the Port or City to procure electric car carrier trucks for use in the proposed project, and electric car carrier trucks are not anticipated to be feasible for the Port or City to acquire during the five-year life of the proposed project. Therefore, under this alternative without the use of traditional car carrier trucks, vehicle transport would not be able to occur.

Because electric car carrier trucks are not a feasible option for vehicle transport at this time, this Alternative does not fulfill a key project objective to reduce and consolidate Port Customer reliance on Off-Port storage locations and thus, reduce the need for car carrier truck (diesel or electric) movement to distribute vehicles to those locations. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

Finding

The City rejects the Electric Car Carrier Trucks Alternative on the following grounds which provides sufficient justification for rejection of this alternative: this alternative is infeasible given that there are no commercially available electric car carrier trucks and no such trucks are likely to become available within the next 5 years. Thus, the Electric Car Carrier Trucks Alternative was rejected from further consideration in the EIR.

ALTERNATIVE LOCATIONS

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. The City is mostly developed, with the exception of some undeveloped land to the south of the project site, where the Ormond Lagoon and various undeveloped parcels are located. Therefore, there are very limited areas of approximately equivalent size to the project site that could be used for the project. In addition, the project applicant does not control another site within the City of comparable land area that is available for development of the proposed project. One of the factors for

feasibility of an alternative is “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.” Because the City is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development to the east, north, and west. As such, an alternative location was ultimately rejected from further analysis in the EIR.

Finding

The City rejects the Alternative Locations, on the following ground, which provides sufficient justification for rejection of this alternative: the alternative is infeasible given that the project applicant does not own or control any other property within the City that would be suitable for development of the proposed project. Therefore, this alternative is eliminated from further consideration.

3.2 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

This section discusses a reasonable range of alternatives to the proposed project, including a No Project Alternative, in compliance with CEQA Guidelines Section 15126.6(e). These alternatives are as follows:

- Alternative One: No Project Alternative
- Alternative Two: Two Existing Off-Port Vehicle Storage Locations
- Alternative Three: Existing Zoning

These alternatives are evaluated for their ability to avoid or substantially lessen the impacts of the proposed project identified in the Final EIR, and in consideration of their ability to meet the basic objectives of the proposed project as described in the Final EIR.

3.2.1 Alternative One: No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of a No Project Alternative. The “purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project” (14 CCR 15126.6[e][1]). When defining the No Project Alternative, the analysis must be informed by “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (14 CCR 15126.6[e][2]).

Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the No Project Alternative, which reflects the “circumstances under which the project does not proceed.” Under the No Project Alternative, no development would occur on the project site. Accordingly, the site characteristics of this alternate would be equivalent to the existing conditions and would remain as vacant and undeveloped land.

Impacts

Under Alternative 1, the No Project/ No Build Alternative, all environmental impacts would be reduced further below the project’s less- than-significant impacts.

Finding

The City rejects the No Project Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the No Project Alternative fails to meet any of the project objectives; (2) the No Project Alternative does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.2 Alternative Two: Two Existing Off-Port Vehicle Storage Locations

Description

Alternative Two assumes the existing vehicle storage operations of GLOVIS (Customer) at the Port of Hueneme (Port) and Off-Port locations for vehicle storage within the local area, including within Oxnard, Ventura, Camarillo, and Ventura County would continue.

As such, imported vehicles would be transported by Customer car carrier trucks from the Port to two Off-Port storage locations:

1. Camarillo Airport (555 Airport Way, Camarillo)
2. Tuff Shed (3355 Ventura Road, Ventura)

The locations are approximately 10.6 miles and 9 miles, respectively, from the Port.

Impacts

Under Alternative Two, Two Existing Off-Port Vehicle Storage Locations, environmental impacts related to agriculture and forestry resources, hazards and hazardous materials, population and housing, parks and recreation, schools, and wastewater would be the same as compared to the project, or neither environmentally superior nor inferior to the project.

Alternative Two would result in reduced impacts to aesthetics, biological resources, cultural and tribal cultural resources, geology and soils, wildfire and fire protection, police protection, water, and solid waste, as Alternative Two would not result in development of an undeveloped site. Therefore, Alternative Two would be environmentally superior to the proposed project in regard to these environmental issue areas.

Alternative Two would result in increased impacts to air quality, energy, greenhouse gases, noise, and transportation due to the increased distances to the two locations (Camarillo Airport 10.6 miles, Tuff Shed 9 miles) from the Port. In addition, because the proposed project allows for the consolidation of multiple Off-Port storage locations to a single site within one jurisdiction in a zoning district that allows the proposed use, Alternative Two would result in increased impacts to land use. The Camarillo Airport site and proposed project site are located within MRZ-1, and thus does not contain mineral resources. However, the Tuff Shed site in Ventura is located within MRZ-2 zone, which does contain mineral resources of regional and statewide significance, resulting in an increased impacts to mineral resources under Alternative Two. Lastly, while hydrology and drainage impacts would remain less than significant under both Alternative Two and the proposed project, the proposed project provides more pervious

surface and infrastructure to improve hydrology and water quality impacts, both on-site and off-site. Therefore, Alternative Two is considered environmentally inferior to the proposed project in regard to these environmental issue areas.

Objectives

Alternative Two would partially meet Objective 1, as the project would facilitate commercial success for Port clients to ensure they keep their business in the region, and keep 167 local citizens employed. However, Alternative Two does not provide for new jobs. In addition, Alternative Two would not meet Objective 2, as Alternative Two would not reduce and consolidate Port vehicle customer reliance on off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicles to those locations, to enable a more efficient movement of vehicles and reduce the need for heavy duty truck movement. Lastly, the project would meet Objective 3, as it would provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative 2 on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative 2 would result in greater impacts to some environmental resource areas; and (2) Alternative 2 does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.3 Alternative Three: Existing Zoning

Description

Alternative Three, Existing Zoning, assumes the approximately 34-acre project site would be developed with a light manufacturing use consistent with the M-1-PD zone (Light Manufacturing Zone with Planned Development Additive) and in accordance with applicable use and development standards required per Oxnard City Code Chapter 16, Zoning.

The M-1-PD zone permits the following: maximum building height of 55 feet and a maximum floor area ratio of 70%. For this Alternative, the maximum development assumes a 40% floor area ratio and 587,189 square feet.

Impacts

Under Alternative Three, Existing Zoning, environmental impacts relative to agriculture and forestry resources, biological resources, cultural and tribal cultural resources, geology and soils, mineral resources, population and housing, and schools would be similar compared to the project.

Alternative Three would result in greater impacts relative to aesthetics, as the site would be developed with light manufacturing uses with buildings up to 55 feet in height, thus changing the visual character of the site. In addition, Alternative Three would result in greater impacts relative to air quality, energy, greenhouse gas emissions, and noise, as the duration of both construction and operations associated with Alternative Three would be increased compared to the project. Light manufacturing uses have the

potential to manufacture, transport, use, or dispose of hazardous materials and thus impacts to hazards and hazardous materials would be increased under Alternative Three. Alternative Three would result in less pervious area and more impervious area compared to the project. Thus, impacts to hydrology and water quality would be increased compared to the project. Although Alternative Three would be consistent with the City's Zoning Code and compatible with surrounding uses, similar to the proposed project, Alternative Three would be subject to the Ventura County Airport Comprehensive Land Use Plan (ACLUP) land use or compatibility guidelines, and Federal Aviation Regulations Part 77 height limitations and would be required to be consistent with the ACLUP and Federal Aviation Regulations Part 77. Therefore, Alternative Three would result in greater impacts to land use.

In addition, the number of employees associated with Alternative Three would increase, resulting in an increase in demand for parks and recreation, wildfire and fire protection, and police protection. Regarding transportation, the vehicle trips generated by a 587,189 square foot light manufacturing uses could result in significantly more peak daily, A.M. peak hour, and P.M. peak hour trips that affect a larger traffic impact area and would increase vehicle miles traveled. As Alternative Three would require water and wastewater infrastructure to be installed, impacts associated with water and wastewater would be increased compared to the project. Lastly, the quantity of solid waste generated is dependent upon the light manufacturing use but would be greater than the proposed project. Therefore, Alternative Three is considered environmentally inferior to the proposed project in regard to aesthetics, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, noise, parks and recreation, wildfire and fire protection, police protection, transportation, water, wastewater, and solid waste.

Objectives

Alternative Three would not meet any of the project objectives. Alternative Three would not facilitate commercial success for Port client to ensure they keep their business in the region, keep 167 local citizens employed, and create the potential for more than 30 jobs in the future; reduce and consolidate, where feasible, Port vehicle customer reliance on Off-Port satellite storage locations, which would reduce the need for car carrier truck movement to distribute vehicle to those locations; or provide operational flexibility for the transport of goods (vehicles) that already flow through the Port for purposes of sale, while maintaining existing goods movement and the existing number or capacity of cargo ships.

Finding

The City rejects Alternative Three on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Three fails to meet most of the project objectives; (2) Alternative Three would result in greater impacts to some environmental resource areas; and (3) Alternative Three does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

3.2.4 Environmentally Superior Alternative

Alternative One, the No Project Alternative, would result in the least environmental impacts and would be the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is Alternative Two, Two Existing Off-Port Vehicle Storage Locations.

Alternative Two would partially meet Objective 1, would not meet Objective 2, and would meet Objective 3. As set forth above, the City rejects Alternative Two on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Alternative Two would result in greater impacts to some environmental resource areas; and (2) Alternative Two does not reduce or eliminate any significant and unavoidable impacts associated with the project, as the project does not result in any significant and unavoidable impacts.

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4.0 GENERAL CEQA FINDINGS

Based on the foregoing Findings and the information contained in the administrative record, and as conditioned by the foregoing, the City has determined the following:

1. The plans for the proposed project have been prepared and analyzed so as to provide for public involvement in the planning and the CEQA processes.
2. To the degree that any impacts described in the Draft EIR are perceived to have a significant effect on the environment, or such impacts appear ambiguous as to their effect on the environment, any significant effect of such impacts has been substantially lessened or avoided by the mitigation measures set forth in the Draft and Final EIR.
3. Comments regarding the Draft EIR received during the public review period have been adequately addressed in the Final EIR. Any significant effects described in such comments were avoided or substantially lessened by the mitigation measures described in the Draft and Final EIR.

4.1 FINDINGS REGARDING RECIRCULATION

The City finds that the Draft EIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5). CEQA Guidelines Section 15088.5 requires recirculation of an EIR prior to certification of the Final EIR when “significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review.” As described in CEQA Guidelines Section 15088.5:

New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it;
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

In addition, CEQA Guidelines Section 15088.5(b) provides that “recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR.” Recirculation also is not required simply because new information is added to an EIR;

indeed, new information is oftentimes added given CEQA’s public/agency comment and response process and CEQA’s post-Draft EIR circulation requirement of proposed responses to comments submitted by public agencies. In short, recirculation is “intended to be an exception rather than the general rule” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132).

As such, the City makes the following Findings:

- None of the public comments submitted to the City regarding the Draft EIR present any significant new information that would require the Draft EIR to be recirculated for public review.
- No new or modified mitigation measures are proposed that would have the potential to create new significant environmental impacts.
- The Draft EIR adequately analyzed project alternatives and there are no feasible alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project.
- The Draft EIR was not fundamentally and basically inadequate and conclusory in nature and did not preclude meaningful public review and comment.

In this legal context, the City finds that recirculation of the Draft EIR prior to certification is not required. In addition to providing responses to comments, the Final EIR includes revisions to expand upon information already presented in the Draft EIR; explain or enhance the evidentiary basis for the Draft EIR’s findings; update information; and to make clarifications, amplifications, updates, or helpful revisions to the Draft EIR. The Final EIR’s revisions, clarifications, and/or updates do not result in any new significant impacts or increase the severity of a previously identified significant impact. In sum, the Final EIR demonstrates that the proposed project would not result in any new significant impacts or increase the severity of a significant impact compared to the analysis presented in the Draft EIR. The changes reflected in the Final EIR also do not indicate that meaningful public review of the Draft EIR was precluded in the first instance. Accordingly, recirculation of the EIR is not required because revisions to the EIR are not significant as defined in Section 15088.5 of the CEQA Guidelines.

11.0 MITIGATION MONITORING AND REPORTING PROGRAM

11.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) Guidelines requires that, whenever a public agency approves a project based on a Mitigated Negative Declaration or an Environmental Impact Report (EIR), the public agency shall establish a mitigation monitoring or reporting program to ensure that all adopted mitigation measures are implemented.

The mitigation monitoring and reporting program (MMRP) contained herein is intended to satisfy this requirement of the CEQA Guidelines as it relates to the Temporary Outdoor Vehicle Storage Facility Project (project). This MMRP is intended to be used by City of Oxnard (City) staff to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the Draft EIR and finalized in the Final EIR prepared for the proposed project.

The Final EIR for the proposed project presents a detailed set of mitigation measures required for implementation. As noted above, the intent of the MMRP is to ensure the effective implementation and enforcement of all adopted mitigation measures. The MMRP will also provide for monitoring of construction activities, as necessary, and in the field identification and resolution of environmental concerns.

11.2 PURPOSE OF THE MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a sufficient manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements. The MMRP table has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies each mitigation measure or standard condition; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring conditions; and the agency or party responsible for ensuring that the monitoring is performed. The numbering of mitigation measures and standard conditions follows the numbering sequence found in the Final EIR.

11.3 ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City,

at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. The City would be responsible for overall administration of the MMRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure.

Section 21081.6 of the Public Resources Code requires the lead agency to identify the “custodian of documents and other material” which constitutes the “record of proceedings” upon which the action on the project was based. Inquiries should be directed to:

City of Oxnard Community Development Department
Planning & Environmental Services Division
214 South C Street
Oxnard, California, 93030

11.4 REPORTING

Upon completion of the project, the City’s Planning Manager shall prepare a monitoring report on the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall also be compiled and explained in monthly or annual reports, as relevant. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

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5.1 AESTHETICS					
Implementation of the proposed project could substantially degrade the visual character/quality of the site and its surroundings (Threshold AES-3).	SC AES-1: Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans.	Prior to the issuance of building permits.	One time prior to issuance of building permits.	Applicant	
	SC AES-2: Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems.	Prior to the issuance of a certificate of occupancy.	Installation occurs one time prior to the issuance of a certificate of occupancy.	Applicant	
	SC AES-3: Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods.	Prior to the issuance of a certificate of occupancy.	Provision of water schedule occurs one time prior to the issuance of a certificate of occupancy. Recommendations of the watering schedule must be implemented throughout project implementation.	Applicant	
	SC AES-4: The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure.	During project construction and prior to project operation.	Installation occurs one time during project construction. Ongoing maintenance should occur when necessary during project implementation to ensure sufficiency of irrigation system.	Applicant	

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	SC AES-5: All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	SC AES-6: The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	SC AES-7: The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Ongoing during project operation for the life of the 5-year Special Use Permit as required by the City Code.	Applicant	
	MM AES-1: The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-2: In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site.	During project construction and prior to project operation.	Installation occurs one time during project construction.	Applicant	
	MM AES-3: Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chain-link fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation.	Prior to vegetation maturation that effectively buffers views onto the project site.	Ongoing during project operation for the life of the 5-year Special Use Permit.	Applicant	

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			Applicant should regularly assess vegetation to determine whether screening fabric or other alternative temporary measures are necessary. Once vegetation has matured to effectively buffered views to the project site, the Applicant should remove fabric screening in those areas.		
	MM AES-4: The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project.	During project construction and prior to project operation.	Installation occurs during project construction. Visual screening methods should complement the screening established for the project. Applicant should regularly assess screening to ensure it is sufficient and address any degradation.	Applicant	
Implementation of the proposed project could create a source of substantial light or glare, which could affect daytime and/or nighttime views in the area (Threshold AES-5).	SC AES-8: The project must comply with the Outdoor Lighting Code & Guideline: a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:	Ongoing during project construction and operation.	Lighting installation occurs during project construction. Ongoing compliance with the Outdoor Lighting Code & Guideline is required for the life of the project during the 5-year Special Use Permit, consistent	Applicant	

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	i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up. ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to one 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up. c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected.		with the Oxnard City Code.		

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	SC-AES-9: Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature).	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
	SC AES-10: Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians.	Ongoing during project construction and operation	Lighting installation occurs during project construction. Maintenance and replacement of lightbulbs consistent with this standard condition is required during the life of the project.	Applicant	
5.4 Biological Resources					
The proposed project could have a substantial adverse effect on sensitive or special status biological resources, or riparian habitats, or natural communities (Threshold BIO-1, Threshold BIO-2).	MM BIO-1: To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.	Conduct survey during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative, or if habitat can be avoided.	Initial survey and reporting. Conduct monitoring if required to comply with Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act.	Applicant	

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	If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities. The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.	Comply with Fish and Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act if surveys are positive and habitat cannot be avoided. Incorporate measures into construction contracts, as relevant.			

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	In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided.				
5.5 CULTURAL AND TRIBAL CULTURAL RESOURCES					
The proposed project could result in a substantial adverse change in the significance of a unique archaeological resource pursuant to state CEQA Guidelines Section 15064.5 (Threshold CTC-2).	MM CUL-1: Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal)	A Principal Investigator/Archaeologist shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground				

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	disturbing activities, an archaeological monitoring report shall be prepared within 30 business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center.				
	MM-CUL-2: Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to	A Native American/Tribal Monitor shall be retained prior to ground-disturbance activities. Monitoring is ongoing during ground-disturbing activities. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities.	Applicant	

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	commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.				
5.7 GEOLOGY AND SOILS					
Implementation of the proposed project could result in the risk of loss, injury, or death due to strong seismic ground shaking (Threshold GEO-1b).	MM GEO-1: Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction.	Prior to issuance of grading permits	Report must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during site grading and construction on an ongoing basis during construction activities.	Applicant Review by City of Oxnard Building and Engineering Division.	
5.9 HAZARDOUS MATERIALS USE, GENERATION, TRANSPORT, OR DISPOSAL					
The proposed project could result in an increased risk of upset associated with the routine use, generation, transport, or disposal of hazardous materials (Threshold HAZ-1).	SC HAZ-1: Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments.	Prior to issuance of grading permits	Safety Plan must be submitted prior to issuance of grading permits. Recommendations in the report shall be implemented during project operation on an ongoing basis.	Applicant Review by City of Oxnard Fire and Planning Departments	
5.10 HYDROLOGY AND WATER QUALITY					
The proposed project could cause a violation	SC HYD-1: The Applicant shall design project to minimize degradation of stormwater quality by	During project design.	Stormwater quality calculations and	Applicant	

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of any adopted water quality standards or waste discharge requirements (Threshold HYD-1).	complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM).	Stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first).	associated construction plans demonstrating compliance with the MS4 permit must be submitted prior to issuance of building or grading permits (whichever comes first). Ongoing compliance with the MS4 permit is required during the life of the project.		
	SC HYD-2: The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations.	Stormwater quality calculations and infiltration plans must be determined during project design. Engineering and architectural recommendations shall be implemented throughout the life of the project.	Stormwater issues will be addressed during project design. Ongoing compliance with the 2011 Technical Guidance Manual for Stormwater Control Measures is required throughout the life of the project.	Applicant Recommendations required from a geotechnical engineer, and if applicable, a landscape architect	

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	SC HYD-3: Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City.	During project design and prior to issuance of grading and building permits (whichever comes first).	Ongoing long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations.	Applicant The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design.	
	SC HYD-4: The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM).	Installation occurs once during project construction.	Ongoing maintenance as needed to ensure the system is sufficient.	Applicant	

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5.17 POLICE PROTECTION					
The proposed project could increase the demand for police protection service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects (Threshold PP-1) .	MM PP-1: Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others: - At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road. - At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions. - If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes.	Traffic Control Plan must be developed prior to construction, and must be implemented during project construction.	Ongoing implementation during project construction. No action required during project operation.	Applicant Review by City Traffic Engineer required.	

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OXNARD UPHOLDING THE PLANNING COMMISSION DECISION APPROVING PLANNING AND ZONING PERMIT NO. 18-500-02 (SPECIAL USE PERMIT) TO ALLOW FOR THE CONSTRUCTION OF A TEMPORARY OUTDOOR VEHICLE STORAGE FACILITY WITH A MOBILE GUARDHOUSE/OFFICE, PORTABLE RESTROOM, PORTABLE LIGHT FIXTURES, DRAINAGE IMPROVEMENTS, CAPACITY FOR 4,944 VEHICLES ON A GRAVEL SURFACE, LANDSCAPING AND FENCING ON TWO LOTS (FOR A TOTAL OF APPROXIMATELY 34 ACRES), LOCATED AT THE SOUTHEAST CORNER OF HUENEME ROAD AND PERKINS ROAD, AND BOUNDED BY HUENEME ROAD TO THE NORTH, URBAN DEVELOPMENT TO THE EAST, THE UNION PACIFIC RAILROAD TO THE SOUTH, AND THE ADVANCED WATER PURIFICATION FACILITY AND PERKINS ROAD TO THE WEST (APN'S 231-0-092-105, AND 231-0-092-245). FILED BY APPLICANT CHRISTINA BIRDSEY, 333 PONOMA STREET, PORT HUENEME, CALIFORNIA 93044-0608 ON BEHALF OF PROPERTY OWNER A&J OXNARD LLC, 18980 VENTURA BOULEVARD, UNIT 200, TARZANA, CALIFORNIA 91356.

WHEREAS, on March 29, 2018, Christina Birdsey (the **“Applicant”** and/or **“Permittee”**) submitted a request to approve Planning and Zoning Permit No. 18–500-02 (Special Use Permit) to construct a temporary outdoor vehicle storage facility with a mobile guardhouse/office, portable restroom, portable light fixtures, drainage improvements, capacity for 4,944 vehicles on a gravel surface, landscaping and fencing on two lots (for a total of approximately 34 acres), located a the southeast corner of Hueneme Road and Perkins Road, and bounded by Hueneme Road to the north, urban development to the east, the Union Pacific Railroad to the south, and the Advanced Water Purification Facility and Perkins Road to the west (APNs: 231-0-092-105 and 231-0-092-245) (the **“Project”**); and

WHEREAS, the the City of Oxnard as the Lead Agency, has prepared an EIR (State Clearinghouse No. 2020069039) in accordance with the requirements of the California Environmental Quality Act (CEQA, Public resources Code § 21000, et seq.), the regulations promulgated thereunder (14 California Code of Regulations, §15000, et seq., CEQA Guidelines), and the City’s Environmental Review Guidelines; and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnard (**“Planning Commission”**) conducted a duly noticed public hearing, and received and reviewed all written and oral evidence related to the proposed Project, in accordance with Sections 16-536 and 16-651 of the Oxnard City Code (OCC) and considered the Certification of Final Environmental Impact Report (Final EIR) No. 22-01 pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, on October 20, 2022, the Planning Commission found that the Final EIR was completed in compliance with CEQA and reflects the independent judgment of the City; and

WHEREAS, on October 20, 2022, the Planning Commission of the City of Oxnardvoted voted

4-1, with two commissioners recused, to approve Planning Commission Resolutions 2022-35 and 2022-36, to certify Final EIR No. 22-01 and approve the Project, subject to certain findings and conditions in accordance with Section 16-530 through 16-553 of Oxnard City Code; and

WHEREAS, on November 7, 2022, the Appellant filed an appeal of the decision of the Planning Commission to certify the Final EIR No. 22-01 and grant Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for the Project; and

WHEREAS, on December 6, 2022, the City Council conducted a duly noticed public hearing to consider the Appellant's Appeal of the Planning Commission's decision to certify Final EIR No. 22-01 and approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit) in accordance with Oxnard City Code Sections 16-530 through 16-553 of the Oxnard City Code; and

WHEREAS, on December 6, 2022, the City Council also reviewed all of the information provided in the staff report, attachments, environmental document, and considered the testimony given at the public hearing, including all written communications to the Planning Commission and City Council, as well as other pertinent information; and

WHEREAS, the comments of the Councilmembers, agencies, interested groups, and members of the public have received adequate responses.

WHEREAS, the City Council finds, after due study, deliberation and public hearing, that the project meets the criteria set out in Sections 16-536 and 16-651 of the OCC; and

WHEREAS, the Project has been reviewed by the Development Advisory Committee (DAC) and the DAC has prepared conditions of approval that are incorporated within the recommended permits; and

WHEREAS, the City Council finds that the Project conforms to the City of Oxnard 2030 General Plan elements thereof and the Oxnard City Code for the reasons set forth in the City Council Staff Report; and

WHEREAS, on December 6, 2022, the City Council reviewed all of the information provided in the staff report and considered the testimony given at the public hearing, including all written communications to the Planning Commission and City Council, as well as other pertinent information; and

WHEREAS, on December 6, 2022, the City Council finds after due study and deliberation that the that the applicant agrees with the necessity of and accepts all elements, requirements, and conditions of this Resolution as being a reasonable manner of preserving, protecting, providing for, and fostering the health, safety, and welfare of the citizenry in general and the persons who work, visit or live in this development in particular.

WHEREAS, the proposed project is consistent with the following:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF OXNARD APPROVES PLANNING AND ZONING PERMIT NO. 18-500-02 (SPECIAL USE PERMIT), SUBJECT TO THE FOLLOWING FINDINGS AND CONDITIONS::

SECTION 1. Based on the entire record before the City Council and all written and oral evidence presented, including the Special Use Permit Staff Report and all attachments thereto, the City Council finds:

1. The proposed use is in conformance with the General Plan and other adopted policies of the City of Oxnard.

The Project site has 2030 General Plan land use designations of Industrial Limited (ILT) and Park (PRK) and a zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD). The proposed project includes the development of temporary structures for temporary vehicle storage. Given the temporary use of the site for outdoor vehicle storage for a maximum of five years and that the proposed project does not include permanent structures, the proposed project does not preclude future development for park land or other industrial land uses. As discussed in detail in the Planning Commission Staff Report (Sections 6 b, c, Attachment D, and Attachment E) the Project, as designed and conditioned, meets all applicable development standards. Therefore, the proposed project is in compliance with the 2030 General Plan and other adopted policies of the City of Oxnard and meets this Finding.

2. The nature, condition and development of adjacent uses, buildings and structures shall be considered, and no proposed Special Use Permit shall be granted if the approval body finds such use will adversely affect or be materially detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

As described in the Staff Report, pursuant to the 2030 General Plan land use designation of Industrial Limited (ILT) and Park (PRK) and the zoning designation of Light Manufacturing with Planned Development Additive Zone (M-1-PD), the proposed use of the project site as a temporary vehicle storage facility, is an allowed use, subject to a Special Use Permit (OCC §16-163). The surrounding uses are characterized by light industrial, commercial, and residential uses, which are predominantly light industrial facilities (commercial trucking facility, Advanced Water Purification Facility), commercial shopping centers, a four lane road (Hueneme Road), single-family residences, railroad tracks and open space. Construction activities, anticipated uses, and development design will be subject to standard construction requirements of the Building, Fire, and Traffic Codes. Therefore, the proposed use and improvements, as conditioned, will not adversely affect or be materially detrimental to the adjacent uses, buildings or structures or to the public health, safety or general welfare.

- 3. The site that is subject to the Special Use Permit shall be adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and items which may be required by Section 16-532 (Conditions).**

As described in the Staff Report, the project as designed and conditioned meets the development standards of the Light Manufacturing with Planned Development Additive Zone (M-1-PD) zone as described above in Finding Section 1(1). Pursuant to the Zoning Code, the Project has been designed to be consistent with the maximum building height, front, side and rear setbacks, and lot coverage. As detailed in the Staff report, the project site is approximately 34 acres which is adequate to accommodate the required 12 employee parking spaces and the required 30-foot landscape buffer along Hueneme Road. As such, the subject site is adequate in terms of size and as developed the development meets or exceeds City's design standards.

- 4. The site that is subject to the Special Use Permit shall be served by highways adequate in width and improved as necessary to carry the kind and quantity of traffic such use will generate.**

As described in the Staff Report, the project site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed driveway access would provide sufficient access to the site and would allow for adequate circulation around the site. As described in the EIR, the project will have less than significant impacts to the City roadway network and roadway improvements are not required as a result of the project. Therefore, the site has sufficient access to streets and highways that are adequate in size and existing intersections adjacent to the project site will operate at acceptable levels of service.

- 5. The site that is subject to the Special Use Permit shall be provided with adequate sewerage, water, fire protection and storm drainage facilities.**

As described in the Staff Report, the project includes a portable restroom that will be serviced as needed by a waste-services provider. The project also includes a temporary guardhouse/office building that does not require water. The site will include two driveways for vehicular access from Perkins Road and one driveway for emergency vehicle only access from Hueneme Road. The proposed Project includes drainage improvements along the southeastern side of the site. Furthermore, the Project was reviewed by the Development Advisory Committee for adequate utilities and services. In accordance with the Stormwater Quality Conditions of this Resolution, the Project's design will comply with stormwater control measures as required by the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system ("MS4") permit. The Project is consistent with the level of development identified under the General Plan and Oxnard City Code, and therefore is within the anticipated level of development. The project is not anticipated to result in any significant impacts to utilities and public services. Therefore, the site

for the proposed use will be provided with adequate sewage, water, fire protection and storm drainage facilities.

SECTION 2. The City Council, in accordance with the California Environmental Quality Act (CEQA), determines that after implementation of standard conditions and mitigation measures identified in the Final EIR, all potentially significant impacts associated with the proposed project would be reduced to less than significant levels. The Planning & Environmental Services Manager is hereby authorized to file a Notice of Determination with the Ventura County Clerk pursuant to Section 15094 of the State CEQA Guidelines within five (5) working days of passage, approval and adoption of this Resolution.

SECTION 3. Based on the findings set forth herein and the Staff Report and all attachments thereto, the City Council hereby approves Planning and Zoning Permit No. 18-500-02 (Special Use Permit), subject to the attached conditions of approval.

SECTION 4. The decision of the City Council shall be final pursuant to Section 16-551 of the Oxnard City Code.

SECTION 5. The Secretary shall certify the adoption of this Resolution.

CONDITIONS OF APPROVAL

Note: The abbreviations below identify the City department or division responsible for determining compliance with these standard conditions. The first department or division listed has responsibility for compliance at plan check, the second during inspection and the third at final inspection, prior to issuance of a certificate of occupancy, or at a later date, as specified in the condition. If more than one department or division is listed, the first will check the plans or inspect the project before the second confirms compliance with the condition. The italicized code at the end of each condition provides internal information on the source of each condition: Some are standard permit conditions (e.g. *G-1*) while some are taken from environmental documents (e.g. *MND-S2*).

DEPARTMENTS AND DIVISIONS			
CA	City Attorney	PL	Planning
DS	Dev Services/Eng Dev/Inspectors	TR	Traffic
PD	Police	B	Building Plan Checker
SC	Source Control	FD	Fire
PK	Landscape Design	CE	Code Enforcement

GENERAL PROJECT CONDITIONS

1. This permit is granted for the property described in the application on file with the Planning Division, and may not be transferred from one property to another. (PL, G-1).
2. This permit is granted for the plans dated October 20, 2022, (“the plans”) on file with the Planning Division. The project shall conform to the plans, except as otherwise specified in these conditions, or unless a minor modification to the plans is approved by the Planning and Environmental Services Manager (“Planning Manager”) or a major modification to the plans is approved by the Planning Commission. A minor modification may be granted for minimal changes or increases in the extent of use or size of structures or of the design, materials or colors of structures or masonry walls. A major modification shall be required for substantial changes or increases in such items. (PL, G-2)
3. This permit shall automatically become null and void 36 months from the date of its issuance, unless Developer has diligently developed the proposed project, as shown by the issuance of a grading, foundation, or building permit and the construction of substantial improvements. (PL, G-3)
4. All required off-site and on-site improvements for the project, including structures, paving, and landscaping, shall be completed prior to occupancy unless the Development Services Manager allows the Developer to provide security or an executed agreement approved by the City Attorney to ensure completion of such improvements. (DS, G-4)
5. By commencing any activity related to the project or using any structure authorized by this permit, Developer accepts all of the conditions and obligations imposed by this permit and waives any challenge to the validity of the conditions and obligations stated therein. (CA, G-5)
6. Developer agrees, as a condition of adoption of this resolution, at Developer’s own expense, to indemnify, defend and hold harmless the City and its agents, officers and employees from and against any claim, action or proceeding to attack, review, set aside, void or annul the approval of the resolution or any condition attached thereto or any proceedings, acts or determinations taken, done or made prior to the approval of such resolution that were part of the approval process. (CA, G-6)
7. Any covenants, conditions, and restrictions (CC&Rs) applicable to the project property shall be consistent with the terms of this permit and the City Code. If there is a conflict between the CC&Rs and the City Code or this permit, the City Code or this permit shall prevail. (CA, G-7)
8. Developer shall complete the “Notice of Land Use Restrictions and Conditions” form, using the form provided by the City, for recording with the Ventura County Recorder. Before the City issues building permits, Developer shall submit the original completed, signed and notarized document, together with the required fees to the Planning Manager. (PL, G-8)

9. Developer shall provide off-street parking for the project, including the number of spaces, stall size, paving, striping, location, and access, as required by the City Code. (PL/B, G-9)
10. Before placing or constructing any signs on the project property, Developer shall obtain a sign permit from the City. Except as provided in the sign permit, Developer may not change any signs on the project property. (PL/B, G-10)
11. Developer shall obtain a building permit for any new construction or modifications to structures, including interior modifications, authorized by this permit. (B, G-11)
12. Developer shall not permit any combustible refuse or other flammable materials to be burned on the project property. (FD, G-12)
13. Developer shall not permit any materials classified as flammable, combustible, radioactive, carcinogenic or otherwise potentially hazardous to human health to be handled, stored or used on the project property, except as provided in a permit issued by the Fire Chief. (FD, G-13)
14. If Developer, owner or tenant fails to comply with any of the conditions of this permit, the Developer, owner or tenant shall be subject to a civil fine pursuant to the City Code. (CA, G-14)
15. Prior to issuance of building permits, Developer shall correct all violations of the City Code existing on the project property for which the Code Compliance Division has open cases. (PL, G-15).

LANDSCAPE CONDITIONS

16. Prior to submittal of landscape and irrigation plans, Developer shall obtain approval of the Planning Manager or designee of a plan showing on the project property all existing trees and identifying the trees to be saved, transplanted or removed. (PK, PK-1)
17. Prior to issuance of building permits or the proposed use is initiated, whichever comes first, Developer shall submit two copies of landscape and irrigation plans, along with the appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (PK/DS, PK-2)
18. Prior to issuance of a certificate of occupancy, Developer shall install landscape and automatic irrigation systems that have been approved by the Parks and Facilities Superintendent. (PK, PK-3)
19. Developer shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by this permit. Failure of Developer to do so may result in the revocation of this permit and initiation of legal proceedings against Developer to ensue compliance (PK, PK-4)

20. Prior to the issuance of City issues a certificate of occupancy, Developer shall provide a watering schedule to the building owner or manager and to Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. (PK, PK-5)
21. All trees planted or placed on the property by Developer shall be at least 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by this permit. (PK, PK-6)
22. At the time of landscape plan check submittal, the landscape planting and irrigation plans shall comply with the current title 23 Model Water Efficient Landscape Ordinance (MWELO). (PK, PK-7.1)
23. Developer shall install an irrigation system that includes a water sensor shut off device as a water conservation measure. (PK, PK-22)
24. At time of submittal to the Building and Engineering Division for plan check, Developer's Landscape Architect or Architect shall provide the City with written confirmation that they have reviewed the civil engineering construction drawings and that the NPDES requirements are not in conflict with meeting the City's landscape requirements. (PK, PK-23)
25. Developer shall include a note on the Landscape Plans submitted to the Building and Engineering Division for a building permit that "all landscaping and irrigation comply with Ordinance No. 2822, which adopted the City of Oxnard Landscape Water Conservation Standards, and applicable water conservation requirements of the State of California". (PK, PK-24)
26. At the time of Plan Check submittal, the landscape plans shall contain an exhibit titled "Tree Tabulation Chart". The Tree Tabulation Chart shall contain a listing of all existing trees on site and shall refer to them by number as identified in the Arborist's Tree Report. The Tree Tabulation Chart shall clearly list all trees to remain, be removed or transplanted. The Chart shall contain the Arborist's economic appraisal value of each tree(s) removed as well as computations and calculations showing how the value of the removed tree(s) was put back into new tree sizes for the project that are in addition to meeting the City's minimum tree size of 24" box. (PK)
27. Consistent with the City Council Resolution 15,569 which declared a continuance of the Stage 2 water shortage condition within the City of Oxnard, the project is required to implement and maintain the mandatory water conservation requirements for as long as City Council Resolution 15,569 is in effect or is amended/replaced by the City of Oxnard.

PLANNING DIVISION CONDITIONS

28. Plans submitted by Developer with building permit applications shall show on the building elevation sheets all exterior building materials and colors, including product and finish

manufacturer name, color name and number, and surface finish type (such as: stucco with sand finish, plaster with smooth finish) to be used in construction. (PL/B, PL-1)

29. Any application for a minor modification to the project shall be accompanied by four copies of plans reflecting the requested modification, together with applicable processing fees. (PL, PL-2)
30. Before the City issues building permits, Developer shall include a reproduction of all conditions of this permit as adopted by resolution of the Planning Commission and/or the City Council in all sets of construction documents and specifications for the project. (PL, PL-3)
31. Before the City issues building permits, Developer shall provide to the Planning Division Manager color photographic reductions (8 1/2" by 11") of full-size colored elevations and any other colored exhibit approved by the Planning Commission. Developer may retain the full-size colored elevations after the reductions are so provided. (PL, PL-4)
32. Developer may not modify any use approved by this permit unless the Planning Division Manager determines that Developer has provided the parking required by the City Code for the modified use. (PL, PL-7)
33. During the plan check review process, the Developer shall provide a lighting plan that provides design details (light standards, bollards, wall mounted packs, etc.) and illumination site information within alleyways, pathways, streetscapes, and open spaces proposed throughout the development. An electrical engineer shall prepare the site lighting plan demonstrating that adequate lighting ranges will be provided throughout the development without creating light spillover, light pollution, or conflicts with surrounding factors such as tree locations, off-site or adjacent lighting. (PL)
34. Prior to issuance of building permits, Developer shall demonstrate that light standards illustrated on conceptual lighting plan do not conflict with tree locations. Developer shall submit a plan showing both the lighting and landscape on the same sheet.
35. Project on-site lighting shall be of a type and in a location that does not constitute a hazard to vehicular traffic, either on private property or on adjoining streets. To prevent damage from vehicles, standards in parking areas shall be mounted on reinforced concrete pedestals or otherwise protected. Developer shall recess or conceal under-canopy lighting elements so as not to be directly visible from a public street. Developer shall submit a lighting plan showing standard heights and light materials for design review and approval of the Planning Division Manager. (PL/B, PL-8)
36. In order to minimize light and glare on the project property, all parking lot and exterior structure light fixtures shall be high cut-off type that divert lighting downward onto the property and shall not cast light on any adjacent property or roadway. (PL, PL-9)

37. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (B/DS, *PL-11*)
38. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code section 23114, with special attention to sub sections 23114(b)(2)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
 - b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (B/DS, *PL-12*)
39. Developer shall provide for dust control at all times during project property preparation and construction activities. (B/DS, *PL-13*)
40. Developer agrees to participate in a water conservation program that includes refitting water fixtures existing on the project property with water conserving devices within residences or businesses in the City's water service area, if such a program is in effect when building permits are issued for this project. Among the requirements of such a program might be refitting existing toilets, faucets, shower heads, landscaping irrigation or other fixtures and items that consume water within the structure. (PL, *PL-14*)
41. Because of water limitations placed upon the City by its water providers, approval of this permit does not guarantee that the City will issue building permits. Issuance of building permits may be delayed as a result of implementation of a water conservation or allocation plan. (PL, *PL-15*)
42. Prior to issuance of building permits, Developer shall pay a document imaging fee for the planning files in an amount calculated by planning staff at the time of building permit review based on fees then in effect. (PL/B, *PL-16*)
43. Developer shall participate in the City's Public Art Program by paying the Public Art fee prior to issuance of building permits, in accordance with City Council Resolution No. 14,124. (PL, *PL-50*)
44. For any exterior utility meter panels, Developer shall paint such panels to match the structure upon which it is located. Such panels shall be located to take advantage of screening (e.g. landscaping or other building elements) from public right-of-ways, to the maximum extent feasible. (PL, *PL-43*)

45. Prior to issuance of a certificate of occupancy, Developer shall remove all construction materials and vehicles from the subject property. (PL/B, PL-47)
46. Developer shall remove any and all graffiti from the project premises, within 24 hours of its appearance. The surface of such affected areas shall be matched to blend in with the underlying colors and/or design, and shall not look like a paint patch. (PL)
47. Before the City issues building permits, Developer shall provide a Graffiti Deterrent Plan, subject to approval of the Planning Division Manager. The plan shall include such elements as clear film on windows and/or mirrors, as well as washable paint and sealers on the building and perimeter walls. (PL)
48. Developer shall ensure that all construction equipment is maintained and tuned to recommended manufacturer's specifications. (MND, C-1)
49. At all times during construction activities, Developer shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust. (MND, C-2)
50. During construction, Developer shall water the area to be graded or excavated prior to commencement of grading or excavation operations. Such application of water shall be at least twice per day and shall penetrate sufficiently to minimize fugitive dust during grading activities. (MND, C-3)
51. During construction, Developer shall control dust by the following activities:
 - a. All trucks hauling graded or excavated material offsite shall be required to cover their loads as required by California Vehicle Code §23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
 - b. All graded and excavated material, exposed soils areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. (MND, C-4)
52. During construction, Developer shall post and maintain onsite signs, in highly visible areas, restricting all vehicular traffic to 15 miles per hour or less. (MND, C-5)
53. During periods of high winds (i.e. wind speed sufficient to cause fugitive dust to impact adjacent properties), Developer shall cease all clearing, grading, earth moving, and excavation operations to prevent fugitive dust from being a nuisance or creating a hazard, either onsite or offsite. (MND, C-6)
54. The Permittee shall comply with the provisions of applicable VCAPCD Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance),

Rule 55 (Fugitive Dust), and Rule 55.1 (Removal of Visible Roadway Accumulations). (MND, C-7)

55. Developer shall mitigate air quality emissions associated with development of the subject site through a contribution to the City's Transportation Demand Management (TDM) program. Such fee shall be calculated at the time of building permit issuance in accordance with the Ventura County Air Quality Assessment Guidelines, as amended. Such fee shall be collected in full prior to building permit issuance. (MND, C-9)
56. Prior to grading permit approval, Developer shall include on the grading plans a reproduction of all conditions of this permit pertaining to dust control requirements. (PL)
57. The proposed vehicle storage use shall be granted for a time period not to exceed five years from the date of Final Inspection and commencement of the approved use. Upon the expiration of the five (5) year period the site shall be returned to its existing condition within ninety (90) days as follows:
 - a. The facility may be used to store vehicles only after final Building Permit approval. All vehicles shall be removed from the site no later than five years from the Final Building Permit Inspection.
 - b. The site shall be returned to its existing condition (the condition prior to development) subject to the required City permits and a plan to be reviewed and approved by the Community Development Director with the following conditions: the drainage improvements, landscaping, and fencing shall remain on the site and be maintained by the property owner.
 - c. Prior to the issuance of any Building or Grading Permits for the Project, the Developer (Oxnard Harbor District) or Property Owner shall submit to the City of Oxnard a performance bond of at least \$1,500,000.00 for the restoration of the Project site in accordance with Condition of Approval 57(b). The performance bond shall be in a form approved by the City Attorney. The performance bond shall be released upon the completion of all onsite work, to the satisfaction of the Community Development Director.
58. Applicant shall submit payment for all outstanding discretionary permit and environmental processing fees associated with the development project. Funds shall be deposited prior to issuance of a grading permit. (PL).
59. Applicant shall deposit \$5,000.00 for mitigation monitoring and reporting associated with the development project, PZ 18-500-02. Such funds shall be deposited prior to issuance of a grading permit. Additional funds may be required throughout the life of the permit as needed for cost recovery related to environmental monitoring. Any additional required funds shall be requested in writing by the Community Development Director and shall be deposited within 10 days of written notification. (PL)

PLANNING ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURES AND CONDITIONS

60. Prior to the issuance of building permits, the Applicant shall submit two copies of landscape and irrigation plans, along with appropriate permit application and fees, to the Development Services Division and obtain approval of such plans. (SC AES-1)
61. Prior to the issuance of a certificate of occupancy, the Applicant shall install landscape and automatic irrigation systems. (SC AES-2)
62. Prior to the issuance of a certificate of occupancy, the Applicant shall provide a watering schedule to the site manager and to the Planning Division or designee. The irrigation system shall include automatic rain shut-off devices, or instructions on how to override the irrigation system during rainy periods. (SC AES-3)
63. The Applicant shall install an irrigation system that includes a water sensor shut-off device as a water conservation measure. (SC AES-4)
64. All trees planted or placed on the property by the Applicant shall be a minimum of 24-inch-box size. All shrubs and vines shall be at least five-gallon size, except as otherwise specified by the Special Use Permit. (SC AES-5)
65. The Applicant shall properly maintain landscape planting and all irrigation systems as required by the City Code and as specified by Special Use Permit for the life of the project. Failure of the Applicant to do so may result in the revocation of this permit and initiation of legal proceedings against Applicant to ensure compliance. (SC AES-6)
66. The Applicant agrees that the project has aesthetic impacts arising from conversion of undeveloped land to developed land, which the landscaping improvements for the project are intended to mitigate. The Applicant further agrees that the landscaping improvements must be maintained for the life of the permit in order to continue to mitigate such impacts. (SC AES-7)
67. The Applicant shall install chain-link fencing with top and bottom rails to provide support for plants. (MM AES-1)
68. In locations where chain-link gates are proposed and plants cannot grow, the Applicant shall install either privacy slats on the chain-link gates or solid gates to block views onto the site. (MM AES-2)
69. Prior to vegetation maturation that effectively buffers views onto the project site, the Applicant shall install screening fabric on the chainlink fencing or other alternative temporary measures approved by the City to fill gaps in the vegetation. (MM AES-3)
70. The Applicant shall provide visual screening of the existing water utility structure/chain-link fence enclosure on the southeast corner of Hueneme Road and Perkins Road complementary to the screening established with the project. (MM AES-4)
71. The project must comply with the Outdoor Lighting Code & Guideline:

- a. a. Outdoor lighting shall comply with Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings.
 - b. b. All outdoor lighting shall be flat lens, full cut-off fixtures with the light source fully shielded with the exception of:
 - i. Luminaires with a maximum output of 260 lumens per fixture, regardless of number of bulbs (equal to one 20-watt incandescent light), may be left unshielded provided the fixture has an opaque top to keep light from shining directly up.
 - ii. Luminaires that have a maximum output of 1,000 lumens per fixture, regardless of number of bulbs (equal to one 60-watt incandescent light) may be partially shielded provided the bulb is not visible, and the fixture has an opaque top keep light from shining directly up.
 - c. Oxnard City Code 16-320: Lighting within physical limits of the area required to be lighted shall not exceed seven foot-candles, nor be less than one foot-candle at any point. A light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. No lighting shall be of a type or in a location that constitutes a hazard to vehicular traffic, either on private property or on the abutting streets. The height of light standards shall not exceed 26 feet. To prevent damage from automobiles, standards shall be mounted on reinforced concrete pedestals or otherwise protected. (SC AES-8)
72. Lighting instruments shall be metal halide, LED, or similar in nature and spectrum (3,000K to 20,000K Correlated Color Temperature). (SC AES-9)
73. Lighting instruments shall be installed so that light does not directly illuminate property outside the project site. Instruments shall not create glare for motorists or pedestrians. (SC AES-10)
74. To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if practicable.

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven (7) days prior to initiation of ground disturbance and vegetation removal activities.

The pre-construction nesting bird survey shall be conducted on foot inside the project site, including a 50-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be

determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is complete and the young have fledged the nest. Encroachment into the buffer shall occur only if authorized by the qualified biologist, who shall monitor activities to ensure that nesting birds are not adversely affected.

In addition, for any construction activities, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys (including birds and other terrestrial species) of the project site. The environmental resources specialist shall conduct surveys no more than two weeks prior to the approved construction activities to detect any active sensitive species. In the event that any sensitive species are present in or adjacent to the construction area but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resources specialist shall implement a resource avoidance program with sufficient buffer areas to ensure adverse impacts to such resources are avoided. (MM BIO-1)

75. Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Ventura County preferred), to complete the following: compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan), manage archaeological monitoring and address any inadvertent discoveries identified during project implementation. The purpose of the Plan is to outline cultural monitoring (archaeological and Native American/Tribal) protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural (archaeological or Native American/Tribal) resources during ground-disturbing phases and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources in accordance with CEQA throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities.

The Principal Investigator/Archaeologist shall manage archaeological monitoring conducted by archaeological technicians during initial ground disturbances. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring (archaeological or Native American/Tribal), this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 30

business days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the City and the South Central Coastal Information Center. (MM CUL-1)

76. Native American/Tribal Monitoring - Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the Project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. The Plan created in compliance with MM-CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities. (MM CUL-2)
77. Prior to issuance of grading permits, the Applicant or designee shall prepare and submit a soils, geologic, and structural evaluation report prepared by a registered soils engineer and/or structural engineer for review and approval by the City of Oxnard Building and Engineering Division. The recommendations in the report shall be implemented during site grading and construction. (MM GEO-1)
78. Prior to issuance of the grading permit, the Applicant shall submit a Safety Plan to the City of Oxnard Fire and Planning Departments. The Safety Plan shall address best management practices to address how vehicles are inspected for leakage and how liquids and vehicle fluids are inspected to ensure release does not occur. The Safety Plan is subject to review and approval by the City of Oxnard Fire and Planning Departments. (SC HAZ-1)
79. The Applicant shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit (Order R4-2010-0108 including all revisions) for new development and redevelopment projects. The Applicant shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (2011 TGM). (SC HYD-1)
80. The Applicant's stormwater quality calculations shall include site specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for

design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of sitespecific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (SC HYD-2)

81. Using forms provided by the Development Services Division, the Applicant shall submit a stormwater quality control measures maintenance and operations plan (the Plan) for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, the Applicant shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by the City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the Development Services Manager approves the Plan and the Applicant provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (SC HYD-3)
82. The Applicant shall install 'Full Capture System Devices' (Devices) certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments (Amendments) in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures (TGM). (SC HYD-4)
83. Prior to construction, the Applicant shall prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer. The Plan may include the following provisions, among others:
 - a. At least one unobstructed lane shall be maintained in both directions on the following surrounding roadways: Hueneme Road and Perkins Road.
 - b. At any time only a single lane is available, the Applicant shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions.
 - c. If construction activities require the complete closure of a roadway segment, the Applicant shall provide appropriate signage indicating detours/alternative routes. (MM PP-1)

POLICE DEPARTMENT CONDITIONS

84. Light poles shall be no taller than 26-feet tall. Gas, propane or other hydrocarbon powered generators are not allowed to power the lighting instruments.

85. Lighting on the site shall follow the perimeter fencing but shall not create “light trespass” off the project area or glare to traffic on adjacent streets. The lighting instruments shall illuminate a corridor that follows the fence-line on the interior perimeter between 1 and 7-foot candles and shall be in operation from dusk to dawn. It is not the intent of this condition to illuminate the whole parking field, but merely that area adjacent to and including the fence line.
86. Lighting instruments shall be LED flat lens with cut-off shields where “light trespass” may be an issue. The flat lens shall be directed toward the ground and shall not be canted to expand the lighting area of coverage.
87. Wall packs are not permitted.
88. A berm, 24-inches above grade, shall run parallel between the fence and the Public-Right-of-Way along Hueneme Road and Perkins Road sides of the project as well as the eastern fence which runs south from Hueneme Road. This berm is intended to supplement the fencing as a security measure. A break in the berm shall exist for gated exit driveways. The berm shall be sufficiently landscaped to deter erosion. Landscape shall be sufficiently irrigated to maintain plantings through the life of the project.
89. Landscape plans shall be submitted to, and approved by, the Planning and Police Departments prior to the issuance of building permits. Landscape plans shall include a table of species to be planted, and include a map of where various species will be located on the site, and call-outs identifying locations of berms, gates and fences.
90. Keys shall not be left in any vehicle on the premises without a responsible party in the vehicle. If the keys to vehicles stored at the site are maintained in the security facility, then the keys must be secured in a locked cabinet securely affixed to the interior wall of the facility or other means to ensure the keys are not easily removed from the premises.
91. A “Knox Box” shall be installed at each gate of the facility to facilitate Fire Department access.
92. No trespass, and no loitering signs shall be placed on each gate to the site. Signs shall be worded: No Trespassing – No Loitering, Forbidden by Law, No Drinking of Alcoholic Beverages, Violators will be subject to arrest or citation pursuant to 602 PC & 7-125 OXO.
93. Prior to the issuance of building permits, the design of all gates shall be approved by Planning and Police Departments. Gate design shall be developed so that vehicle ramming will not collapse the gate.
94. Security cameras shall be installed to monitor the facility. The camera system shall comply with these minimum standards:
 - a) Cameras and supporting equipment shall supply digital color images under normal lighting conditions. Greyscale images are required for infra-red lighting.
 - b) Cameras shall be made by a reputable manufacturer and maintained to current industry standards.
 - c) Cameras shall have low light capability to capture identifiable images.

- d) The video system shall utilize a Digital Video Recorder (DVR). VHS and other formats are prohibited.
 - e) The video system shall allow recording, live viewing and playback of recorded video for a period of at least 30 days.
 - f) Recorded images shall bear a date and time stamp that cannot be altered.
 - g) Prior to the installation of a security camera system, applicant shall submit a plan showing location of cameras and the scope of their capture area. The plan shall include a list of components.
 - h) Signage shall be posted at each entrance which states in 2 inch letters: "These premises are monitored by a security camera system".
 - i) Cameras in domed casings are required as their area of focus is not easily determined by a casual observer.
 - j) All exterior cameras shall have the capability of capturing identifiable images in minimum lighting or during hours of darkness.
 - k) The DVR shall be stored in a locked secure cabinet at the site.
 - l) Security personnel shall be authorized to transfer images from the security camera system to any member of the Oxnard Police Department conducting a criminal investigation at or near the premises.
95. Security cameras shall be placed at these locations at a minimum:
- a) At each gate a pole mounted camera shall be placed on the inside of the security fence capturing the entire opening of the gate threshold.
 - b) Camera(s) shall be mounted near the security shack to capture images of all persons entering and exiting the shack.
96. The address for the facility shall be 5600 Perkins Road. A sign shall be posted on the fence on the Perkins Road side of the facility stating in 4-inch tall letters: "5600 Perkins Road".
97. An authorized member of the Oxnard Police Department or Code Compliance Division may inspect the site for compliance with these conditions anytime vehicles are stored at the site pursuant to this permit.

FIRE DEPARTMENT CONDITIONS

98. Developer shall construct all vehicle access driveways on the project property to be at least 26 feet wide, exclusive of shoulders. Developer shall mark curbs adjacent to designated fire lanes in parking lots to prohibit stopping and parking in the fire lanes. Developer shall mark all designated fire lanes in accordance with the California Vehicle Code. (FD/B, F-1)
99. The project shall meet the minimum requirements of the "Fire Protection Planning Guide" published by the Fire Department. (FD, F-6)
100. At all times during construction, Developer shall maintain surfaces capable of handling loads of 76,000 pounds which will provide access for firefighting apparatus to all parts of the project property. (FD/DS, F-7)

101. Developer shall identify all hydrants and fire protection equipment on the project property as required by the Fire Chief. (FD, F-8)
102. Developer shall install security devices and measures, including walkway and vehicle control gates, entrance telephones, intercoms and similar features, subject to approval of the Police Chief and the Fire Chief. Vehicle control gates shall be operable by City approved radio equipment. (FD/PD, F-9)
103. The turning radius of all project property driveways and turnaround areas used for emergency access shall be approved by the City Traffic Engineering Department. (FD, F-11)
104. Areas designated by the Fire Marshal as Fire Lanes shall be identified by a red curb and signage per the California Department of Motor Vehicles.
105. Fire hydrants shall be operational and accessible at all times. No parking, storage or staging of equipment/supplies shall be located within 15 feet on either side of fire hydrants. Prior to final inspection, blue reflective hydrant location markers shall be placed on the access roads in accordance with Fire Department standards.
106. Before the city issues a certificate of occupancy, the developer shall install a Knox key vault at a location to be determined by the Fire Department.
107. Vegetation clearance shall be maintained at all times.
108. A minimum 20-foot clear width and 13-foot, 6-inch (13' 6") clear height emergency access lane shall be maintained free of obstructions at all times within the project site once construction starts.
109. An on-site Life safety Inspection shall be conducted by Fire Department staff to approve final configuration of the site.

DEVELOPMENT SERVICES DIVISION CONDITIONS

110. Developer shall pay plan check and processing fees in effect at the time of construction plan submittal and shall pay development fees, encroachment permit fees, and other applicable fees in effect at permit issuance. (DS-1)
111. Developer shall have the site improvement plans prepared using standard Building and Engineering Division format(s) by a civil engineer licensed in the State of California. The plans shall incorporate recommendations from soil engineering and geology reports. Prior to issuance of a grading permit, improvement plans must be approved by the City Engineer and ink-on-mylar plans filed with the Building and Engineering Division. (DS-3)
112. Developer shall submit improvement plans and drainage calculations demonstrating that storm drain runoff from the project property and all upstream areas will be safely conveyed

to an approved drainage facility. The design and conveyance route shall be compatible with the City's Master Plan of Drainage and shall be approved by the City Engineer prior to approval of improvement plans. (DS-4)

113. Curb cut widths and design shall conform to City ordinances, standards, and policies in effect at the time City issues an encroachment permit. (DS-9)
114. A California licensed civil engineer shall prepare the public improvement plans and documents for this project in accordance with City standards and shall submit all such plans to the City Engineer. Submittal shall include, but not necessarily be limited to, grading, street, drainage, sewer, water and other appurtenant improvement plans, construction cost estimates, soils reports, and all pertinent engineering design calculations. City will not approve a parcel map or final map nor issue a grading, site improvement or building permit until the City Engineer has approved all improvement plans. (DS-15)
115. Prior to issuance of a site improvement permit, Developer shall provide to the Building and Engineering Division a compact Disc (CD) containing digital copies of all project maps, address map, and/or civil improvements drawings in DWG format. Prior to improvement bond release, Developer shall provide an updated CD containing all changes that occur during construction. (DS-16)
116. The conditions of this resolution shall prevail over all omissions, conflicting notations, specifications, dimensions, typical sections, and the like, that may or may not be shown on the improvement plans. (DS-21)
117. Developer shall pay the cost of all inspections of on site and off site improvements. (DS-22)
118. Developer shall be responsible for all project related actions of Developer's employees, contractors, subcontractors, and agents until City accepts the improvements. (DS-23)
119. Prior to beginning construction, Developer shall designate in writing an authorized agent who shall have complete authority to represent and to act for Developer. The authorized agent shall be present at the work site whenever work is in progress. Developer or the authorized agent shall make arrangements acceptable to City for any emergency work. When City gives orders to the authorized agent to do work required for the convenience and safety of the general public because of inclement weather or any other cause, and the orders are not immediately acted upon by the authorized agent, City may do or have such work done by others at Developer's expense. (DS-24)
120. "Standard Specifications for Public Works Construction" latest edition (including modifications thereto by City) and applicable City Standard Plates and Design Criteria shall be the project specifications, except as noted otherwise on the approved improvement plans. City reserves the right to upgrade, add to, or revise these specifications and plans and all other City ordinances, policies, and standards. If the improvements required of this project are not completed within 12 months from the date of City's approval of the improvement

- plans, Developer shall comply with and conform to any and all upgraded, additional or revised specifications, plans, ordinances, policies and standards. (DS-27)
121. Prior to issuance of a grading/site improvement permit, developer shall obtain Development Services Director approval for any proposed construction phasing. The improvement plans (and associated phasing plans) shall clearly indicate any interim or off site improvements required by City. (DS-28)
122. Developer shall retain a California licensed Civil Engineer to ensure that the construction work conforms to the approved improvement plans and specifications and to provide certified "as built" plans after project completion. Developer's submittal of certified "as built" plans is a condition of City's final acceptance of the project and release of any associated security. (DS-29)
123. All grading shall conform to City's standard grading notes, City Code, and recommendations of Developer's soils engineer as approved by the City Engineer. (DS-30)
124. Developer shall construct sufficient drainage facilities concurrent with rough grading operations to mitigate any potential flooding or erosion affecting adjacent properties and public rights-of-way. (DS-31)
125. Developer shall design all slopes steeper than 5 (horizontal) to 1 (vertical) with a minimum 18 inch wide level area (at both top and bottom of slope) where it adjoins a wall, fence, sidewalk, trail, curb or similar improvement. (DS-32)
126. Prior to issuance of a site improvement permit, Developer shall provide to the City Engineer easements or written consent (as determined appropriate by the Development Services Director) from all affected landowners for any diversion of historical flows or change in drainage conditions caused by the project. (DS-36)
127. Developer shall submit a landscape irrigation plan prepared by a licensed professional, showing proper water meter size, backflow prevention devices, and cross connection control. (DS-59)
128. Developer shall provide adequate vehicle sight distance as specified by CalTrans specifications at all driveways and intersections. (TR-71)
129. Using forms provided by the Building and Engineering Division, Developer shall submit a stormwater quality control measures maintenance and operations plan ("the Plan") for this project. If the BMPs implemented with this project include proprietary products that require regular replacement and/or cleaning, Developer shall provide proof of a contract with an entity qualified to provide such periodic maintenance. The property owner is responsible for the long-term maintenance and operation of all BMPs included in the project design. Upon request by City, property owner shall provide written proof of ongoing BMP maintenance operations. No grading or building permit shall be issued until the City Engineer approves

the Plan and Developer provides an executed copy of the City's stormwater covenant with the Plan included as an exhibit for recordation by the City. (DS-82)

130. Developer's stormwater quality control measures maintenance and operations plan shall include: 1) Requirement to clean on-site storm drains at least twice a year; once immediately before the first of October (the beginning of the rainy season) and once in January. The City Engineer may require additional cleaning; 2) Requirement to maintain parking lots free of litter and debris. Developer shall sweep sidewalks, drive aisles, and parking lots regularly to prevent the accumulation of litter and debris. When swept or cleaned, debris must be trapped and collected to prevent entry into the storm drain system. Developer may not discharge any cleaning agent into the storm drain system; 3) Requirement to label all on-site storm drain inlets with the message "Don't Dump - Drains to Ocean" in accordance with City standards. (DS-83)
131. Developer's engineer shall submit written confirmation that the project landscape drawings comply with the landscape requirements of the Technical Guidance Manual for Stormwater Quality Control Measures for all landscape based stormwater quality best management practices. (DS-84)
132. Developer shall provide pre-treatment for all infiltration based stormwater quality Best Management Practices ("BMPs"). Pre-treatment devices must effectively reduce sediment load entering infiltration BMPs to minimize occlusion of underlying soils and reduce long term maintenance requirements and thereby maintain the infiltration capacity of the BMP. 2011 TGM compliant pre-treatment such as vegetated swales are an approved form of pre-treatment. Proprietary pre-treatment devices must be capable of removing 80% of 50 micron particles to be considered adequate pre-treatment. Typical catch basin inserts do not provide the sufficient sediment storage to provide pre-treatment. (DS-85)
133. Prior to issuance of a grading, building or demolition permit and prior to commencement of any clearing, grading or excavation, Developer shall provide evidence of assignment of a permit identification number by the California State Water Resources Control Board indicating submittal of a Notice of Intent (NOI) by the Developer in accordance with the NPDES Construction General Permit. Developer shall comply with all requirements of the General Permit and the Ventura Countywide MS4 Permit, including preparation of a Stormwater Pollution Prevention Plan (SWPPP). Developer shall keep the SWPPP updated to reflect current site conditions and a copy of the SWPPP shall be kept onsite and available for City or designated representative to review upon request. (DS-86)
134. Developer shall install 'Full Capture System Devices' ("Devices") certified by the State Water Resources Control Board Executive Director in compliance with the Statewide Trash Amendments ("Amendments") in all catch basins accepting stormwater runoff from any portion of this project that meets the definition of 'Priority Land Use' as defined by the Amendments at the time of issuance of a grading/site improvement permit. The Devices shall be sized and designed in accordance with requirements of the Amendments and the Technical Guidance Manual for Stormwater Quality Control Measures ("TGM"). (DS-88)

135. Developer shall design all points of vehicular access (driveways) such that all vehicles exiting the site traverse a minimum of 25-feet of solid pavement (e.g., asphalt or concrete) on the private side of the property line. The solid pavement shall extend into the public right-of-way until it joins the existing road paving and includes appropriate turning transitions. This pavement requirement is intended to minimize the conveyance of soil or gravel into the public right-of-way by vehicles exiting the site. (DS)
136. The project meets the definition of “Parking Lot” as defined by the Ventura Countywide MS4 Permit Order No. R4-2010-0108 and the 2011 Technical Guidance Manual for Stormwater Quality Control Measures (“TGM”) as a land area or facility for parking or storage of vehicles used for businesses, commerce, commercial, and industry use. The MS4 Permit and the TGM require projects that meet the definition of a Parking Lot with 25 or more spaces, regardless of the amount of impervious area proposed, shall design and implement post-construction stormwater management control measures. Developer shall update the drainage report and design the post-construction stormwater management control measures in accordance with the MS4 Permit to the satisfaction of the City Engineer. (DS)
137. Developer shall design the project to minimize degradation of stormwater quality by complying with the applicable sections of the Los Angeles Regional Water Quality Control Board’s municipal separate storm sewer system (“MS4”) permit (Order R4-2010-0108 including all revisions) as a new development project. Developer shall submit stormwater quality calculations and associated construction plans demonstrating compliance with the MS4 permit. Calculations shall generally be organized to follow the steps outlined in Chapter 2 of the 2011 Technical Guidance Manual for Stormwater Control Measures (“2011 TGM”). (DS)
138. Developer shall submit stormwater quality calculations to include site-specific analysis and recommendations from a geotechnical engineer, and if applicable, a landscape architect for the design and implementation of stormwater treatment and infiltration devices. Geotechnical Engineering analysis and recommendations shall include, but not necessarily be limited to, determination of site-specific soil infiltration rates, depth to permeable soil layers, methods to reach permeable soil layers, appropriate compaction rates, recommendations to enhance infiltration, and other requirements of the 2011 TGM. Landscape architectural recommendations shall include, but not necessarily be limited to, suggestions regarding appropriate vegetation and soil amendments for vegetated infiltration devices. Project plans shall implement approved design recommendations. (DS)
139. Gravel and packed earthen surfaces used for parking lots and storage areas that are anticipated to receive vehicular loading shall be treated as impervious in the stormwater quality calculations. (DS)
140. If permeable pavement design is proposed, Developer shall demonstrate to the satisfaction of the City Engineer that the soil surface will not be compacted during the construction of the project and regular use during the temporary use permit. The City Engineer shall consider all soil surfaces receiving compaction, regardless of the compaction level, to be impervious. Developer may submit to the City Engineer the project-specific soil compaction

and infiltration testing data for review and consideration for any compaction proposed. The testing data shall demonstrate how the soils will maintain permeability with the compaction level proposed, similar to the pre-development undisturbed soil conditions. The data is subject to review and approval by the City Engineer. (DS)

141. Developer shall provide evidence that the pipes conveying stormwater from this site under the adjacent railroad tracks are free of obstruction to provide the required discharge capacity. In addition, Developer shall provide evidence that the pipes currently have the sufficient structural integrity to perform their intended purpose for the life of the project. (DS)
142. Developer shall provide a drainage report demonstrating that the site drainage facilities are capable of safely conveying project stormwater (up to and including a 1% chance storm) to a safe point of discharge without negatively affecting the neighboring properties. (DS)
143. Developer shall comply with the drainage requirements imposed by Ventura County Watershed Protection District. (DS)
144. This project is subject to the “Special Projects” provision of the City’s Traffic Impact Fee resolution. The proposed use of the property is not adequately represented by a rate previously adopted by the City Council and the Institute of Transportation Engineers Trip Generation Manual as it does not provide appropriate trip generation statistics. Therefore, the Traffic Impact Fee will be based on a site specific traffic study, acceptable to the City Engineer, which calculates the average daily vehicular trips generated by the project. The fee will be based on the current rate per trip times the average daily vehicular trips. Currently, that rate is \$1,035/ADT. (DS)

TRAFFIC DIVISION CONDITIONS

145. Developer shall design and construct the proposed emergency vehicle entrance/exit driveway along Hueneme Road. Final design, location and width of the driveway shall be reviewed and approved by the City Traffic Engineer in accordance with the Fire Department. (TR)
146. Developer shall install a sign “For Emergency Vehicle Use Only” on the proposed gate for the proposed emergency vehicle entrance/exit driveway along Hueneme Road. (TR)
147. Developer shall prohibit parking between the project’s property line and the proposed fencing along Hueneme Road along Perkins Road. Developer shall be responsible in enforcing the no parking restrictions. (TR)

ENVIRONMENTAL RESOURCES DIVISION

148. Developer shall arrange for materials collection during construction, demolition, and occupancy with the City's Environmental Resources Division or Developer shall arrange for self-hauling.

149. Any landscaping maintenance resulting in organic material needing disposal, if performed in-house or via third party, must not be placed in the trash. All organic materials are required to be diverted from landfill disposal. Any third-party contract/service agreement must stipulate this requirement and be verified through the Environmental Resources Division.
150. Developer shall dispose of sewage and solid waste from the project by City's wastewater and solid waste systems in a matter approved by the City Engineer.

PASSED, AND ADOPTED by the City Council of the City of Oxnard on this 6th day of
December 2022, by the following vote:.

AYES:

NOES:

ABSENT:

ABSTAIN:

RECUSED:

John C. Zaragoza, Mayor

ATTEST:

Rose Chaparro, City Clerk

APPROVED AS TO FORM:

Stephen M. Fischer, City Attorney

Appeal of the Planning Commission's Decision to Certify Environmental Impact Report No. 22-01 and Approve Planning and Zoning Permit No. 18-500-02 (Special Use Permit)

Jay Dobrowalski, Planning Supervisor
Community Development Department

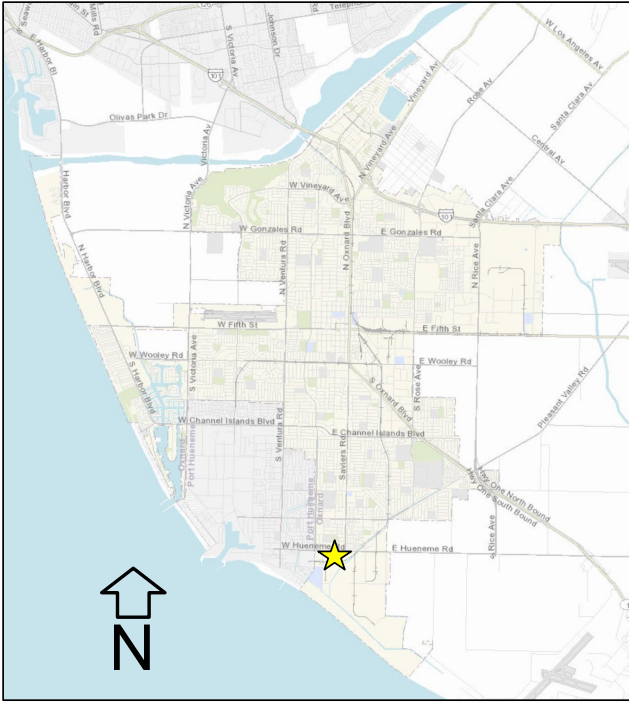
City Council
December 6, 2022



Planning Commission Approved Project Description (SUP)

2

- A request to construct a **temporary vehicle storage facility with a 5-year limitation** on a 33.7-acre site that is currently vacant and undeveloped located at the southeastern corner of the intersection of West Hueneme Road and Perkins Road (Assessor's Parcel Numbers: 231-0-092-245 and -105) within the Light Manufacturing, Planned Development (M-1-PD) zone.
- Proposed development includes a 240 square-foot guard house, portable restroom, perimeter site lighting with 6-foot fencing for security purposes, landscaping, drainage improvements, and grading for a vehicle parking area on one to two inches of gravel.
- Upon expiration of the permit, the office trailer, portable restroom, perimeter lighting and gravel surface would be removed; the 6-foot fencing, landscaping, and drainage improvements would remain on-site.
- Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the City has evaluated potential project-related environmental impacts through the preparation of an Environmental Impact Report.



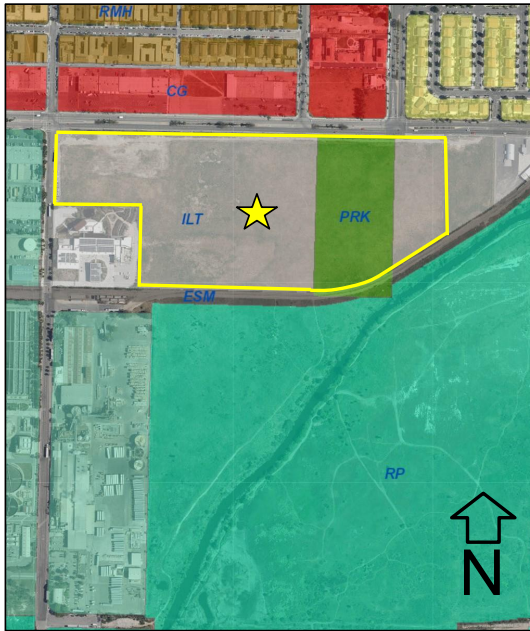


View from Hueneme Rd and Perkins Rd looking southeast

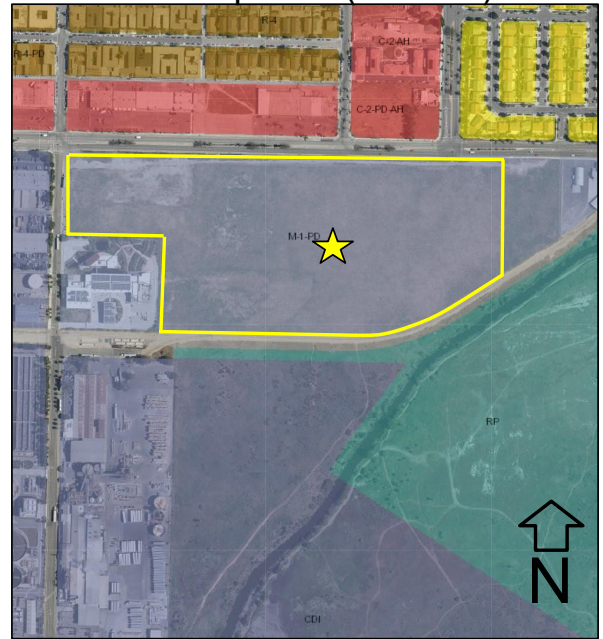


View from Hueneme Rd and Saviers Rd looking southwest

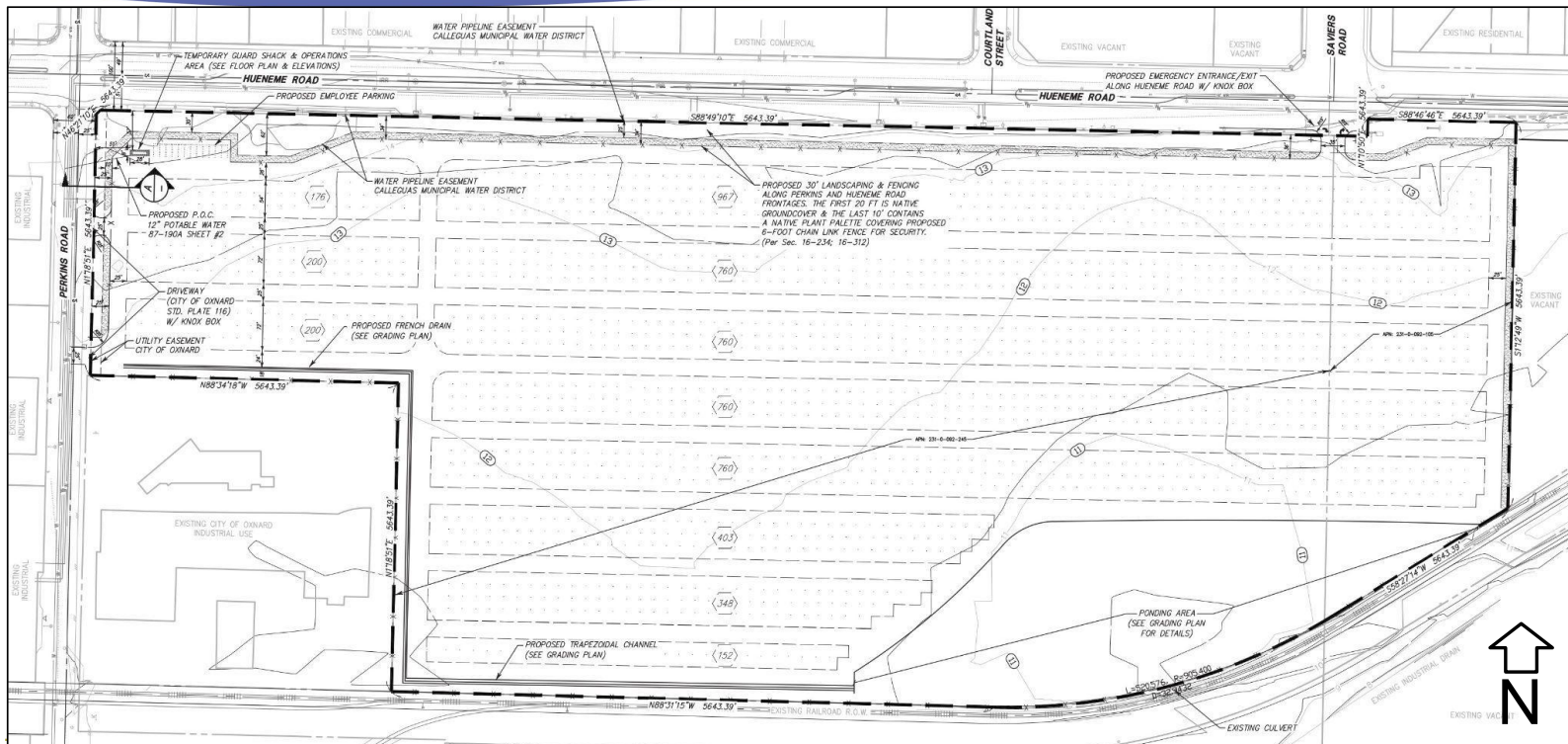
2030 General Plan:
Industrial Light (ILT) and Park (PRK)



Zoning Designation:
Light Manufacturing, Planned
Development (M-1-PD)



Site Plan



- Proposed development is subject to the California Environmental Quality Act
- City prepared a Mitigated Negative Declaration (MND):
 - MND review period for 50 days (20 days required)
 - City received over 220 comment letters
 - City elected to prepare Environmental Impact Report (EIR)
- City prepared an EIR (No. 22-01):
 - EIR identifies potential impacts, mitigation measures, monitoring requirements, and residual impacts
 - Draft EIR review period for 61 days (45 days required)
 - City received 218 comment letters
 - Comments and responses included in EIR
 - Changes made to Draft EIR for Final EIR based on comments

Environmental Review (continued)

- Final EIR identified the following:
 - Class 1 impacts (significant and unavoidable)
 - None identified
 - Class 2 impacts (potentially significant by mitigable, mitigation required)
 - Aesthetics
 - Biological Resources
 - Cultural and Tribal Cultural Resources
 - Geology and Soils
 - Hazardous Materials Use, Generation, Transport, or Disposal
 - Hydrology and Water Quality
 - Police Protection (Transportation)
 - Class 3 impacts (less than significant, no mitigation required)
 - All other impact area were identified as Class 3

- Final EIR includes a Mitigation Monitoring and Reporting Program:
 - Details process to implement required mitigation measures
 - After implementation of standard conditions and mitigation measures, all potentially significant impacts reduced to less than significant levels
- Staff determined that there is no substantial evidence that the Project will have a significant effect on the environment and recommends that the City Council certify the EIR

Community Workshop

- Project presented during November 19, 2018 and March 21, 2022 meetings.
- Site is not within a General Plan Neighborhood
- Notice of meeting was provided:
 - Two on-site postings; and
 - Mailed to residents in Southwinds and Cypress Neighborhoods; and
 - Emailed to Interested Parties
- Comments generally related to: air quality impacts, biology impacts, land use incompatibility, traffic impacts, inadequate public participation opportunities, environmental justice and inadequate environmental review.
- These comments are the same as those addressed in the EIR.

October 20, 2022:

- Public hearing held to consider Planning & Zoning Permit No. 18-500-02 requesting approval of a Special Use Permit.
- Staff recommended approval.
- PC heard public testimony, deliberated, and voted 4-1 to certify EIR and grant SUP

November 7, 2022:

- Timely appeal filed by Appellant

Appeal Grounds

1. The FEIR is replete with inconsistencies, omissions, and misrepresentations of facts by the Oxnard Harbor District and the Lead Agency that tainted environmental review.
2. The Commission erred in certifying a flawed Environmental Impact Report.
3. Public engagement and outreach failed to provide a meaningful opportunity for public comment by ignoring clear language access barriers.
4. Questions remain as to the temporary nature of this Project and concrete steps for fixing this issue remain vague.
5. The Commission made its decision based on an incomplete record.

- The FEIR has several inconsistencies made evident in answers to the PC
- The PC abused its discretion by ignoring these inconsistencies

Staff Response:

- PC heard several hours of testimony
 - PC voted 4-1 to follow staff recommendations
 - This Ground does not include new information
 - Responses to comments are located in the FEIR
 - PC considered the entire record
-

- The FEIR failed contained flaws: piecemealing, failure to assess cumulative impacts, failure to consider reasonable alternatives, failure to properly mitigate impacts, and inaccurate assessments of impacts related to: traffic, air pollution, biological resources, toxic hazards, environmental justice

Staff Response:

- These topics are addressed in the FEIR
 - This Ground does not include new information
 - PC voted 4-1 to certify the FEIR
-

- Lead Agency refused to translate the FEIR documents and provide simultaneous interpretation of public workshops and hearings; created additional barriers to participation in environmental review process

Staff Response:

- This topic is addressed in the FEIR
 - Staff has Spanish speakers; translators were available during PC hearing
 - Project was presented during two Community Workshop meetings
 - City provided additional opportunities for public participation
-

- Commissioners raised concerns regarding the temporary nature of the project
- Final resolution could include amendments including access points to the beach, wetlands restoration, and an educational site

Staff Response:

- PC granted SUP subject to conditions of approval
 - Condition No. 57 requires bond to return site to existing condition
 - Some items will remain on site and be maintained by property owner
 - Site is not within Coastal Zone; no nexus to require coastal access
 - No nexus to require off-site remediation
-

- The Lead Agency should have ensured the PC had all necessary information before the Commissioners.
- Several key items were still missing prior to the hearing

Staff Response:

- Appellant alleges 4 letters are missing from FEIR
- These 4 letters are included in the FEIR
- FEIR posted to City website prior to PC Hearing
- PC considered the entire record

Public Notice

- Notice of City Council hearing was provided:
 - Newspaper,
 - On-site posting; and
 - Mailed to property owners within 300 feet.
- Since the timely filing of the appeal, no public comment has been submitted regarding the project.

That the City Council conduct a public hearing and:

1. Adopt a Resolution certifying Final Environmental Impact Report (EIR) No. 22-01 for the Port of Hueneme - Temporary Outdoor Vehicle Storage Facility (Governor's Office of Planning and Research State Clearinghouse No. 2020069039); and
2. Adopt a Resolution denying the appeal and uploading the Planning Commission's decision to grant Planning and Zoning Permit No. 18-500-02 (Special Use Permit) for a vehicle storage facility, subject to certain findings and conditions.



End of Presentation