



# Final Environmental Impact Report for the PRC 421 Decommissioning Project

State Clearinghouse No. 2021060145  
CSLC EIR Number: 807

**Lead Agency:**

California State Lands Commission  
100 Howe Avenue, Suite 100 South  
Sacramento, California 95825

*March 2022*





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## **Geographic Location**

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## LIST OF ABBREVIATIONS AND ACRONYMS

The following table contains the abbreviations and acronyms used in text of this document.

### UNITS OF MEASUREMENT

°F	degrees Fahrenheit	ft <sup>2</sup>	square foot/feet
BOPD	barrels of oil per day	L <sub>eq</sub>	Equivalent Sound Level
cfs	cubic feet per second	msl	mean sea level
cm	centimeter	mg/kg	milligrams per kilogram
cy	cubic yard(s)	mPa	micro-Pascals
dB; dBA	decibel; decibels on the A-weighted scale	ppb	parts per billion
Hz	hertz	ppm	parts per million
ft	foot/feet	V/C	volume to capacity ratio
		yr	year

### OTHER ABBREVIATIONS AND ACRONYMS

<b>A</b>	AB	Assembly Bill
	API	American Petroleum Institute
	APN	Assessor's Parcel Number
<b>B</b>	BMP	Best Management Practices
	BP	before present
<b>C</b>	CalEnviroScreen	California Communities Environmental Health Screening Tool
	CalGEM	California Geologic and Energy Management Division
	CalOSHA	California Division of Occupational Safety and Health
	Caltrans	California Department of Transportation
	CAA	Clean Air Act
	CAAQS	California Air Quality Standards
	CARB	California Air Resources Board
	CCA	California Coastal Act
	CCIC	Central Coast Information Center
	CCC	California Coastal Commission
	CDFW	California Department of Fish and Wildlife
	CDFW-OSPR	California Department of Fish and Wildlife - Office of Spill Prevention and Response
	CESA	California Endangered Species Act
	CEQA	California Environmental Quality Act
	CFCs	Chlorofluorocarbons
	CH <sub>4</sub>	Methane
	CHRIS	California Historical Resources Information System
	CINMS	Channel Islands National Marine Sanctuary
	CLRF	California red-legged frog
	CLUP	Coastal Land Use Plan

CNDDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CRHR	California Register of Historical Resources
CSC	California Species of Special Concern
CSLC	California State Lands Commission
<b>D</b> DEPM	Division of Environmental Planning and Management
DPS	distinct population segment
DTSC	Department of Toxic Substances Control
<b>E</b> EAP	Emergency Action Plan
EIR	Environmental Impact Report
EMFAC	Emission Factor (model)
EMT	Ellwood Marine Terminal
EOF	Ellwood Onshore Facility
ESHA	environmentally sensitive habitat areas
ESU	evolutionary significant units
<b>F</b> FB	fish block
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FPPP	Fire Prevention and Preparedness Plan
<b>G</b> GHG	Greenhouse Gas
GP	General Plan
<b>H</b> H <sub>2</sub> S	Hydrogen Sulfide
HFCs	Hydrofluorocarbons
<b>I</b> ICS	Incident Command System
IEP	Interagency Ecological Program
IIRT	initial incident response team
IPCC	Intergovernmental Panel on Climate Change
<b>L</b> LiDAR	Light Detection and Range
LCP	Local Coastal Program
LNAPL	Light non-aqueous phase liquid
LOS	Level of Service
<b>M</b> MHTL	mean high tide line
MM	Mitigation Measure
MMP	Mitigation Monitoring Program
MND	Mitigated Negative Declaration
<b>N</b> N <sub>2</sub> O	Nitrous Oxide
NAHC	Native American Heritage Commission
NAAQS	National Air Quality Standards
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NO	Nitric Oxide

	NO <sub>2</sub>	Nitrogen Dioxide
	NO <sub>x</sub>	Nitrogen Oxide
	NOI	Notice of Intent
	NOP	Notice of Preparation
	NPDES	National Pollutant Discharge Elimination System
	NRCS	Natural Resources Conservation Service
	NRHP	National Register of Historic Places
<b>O</b>	O <sub>3</sub>	Ozone
	OEHHA	Office of Environmental Hazard Assessment
	OEM	Office of Emergency Management (Santa Barbara County)
	O&M	Operations and Maintenance
	OSAR	Open Space/Active Recreation (Zoning Designation)
	OSCP	Oil Spill Contingency Plan
	OSPR	Open Space/Passive Recreation (Zoning Designation)
	OPR	Office and Planning and Research
<b>P</b>	P&A	plugging and abandonment
	PAH	polycyclic aromatic hydrocarbons
	PCBs	polychlorinated biphenyls
	PERP	Portable equipment registration program
	PIC	Person-in-Charge
	PID	photoionization detector
	PM	Particulate Matter
	PM <sub>10</sub>	Particulate Matter Less Than 10 Micrometers
	PM <sub>2.5</sub>	Particulate Matter Less Than 2.5 Micrometers
	PPE	personal protective equipment
	PPV	Peak Particle Velocity
<b>R</b>	RAP	Remedial Action Plan
	ROC	Reactive Organic Compounds
	ROG	Reactive Organic Gases
	RWQCB	Regional Water Quality Control Board
<b>S</b>	SBC	Santa Barbara Channel
	SBCAPCD	Santa Barbara County Air Pollution Control District
	SBCAG	Santa Barbara County Association of Governments
	SBCFD	Santa Barbara County Fire Department
	SF <sub>6</sub>	Sulfur Hexafluoride
	SIP	State Implementation Plan
	SIRT	sustained incident response team
	SLR	Sea level rise
	SO <sub>2</sub>	Sulfur dioxide
	SPA	Streamside protection area
	SPL	Sound Pressure Level
	SVOC(s)	Semi-volatile organic compounds
	SWPPP	Storm Water Pollution Prevention Plan
	SWRCB	State Water Resources Control Board
<b>T</b>	TAC	Toxic Air Contaminant

	TDS	treatment, storage, and disposal (facility)
	TPH	Total Petroleum Hydrocarbons
<b>U</b>	UCSB	University of California Santa Barbara
	USACE	U.S. Army Corps of Engineers
	USEPA	U.S. Environmental Protection Agency
	USFWS	U.S. Fish and Wildlife Service
	USGS	United States Geologic Society
<b>V</b>	V/C	Volume to capacity ratio
	VMC	visual modification class
	VMT	Vehicle miles traveled

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*California State Lands Commission*

# **PART I - PREFACE**

Final Environmental Impact Report for the PRC 421  
Decommissioning Project, March 2022

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# **PART I. PREFACE TO THE FINAL ENVIRONMENTAL IMPACT REPORT**

## **PURPOSE**

This document is the Final Environmental Impact Report (EIR) for the PRC 421 Decommissioning Project (Project). The Final EIR has been prepared for consideration by the California State Lands Commission (CSLC), as the lead agency for this Project, pursuant to the California Environmental Quality Act (CEQA) and in accordance with the State CEQA Guidelines (Pub. Resources Code, § 21000 et seq. and Cal. Code Regs., tit. 14, § 15000 et seq.).

## **ORGANIZATION OF THE FINAL EIR**

The Final EIR, reproduced for convenience in one document, replaces the January 2022 Draft EIR. Consistent with State CEQA Guidelines section 15132, the Final EIR consists of the following elements:

- **Part I** – Preface
- **Part II** – Comments and Responses to Comments received on the Draft EIR during the 45-day public comment period, including a list of persons, organizations, and public agencies that provided comments on the Draft EIR
- **Part III** – Revisions to the Draft Environmental Impact Report and any other information added to the EIR by the CSLC as lead agency.<sup>1</sup> Part III includes the entire text of the Draft EIR, as revised, including revisions to the text of the Draft EIR in response to comments received or for reasons that include: to update information; to refine discussions and resolve internal inconsistencies; and to make minor format changes. Some changes have resulted in a shifting of text from one page to another. Except for minor format changes, all revisions to the Draft EIR are shown as follows:
  - Additions to the text of the Draft EIR are underlined
  - Deletions of the text of the Draft EIR are shown as ~~strikeout~~

The Final EIR may be viewed at the following repository locations and on the CSLC website (<http://www.slc.ca.gov/ceqa/prc-421-decommissioning-project/>).

- Goleta Branch Library, 500 N. Fairview Avenue Goleta, CA 93117; (805) 964-7878
- Santa Barbara Public Library, 40 East Anapamu Street, Santa Barbara, CA 93101; (805) 962-7653

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<sup>1</sup> Revisions to the Draft EIR are mostly found in Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, and Section 7.5, *Mitigation Monitoring Table*.

- City of Goleta, Attn: Anne Wells 130 Cremona, Suite B, Goleta, CA 93117; (805) 961-7557
- County of Santa Barbara, Attn: Errin Briggs, 123 E. Anapamu Street, Santa Barbara, CA 93101; (805) 568-2047

## **PROJECT DESCRIPTION**

Two piers and caissons, supporting two wells, formerly produced oil and gas from the offshore Lease PRC 421. The two wells have been idle since 1994 and were plugged and abandoned in May and September 2019 under the direction and supervision of the CSLC and the Division of Oil, Gas, and Geothermal Resources (DOGGR), now known as the California Geologic and Energy Management Division (CalGEM), in compliance with regulatory specifications. The decommissioning Project would remove the two piers and caissons and associated infrastructure (Component 1), and remove the pier access roadway, two pipelines within the roadway, pier abutments, and the supporting seawall/revetment (Component 2). The full Project description is provided in Section 2 of the EIR.

## **DECISION-MAKING PROCESS**

The State CEQA Guidelines stipulate that an EIR must be prepared for any project carried out or approved by a State or local public agency that may have a significant impact on the environment. CSLC has determined the following:

- 1) The PRC 421 Decommissioning Project is a “project” as defined by the State CEQA Guidelines
- 2) The Project may have a significant impact on the environment
- 3) An EIR is required

The CSLC will use this Final EIR as part of its review process, including determining whether or not to approve the Project or an alternative to the Project identified and analyzed in the EIR. If the EIR is certified and the Project approved, mitigation measures will be adopted as part of the approval and incorporated as conditions of Project implementation. The CSLC must certify that:

- The Final EIR has been completed in compliance with CEQA
- The Final EIR was presented to the CSLC in a public meeting, and the CSLC reviewed and considered the information contained in the Final EIR prior to considering the proposed Project
- The Final EIR reflects the CSLC’s independent judgment and analysis
- (State CEQA Guidelines, § 15090)

If the CSLC decides to certify the Final EIR and approve the Project, the CSLC must make one or more written findings for each significant environmental impact identified in the document. The possible findings are:

- The Project has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact
- Changes to the Project are within another agency's jurisdiction and have been or should be adopted by such other agency
- Specific considerations make mitigation measures or alternatives infeasible

(State CEQA Guidelines, § 15091)

If any impacts identified in the EIR cannot be reduced to a level that is less than significant, the CSLC may issue a Statement of Overriding Considerations for Project approval if specific social, economic, or other factors justify the Project's unavoidable adverse environmental effects. If the CSLC approves a project for which a Final EIR has been prepared and certified, the CSLC will issue a Notice of Determination.

## **PROJECT CEQA CHRONOLOGY**

The following is a brief chronology of the CEQA review process associated with the proposed Project (see also Part III, Section 1.3, *Overview of Environmental Review Process*, of the Final EIR).

**June 8, 2021.** The Notice of Preparation (NOP) and Notice of Public Scoping Meeting was published. The environmental setting existing at the time the NOP is published normally constitutes the baseline physical conditions by which a lead agency determines whether an impact is significant (State CEQA Guidelines, § 15125, subd. (a)). Six written comment letters were received during the 30-day public review period.

**June 24, 2021.** Scoping meetings were held at 2:00 p.m. and 6:00 p.m. via Zoom online. At the meetings, the public and interested agencies were informed about the proposed Project and had the opportunity to provide recommendations for the scope and content of the environmental analysis. Eight speakers provided comments at the meetings.

**January 21, 2022 – March 7, 2022.** The Draft EIR was released for a 45-day public review period with comments accepted by mail, email, and in person (online) at public meetings. Six written comments were received.

**February 10, 2022.** Public meetings on the Draft EIR were held at 2:00 p.m. and 6:00 p.m. via Zoom online. At these meetings, attendees had the opportunity to ask questions about, and present oral or written testimony on, the Draft EIR and its contents. One speaker provided comments at the 6:00 p.m. meeting.

**March 2022.** In preparing this Final EIR, CSLC staff obtained additional information as needed to respond to comments, responded to all comments received, and revised the Draft EIR (see Final EIR Parts II and III). The CSLC hearing on the Final EIR and action on the proposed Project is scheduled for April 26, 2022. (See [www.slc.ca.gov](http://www.slc.ca.gov) for further information on meeting time and location when they become available.

*California State Lands Commission*

# **PART II - RESPONSES TO COMMENTS**

Final Environmental Impact Report for the PRC 421  
Decommissioning Project, March 2022

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## PART II. RESPONSES TO COMMENTS

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Pursuant to State California Environmental Quality Act (CEQA) Guidelines section 15088, the California State Lands Commission (CSLC), as CEQA lead agency, is required to evaluate comments on environmental issues received from persons who reviewed the Draft Environmental Impact Report (EIR) prepared for the PRC 421 Decommissioning Project (Project) and to prepare a written response. The lead agency must respond to comments that it received during the noticed comment period and may respond to late comments. The State CEQA Guidelines further require the lead agency to describe in its written response the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). If the lead agency's position varies from recommendations and objections raised in the comments, the agency must address the major environmental issues raised and give details why any specific comments and suggestions were not accepted.

Part II of this Final EIR contains copies of comment letters and oral comments from the public meetings and the CSLC's responses. Six written comment letters were submitted in response to the Draft EIR during the public review period (Table II-1). One speaker provided oral comments at a public meeting on the Draft EIR held by CSLC staff on February 10, 2022 (Table II-2).

Subpart II.A provides the comment letters and responses to significant environmental issues raised in individual comments. Responses to comments are presented in the order listed in Table II-1 and Table II-2 and are organized as follows:

- Each commenter is given a unique comment set number and associated comment identification (ID) numbers for each specific comment. The comment set includes all written and/or oral comments provided by that commenter.
- Individual comments are numbered in the margins of each comment letter and/or oral comment transcript; correspondingly numbered responses follow each comment set.

Part III contains the complete EIR with revisions to the text of the Draft EIR shown in ~~strikeout~~ and underline that were made in response to comments that required changes or for the reasons stated on page I-1. The following conventions are used to indicate how the Draft EIR text was changed during EIR finalization in Part III of this Final EIR:

- Underlined text represents text added to the EIR (in some cases moved from another location in the document, in other cases new text).
- ~~Strikeout text~~ represents text removed from that location in the EIR (in some cases moved elsewhere, in other cases removed entirely).

Table II-1 summarizes written comment sets submitted during the public comment period. Written comments are listed in the order received for each category.

**Table II-1. Written Comments Provided on the Draft EIR and Comment Identification Numbers Used in this Final EIR**

Name of Commenter	Date	Comment at Public Meeting	Comment	
			Set #	ID #
<b>Governmental Agencies</b>				
Santa Barbara County Air Pollution Control District	3/3/22	No	1	1-1 to 1-4
California Coastal Commission	3/7/22	No	2	2-1 to 2-2
City of Goleta	3/7/22	No	3	3-1 to 3-3
California Department of Fish and Wildlife – Natural Resources Agency	3/9/22	No	4	4-1 to 4-10
<b>Groups / Organizations</b>				
Surfrider Foundation	3/4/22	No	5	5-1 to 5-9
<b>Public</b>				
Sandpiper Golf Course	3/7/22	No	6	6-1 to 6-4

Table II-2 lists one commenter who presented oral comments at the public meeting.

**Table II-2. Oral Comments Presented on the Draft EIR during the February 10, 2022, Public Meeting and Comment Identification Number Used in this Final EIR**

Name of Commenter	Comment ID #
Get Oil Out! – Carla Frisk	O1

**SUBPART II.A. INDIVIDUAL COMMENTS AND RESPONSES**

**COMMENT SET 1: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT**



March 3, 2022

Eric Gillies  
California State Lands Commission  
100 Howe Avenue, Suite 100-South  
Sacramento, CA 95825

Sent via email to: [CEQA.comments@slc.ca.gov](mailto:CEQA.comments@slc.ca.gov)

**Re: Santa Barbara County Air Pollution Control District Comments on the Draft Environmental Impact Report for the PRC 421 Decommissioning Project, SCH # 2021060145**

Dear Mr. Gillies:

The Santa Barbara County Air Pollution Control District (District) appreciates the opportunity to provide comments on the Draft Environmental Impact Report (EIR) for the PRC 421 Decommissioning Project. California State Lands Commission proposes to remove the two piers and caissons supporting two wells formerly producing oil and gas from the offshore Lease PRC 421. The two wells have been idle since 1994 and were plugged and abandoned in May and September 2019. Other supporting infrastructure, including two pipelines and the access road and supporting rock revetment, will also be removed. As part of the project, the 2-inch and 6-inch pipelines beneath the golf course pipeline corridor to the Ellwood Onshore Facility (EOF) will be flushed, grouted, and abandoned in place. The project is located at the southern limit of the Sandpiper Golf Course in the City of Goleta on State tidelands and submerged lands as well as the upland access road and revetment below the coastal bluffs. Decommissioning activity is estimated to take place in two components. Component 1 would extend over approximately 143 working days over the course of approximately 5 months. Component 2 would extend over approximately 63 working days over the course of approximately 3 months.

Based on the project description and information that has been provided, the proposed project may include equipment or operations subject to District permit requirements and prohibitory rules. Therefore, the District may be a responsible agency under the California Environmental Quality Act (CEQA) and will rely on the CEQA determination when evaluating any District permits for proposed equipment. The CEQA document should include the air pollutant emissions for all proposed equipment to avoid additional CEQA documentation requirements related to District permit issuance.

District staff has the following comments on the Draft EIR:

- Comment 1-1

1. **4.2 Air Quality, 4.2.1.5 Air Quality Planning, “State Attainment Planning”, page 4-21:** Santa Barbara County has been officially designated as nonattainment for the state ozone standard. The California Office of Administrative Law (OAL) finalized the designation change on September 27, 2021. Please update the discussion to reflect the most current information.
- Comment 1-2

2. **4.2 Air Quality, 4.2.2.2 Applicable Regulatory Requirements, page 4-24:** This page states that “SBCAPCD rules and regulations applicable to activities to be conducted under the proposed Project are limited to potential nuisances (typically dust and odors)...” Please see the District’s letter in response to the NOP dated June 29, 2021 (and attached hereto) for a listing of regulatory requirements potentially applicable to the proposed project, including District

Aeron Arlin Genet, Air Pollution Control Officer

805.961.8800 260 N. San Antonio Rd., Ste. A Santa Barbara, CA 93110 [ourair.org](http://ourair.org) @OurAirSBC

## Responses to Comments

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District Comments on the Draft EIR for the PRC 421 Decommissioning Project, SCH # 2021060145  
March 3, 2022  
Page 2

**Comment 1-2** | Rule 201, *Permits Required*. Please revise the discussion to include all applicable District rules  
**continued** | and regulations.

**Comment 1-3** | 3. **4.2 Air Quality, 4.2.4 Impact Analysis and Mitigation, pages 4-25 – 4-29:** The EIR does not  
analyze the project’s potential impacts related to objectionable odors. The EIR should examine  
whether any of the activities associated with the proposed project will result in odor impacts  
that could adversely affect a substantial number of people. Specifically, we note that pipeline  
flushing operations and exposed organic material (e.g. affixed marine vegetation or sea life)  
during pier removal could generate unpleasant odors. If odors could result in potentially  
significant impacts, mitigation should be applied to reduce those impacts as appropriate under  
CEQA.

**Comment 1-4** | 4. **4.2 Air Quality, 4.2.4 Impact Analysis and Mitigation, pages 4-25 – 4-29:** The impact analysis  
provides separate air pollutant emissions estimates for Components 1 and 2 of the project and  
then determines the significance of construction emissions by separately comparing each  
component’s emissions to the chosen CEQA threshold of significance of 25 tons per year for  
each criteria pollutant (except CO). The document states that this approach was taken because  
each component of the project will occur sequentially, not concurrently. Since Component 1 is  
expected to take approximately 5 months to complete and Component 2 is expected to take  
approximately 3 months to complete, it appears feasible that the two project components could  
be executed within the same 12-month period. Therefore, it seems most appropriate to sum  
emissions from each component before comparing to the 25 tons per year threshold. If it is  
known that the two components cannot/will not be executed within the same 12-month period,  
please add this clarification to the project description. Otherwise, please revise the EIR as  
recommended.

*Note that the same comment applies to the impact analysis for greenhouse gas emissions found  
in 4.7 Greenhouse Gas Emissions, 4.7.4 Impact Analysis and Mitigation, page 4-124 through  
4-125.*

If you or the project applicant have any questions regarding these comments, please feel free to contact  
me at (805) 979-8337 or via email at [barhamc@sbcapcd.org](mailto:barhamc@sbcapcd.org).

Sincerely,



Carly Barham  
Planning Division

Attachment: District NOP Letter dated June 29, 2021

cc: Planning Chron File

**RESPONSE TO COMMENT SET 1: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT**

- 1-1 The text of the Draft EIR has been revised to note that Santa Barbara County is a designated non-attainment area for the State ozone standard.
- 1-2 The text of the Draft EIR has been revised to include additional Santa Barbara County Air Pollution Control District rules that may apply to the proposed Project, including Rule 302 (visible emissions) and Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities).
- 1-3 Substantial odors are not anticipated to result from pipe flushing since the flush water would be contained within a temporary water tank and then transferred to a vacuum truck. This methodology minimizes the release of odors that may be detected by the public. The amount of encrusted algae and invertebrates that may generate odors through decomposition when the caisson sheet pile is removed is very small and would not generate substantial odors that would be detectable by the public.
- 1-4 Although funding for Component 2 has not been secured to date, if funding does become available Component 2 could occur within the same 12-month period as Component 1. The sum of the emissions from both components has been added to the Final EIR and evaluated against the 25 tons per year threshold.

## COMMENT SET 2: CALIFORNIA COASTAL COMMISSION



STATE OF CALIFORNIA—NATURAL RESOURCES AGENCY

GAVIN NEWSOM, GOVERNOR

### CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 300  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5202  
FAX (415) 904-5400

March 7, 2022

Eric Gillies  
Environmental Program Manager I  
California State Lands Commission  
100 Howe Avenue, Suite 100-South  
Sacramento, CA 95825-8202

Re: **PRC 421 Decommissioning Draft Environmental Impact Report**

Dear Mr. Gillies:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the decommissioning project within the former Oil and gas Lease PRC 421 on State tidelands and submerged lands as well as the upland access road and revetment below the bluffs marking the southern limit of the Sandpiper Golf Course in the City of Goleta (City).

The PRC 421 Decommissioning Project (Project) consists of two primary components, Component 1 and Component 2, followed by site restoration and cleanup. Component 1 of the Project includes the complete demolition and removal of the 421-1 and 421-2 caissons and piers back to the existing seawall, removal of both well casings and capping the well down to the bedrock, and the flushing and isolating of the 2-inch and 6-inch-diameter pipelines (pipelines) through the golf course to the Ellwood Onshore Facility (EOF). Component 2 involves the decommissioning and removal of the pipelines that extend from the 421-1 pier area beneath the access roadway and the subsequent removal of the pier abutments, supporting rock revetment, and wooden seawall beneath the access roadway along the bluff as well as removal of any hydrocarbon impacted soil within the roadway and sloping to a natural grade. As described in Section 6.6 of the DEIR, the Single Component Abandonment Alternative consisting solely of Component 1 is currently identified as the preferred alternative.

Commission staff coordinated with State Lands Commission (SLC) staff and City staff as part of a Joint Review Panel (JRP) in the development of the DEIR. Commission staff appreciates SLC's consideration of the feedback previously provided. In addition to reviewing the DEIR, on February 11, 2022 Commission staff received a Coastal Development Permit (CDP) application for the Project and are in the process of reviewing the CDP application for completeness pursuant to Section 13056 of the Commission's **administrative regulations**. Commission staff strongly support the inclusion of Component 2 in the DEIR and look forward to continuing to coordinate with the State Lands Commission (SLC) and the City with the goal of expediting removal of Component 2, including through the identification of available funding for this work. Removal of Component 2 would alleviate the risk of ongoing resource damage from the release and spread of debris and hydrocarbon contaminants within the roadbed and rock revetment and also enhance public access and recreational benefits in the area.

After reviewing the DEIR Commission staff would like to provide comments on two items:

### Coastal Wetlands

**Comment 2-1** Impact BIO-8, Loss of Coastal Wetlands (Component 2), discusses how removal of the rock revetment and wooden seawall and abandonment of the access roadway may result in the loss of a portion of the small wetland feature located within or adjacent to the access roadway. It appears that this wetland formed due to the discharge of irrigation water from the Sandpiper Golf Course located on the bluff above. As such, the wetland appears dependent on this artificial water source and may diminish or disappear if irrigation practices at the golf course change.

The DEIR discussion concludes that the loss of wetlands as a result of removal of Component 2 would be less than significant with implementation of mitigation measures MM BIO-5a: Coastal Wetlands Mitigation and MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2. When CCC staff previously reviewed the administrative draft EIR during the JRP process, MM BIO-5b required development of a coastal wetlands retention plan that could include leaving road fill material north of Pier 421-2 to maintain the existing wetlands at this location. However, in the DEIR, this mitigation measure has been modified to require development of a coastal wetlands retention plan which *shall* include leaving road fill material north of Pier 421-2 or placing other suitable material as needed to maintain the existing wetlands at this location. This modification to the mitigation measure regarding leaving road fill material **from a possible “could” to a mandatory “shall”, while also encouraging placement of additional road material, is a significant change** to the intent and application of the mitigation measure. Requiring the road fill material to remain and encouraging placement of more material may limit adverse impacts to the small wetland feature but would result in significant impacts to coastal resources which are not addressed or discussed in the draft EIR – specifically, those associated with the release of contaminated material and debris from Component 2 and the ongoing loss of public beach access and recreation opportunities. Further, this DEIR does not consider the potential for natural expansion of the wetland feature that could occur if the artificial material of Component 2 were to be removed and the surrounding beach area be restored to a natural condition or the degradation and erosion of Component 2 that would occur in this area due to Sea Level Rise and wave attack if it were to remain in place. Commission staff therefore recommend revising mitigation measure MM BIO-5b to no longer require abandonment-in-place and expansion of Component 2.

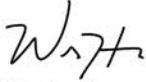
### Sea Level Rise

**Comment 2-2** Section 8.1 of the DEIR includes an analysis of Climate Change and Sea Level Rise (SLR) and also a coastal hazards impact assessment. The analysis incorporates up to 6.6 feet of SLR which is equivalent to a Medium-High Risk Aversion scenario by the year 2100. Due to the low adaptive capacity of the abandoned 421 pier access road in consideration of potential future SLR and coastal hazards, as well as the contaminated material and debris present in the roadbed and associated seawall, Commission staff recommend that the analysis of Section 8.1 be updated to incorporate the Extreme Risk Aversion Scenario (H++) of 13.7 feet through the year 2120.

**Conclusion**

Thank you for your consideration of the comments included above. If you have any questions, please do not hesitate to contact me at [Weslev.Horn@coastal.ca.gov](mailto:Weslev.Horn@coastal.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Wesley Horn'.

Wesley Horn  
Environmental Scientist  
Energy, Ocean Resources and Federal Consistency Division

**RESPONSE TO COMMENT SET 2: CALIFORNIA COASTAL COMMISSION**

- 2-1 The intent of mitigation measure MM BIO-5b is to either leave sufficient rock and road base material in place to maintain the impoundment of run-off from the golf course or use other suitable material should the existing material be removed. Therefore, placement of “additional road material” is not proposed. The suggestion to consider the “natural expansion of the wetland feature that could occur if the artificial fill material of Component 2 were to be removed and the surrounding beach area be restored to a natural condition” is not accurate since the area of wetland vegetation would be drastically reduced if material currently impounding run-off were removed. It is possible that run-off from the golf course could form a small channel on the beach if the impoundment were removed but would not support wetland vegetation due to surf action and saltwater inundation. Implementation of proposed mitigation measure MM BIO-5a would preserve the existing wetland feature should Component 2 be implemented.
- 2-2 The use of 6.6 feet in the year 2100 sea level rise analysis is adequately conservative since it is based on a high greenhouse gas emissions scenario. The objective of the Project is to remove deserted and derelict oil and gas infrastructure from the beach and restore the beach area to natural conditions, which would then be subject to any future projected sea level rise scenarios similar to the surrounding beach areas.

## COMMENT SET 3: CITY OF GOLETA



March 7, 2022

**CITY COUNCIL**

Paula Perotte  
*Mayor*

James Kyriaco  
*Mayor Pro Tempore*

Roger S. Aceves  
*Councilmember*

Stuart Kasdin  
*Councilmember*

Kyle Richards  
*Councilmember*

**CITY MANAGER**  
Michelle Greene

California State Lands Commission  
100 Howe Avenue, Suite 100 South  
Sacramento, California 95825  
Attn: Eric Gillies  
[CEQA.comments@slc.ca.gov](mailto:CEQA.comments@slc.ca.gov)

*RE: Comments re Draft EIR for the PRC 421 Decommissioning Project*

Dear Mr. Gillies:

The City of Goleta (the “City”) appreciates the opportunity to comment on the California State Lands Commission’s (“Commission”) Draft Environmental Impact Report (“DEIR”) for the PRC 421 Decommissioning Project (the “Project”). The City is a responsible agency for the Project under the California Environmental Quality Act (“CEQA”), as it has discretionary approval authority over Component 2 of the Project. (See DEIR, p. 1-12 [acknowledging City’s discretionary approval authority].)

As a responsible agency, the City supports implementation of the Project and urges the Commission to certify the EIR as to the entirety of the Project—both Components 1 and 2.

The Project generally entails removal of facilities related to former State Oil and Gas Lease PRC 421, including the removal of two piers and caissons as well as the upland access roadway and revetment. The EIR defines the Project as consisting of the following two components, described below in general, non-exhaustive terms:

- Component 1: Removal of both pier structures and supports to the bedrock interface; removal of both caissons’ external sheet pile and concrete walls including concrete footings; cutting and removal of well casings down to existing bedrock elevation; and installation of a final welded well cap.

- **Component 2:** Removal of the two pipelines that extend from Pier 421-1, beneath the existing access roadway; removal of both pier abutment structures originally installed in 2001; removal of rock revetment from the beach; removal of wooden seawall and its structural components; removal of contaminated soil within the access roadway; sloping and restoration of access roadway area to a natural grade; and final site restoration.

The PRC 421 facilities represent a physical coastal obstruction, a potential public safety hazard, and a potential environmental hazard represented by the known presence of hydrocarbon-impacted soil and fill contained within the pier caissons. Implementation of the entirety of the Project – both Components 1 and 2 – is necessary to allow full use of the beach coastline by the public and to eliminate the existing threat to public safety and the environment posed by the deteriorating PRC 421 facilities.

The City thus requests that the Commission certify the EIR as to both Component 1 and 2 of the Project.

Comment  
3-1

**1. The Commission should certify the EIR as to both Component 1 and 2 to avoid improper project piecemealing under CEQA**

CEQA requires the Commission to certify the EIR as to both Component 1 and Component 2 of the Project. As the EIR recognizes, the Commission must review “the whole of [the] action that has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” (DEIR, p. 1-6, quoting State CEQA Guidelines, § 15378.)

The EIR is clear that the “whole of the action” entails both Component 1 and Component 2. (DEIR, pp. 2-1, 4-1.) The City agrees. Accordingly, the City appreciates that the Commission has analyzed the potential environmental impacts of both components of the Project. This approach is necessary to avoid improper project piecemealing under CEQA—i.e., obfuscating a project’s potential environmental impacts “by chopping a large project into many little ones, each with a potential impact on the environment, which cumulatively may have disastrous consequences.” (*East Sacramento Partnerships for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, 293, quoting *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592.) The City thus respectfully requests that the Commission certify the EIR as to the Project as described in the EIR, which is comprised of Component 1 and Component 2.

Comment  
3-2

**2. The Commission should reject the Single Component Abandonment Alternative, as that alternative does not meet the Project’s objectives**

The Single Component Abandonment Alternative does not meet the Project’s objectives. The EIR provides that the two objectives of the Project are to:

1. Decommission the piers, caissons, and remaining portions of the wells (the riser pipe from the top of the cement plug and wellheads) and other infrastructure, including the pipelines within the access roadway and golf



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Comment  
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Continued

course back to the tie-in points just outside of the EOF, and the access roadway and supporting rock revetment.

2. Restore the beach area to conditions similar to the surrounding area and appropriate for safe public access and use.

These objectives cannot be met unless the Commission certifies the EIR as to both Component 1 and 2 of the Project. The Project cannot meet Objective 1 without Component 2 because Component 2 entails the removal of the pipelines that lie within the access roadway; removal of those pipelines is critical to decommissioning the oil infrastructure. (DEIR, p. ES-3.) The Project similarly cannot meet Objective 2 without Component 2, as final site restoration is part of Component 2 of the Project (e.g., removing the defunct pipelines and other structures that were used to support PRC 421). (*Ibid.*)

The Commission should therefore reject the Single Component Abandonment Alternative as it fails to meet both of the Project's basic objectives. (State CEQA Guidelines, § 15126.6(c).)

Comment  
3-3

**3. The EIR should be revised to include Mandatory Findings of Significance**

The EIR does not appear to specifically address the four mandatory findings of significance set forth in State CEQA Guidelines section 15065(a). While the EIR includes substantial evidence demonstrating that implementation of the entirety of the Project would not result in a significant effect on the environment, the City believes the EIR should be revised to specifically address the mandatory findings of significance.

The City does not believe that this revision would require recirculation of the EIR under State CEQA Guidelines section 15088.5, as the discussion of the mandatory findings of significance would not qualify as "significant new information" under CEQA. The information supporting the conclusions for each of the mandatory findings is already included in myriad places throughout the EIR.

**4. Conclusion**

Thank you for providing the City with an opportunity to review the DEIR. The City looks forward to continued cooperative efforts to implement the entirety of the Project—both Components 1 and 2.

Please do not hesitate to reach out to me should you have any questions.

Sincerely,



Michelle Greene  
City Manager, City of Goleta



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**RESPONSE TO COMMENT SET 3: CITY OF GOLETA**

- 3-1 Comment noted. The CSLC will consider the entire EIR and the whole of the action (including both Components 1 and 2) for certification.
- 3-2 Comment noted. It is acknowledged that the City prefers the proposed Project since it fully meets the Project objectives over the Single Component Abandonment Alternative.
- 3-3 As provided in Part I (Decision-Making Process) of this Final EIR, if CSLC decides to certify the Final EIR and approve the Project, the CSLC must make one or more written findings for each significant environmental impact identified in the document (see State CEQA Guidelines, § 15091). These CEQA findings will be included in the CSLC Staff Report, and the CSLC cannot approve the Project without adopting the findings.

## COMMENT SET 4: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
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San Diego, CA 92123  
(858) 467-4201  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



March 9, 2022

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Environmental Program Manager I  
California State Lands Commission  
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**Subject: Comments on the Draft Environmental Impact Report for PRC 421  
Decommissioning Project, SCH #2021060145, Santa Barbara County**

Dear Eric Gillies:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for PRC 421 Decommissioning Project (Project). The California State Lands Commission (CSLS) is the lead agency preparing a DEIR pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et. seq.) with the purpose of informing decision-makers and the public regarding potential environmental effects related to the Project.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### **CDFW's Role**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, §

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2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

**Project Location:** The project site encompasses State tidal lands and submerged lands as well as the upland access road and revetment below the bluffs marking the southern limit of the Sandpiper Golf Course in the city of Goleta, California.

**Project Description/Objectives:** This Project is part of a decommissioning process for two wells that have been idle since 1994 and have been plugged and abandoned. The decommissioning process involves removing two piers (Pier 421-1 and Pier 421-2) and caissons and other infrastructure which includes two pipelines, the access road, and supporting rock revetment below the bluffs.

Specifically, the Project involves:

1. Component 1 – Caisson and Pier Removal (421-1 and 421-2)
  - Removal of soil and fill inside both caissons down to the existing bedrock, including all interior debris (buried timber, steel, and concrete support structures);
  - Cutting and removal of well casings down to existing bedrock elevation and installation of a final welded well cap;
  - Removal of both caissons' external sheet pile and concrete walls including concrete footings;
  - Full removal of both pier structures and supports to the bedrock interface; and,
  - Flushing and isolating the 2-inch-diameter and 6-inch-diameter pipelines from the 421-1 pier back through the golf course pipeline corridor to the EOF.
2. Component 2 – Access Roadway, Production Pipelines, Pier Abutments, Rock Revetment and Wooden Seawall Removal
  - Excavation and removal of the 2-inch-diameter and 6-inch-diameter pipelines from the 421-1 pier location west to the 12th tee location at the golf course;
  - Complete removal of both pier abutment structures originally installed in 2001;
  - Removal of rock revetment from the beach (between the 12th tee and 421-2 pier area);
  - Removal of wooden seawall and its structural components (from the 421-2 pier area and extending approximately 75 feet to the southeast);
  - Removal of any unrecorded historical debris;
  - Removal of any petroleum hydrocarbon-containing soil identified within access roadway;
  - Sloping and restoration of access roadway area (1,600 feet) to a natural grade; and,
  - Final Site restoration.

#### COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the CSLS in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources.

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### Specific Comments

**Comment 4-1** **Comment 1: Use of Holland-based Ecosystem Classification in Lieu of State Adopted Vegetation Community Classification System**

**Issue:** CDFW is concerned about the DEIR's use of the Holland classification system, which is based on ecology rather than specific vegetation assemblages. The Holland ecosystem classification system has "gross errors", is not repeatable, lacks uniform membership criteria, and has not been updated since 1986 (CDFW, 2022). Based on the Holland map provided in the DEIR (Figure 4.3-1) CDFW can preliminarily determine alliances from the map's aerial photo alone. Open water, foredunes, and other ecological features are not vegetation communities.

**Specific impact:** The DEIR states "the vegetation types used in this system do not adequately describe vegetation of the Project site, in part due to the fragmented and disturbed nature of the affected vegetation. Therefore, a more generalized system (Preliminary Descriptions of the Terrestrial Natural Communities of California – Holland 1986) was used to classify vegetation of the Project site. A". Based on Figures 4.3, CDFW has determined that mapping using The Manual of California Vegetations' alliances and associations are applicable to the Project site, including the disturbed areas with non-native vegetation. The Holland classification system does not adequately describe vegetation, beyond generic assemblages that are too large scale to determine uniqueness, rareness, value in the landscape, or base restoration planting appropriateness.

The ecology-based Holland classification system is no longer supported by the State of California. It has been replaced by the National Vegetation Classification System and its California expression, The Manual of California Vegetation, Second Edition (MCV) (Sawyer, Keeler-Wolf and Evens 2009) under Section 1940 of the Fish and Game Code. The Manual should be used when describing existing conditions in environmental documents, assessing impacts, and mapping vegetation.

Sensitive vegetation communities under the MCV are defined and have specific membership requirements. The presence of these vegetation communities should be acknowledged if they meet the membership requirements. The quality of the vegetation community is considered when mitigation ratios are considered, but the vegetation either meets the membership criteria, or it doesn't. If it meets the membership criteria, the vegetation communities should be mitigated to ensure no net loss of these locally important vegetation communities.

As an example, the DEIR lists dominant plants for what is called "Southern Coastal Bluff Scrub" (Holland community) as quail bush (*Atriplex lentiformis*), coastal golden-bush (*Isocoma menziesii*), coyote brush (*Baccharis pilularis*), iceplant (*Carpobrotus edulis*), saltgrass (*Distichlis spicata*), rabbits-foot grass (*Polypogon monspeliensis*), heliotrope (*Heliotropium curassavicum*), and alkali heath (*Frankenia salina*). These plants listed comprise many different alliances and associations, many of which are rare. This grouping of plants is too large scale to identify the uniqueness of specific plant assemblages CDFW considers *Atriplex lentiformis* Shrubland (Quailbush Scrub) Alliance, ranked S4, a locally sensitive vegetation community given the loss of this vegetation community in the coastal Goleta area. *Baccharis pilularis* (Coyote brush scrub) Alliance is ranked S5 by CDFW but given the local losses of this vegetation community in the coastal Goleta area, CDFW considers this a locally sensitive vegetation community, and this vegetation community value in the landscape is not adequately determined using Holland.

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**Comment 4-1** In 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the state (Fish and Game Code Section 1940). This standard complies with the National Vegetation Classification System which utilizes alliance and association-based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the MCV, found online at <http://vegetation.cnps.org/>. Through this MCV vegetation classification system, CDFW tracks Sensitive Natural Communities and their respective rankings using the MCV Alliance and Association names for vegetation communities.

**Continued**

**Why Impact Will Occur:** The DEIR uses Holland-based vegetation ecosystem classification to identify vegetation communities. Without MCV names identified for the vegetation communities potentially affected by the Project, CDFW is unable to determine if the project may impact sensitive vegetation communities or wildlife species that depend on these communities or recommend appropriate avoidance, minimization and/or mitigation measures. If a vegetation community in the project area has not previously been described, it may be a rare type. In this case, please contact CDFW about documenting and validating the vegetation community. The use of Holland ecosystem classifications to list impacts makes it impossible for CDFW to determine what MCV vegetation community is being impacted, nor determine if the proposed revegetation is mitigating impacts to a specific vegetation community that was impacted.

CEQA Guidelines sections 15070 and 15071 require the DEIR to analyze if the Project may have a significant effect on the environment as well as review if the Project will “avoid the effect or mitigate to a point where clearly no significant effects would occur.”

In order to analyze if a project may have a significant effect on the environment, the location, acreage, species composition, and success criteria of proposed mitigation information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well assess the adequacy of the mitigation proposed.

**Evidence Impact would be significant:** Inadequate avoidance, minimization, and mitigation measures for impacts to these CEQA locally sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends that floristic, alliance- and/or association-based mapping and vegetation impact assessments be conducted at the Project site and neighboring vicinity. Alliance/association-based mapping should have no minimum mapping unit and reflect the outline of the polygon of spatially heterogenic vegetation. If the botanical vegetation mapping of the site yields polygons that do not conform to a known alliance/association, contact CDFW to discuss how this should be handled as new alliances must be vetted prior to use. The DEIR document should identify, map, and discuss the specific vegetation alliances within the Project Area following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (Survey Protocols) see: <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>.

**Mitigation Measure #2:** CDFW recommends avoiding any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio

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**Comment 4-1** sufficient to achieve a no-net loss for impacts to special status plant species and their  
**Continued** associated habitat. CDFW recommends following the Coastal Commission's Environmentally Sensitive Habitat Area ratio of 4:1 for impacts to the sensitive vegetation communities including some S4 and S5 habitats like found onsite due to cumulative loss of these vegetation communities along the Santa Barbara coast.

All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).

**Mitigation Measure #3:** Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in MCV2, ensuring one species or layer does not disproportionately dominate a site but conditions mimic the reference site and meets the alliance membership requirements.

CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.

**Comment 4-2** **Comment #2: Special Status Species Presence/Absence Surveys not conducted to inform Project alternatives or allow meaningful avoidance and mitigation measures. Reliance on pre-project surveys to detect special-status species presence**

**Issue:** Based on the information provided in the DEIR many special-status species are likely to occur in the project area. CDFW is not clear how Mitigation Measures BIO-3A- BIO-3E will mitigate impacts to special-status species. CDFW is concerned the following species were not adequately surveyed for, using species-specific protocols where available, to disclose presence/absence in the DEIR, including:

**California Species of Special Concern (SSC):** Globose dune beetle (*Coelus globosus*), Crotch bumblebee (*Bombus crotchii*), sandy beach tiger beetle (*Cicindela hirticollis gravida*), western snowy plover (*Charadrius nivosus*) western pond turtle, (*Emys marmorata*), California red-legged frog (*Rana draytoni*), tidewater goby (*Eucyclogobius newberryi*), monarch butterfly (*Danaus plexippus*), and coast patch-nosed snake (*Salvadora hexalepis virgultea*).

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**Comment 4-2** **CESA-listed:** Belding's savannah sparrow (*Passerculus sandwichensis alaudinus*), California least tern (*Sternula antillarum browni*).  
**Continued**

**CESA-fully-protected species (Fish and G. Code § 3511):** California brown pelican (*Pelecanus occidentalis californicus*), white-tailed Kite (*Elanus leucurus*), and California least tern (*Sternula antillarum browni*).

**Rare Plants:** black-flowered figwort (*Scrophularia atrata*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), southern tarplant (*Centromadia parryi* ssp. *australis*), Contra Costa goldfields (*Lasthenia conjugens*), Davidson's salt scale (*Atriplex serenana* var. *davidsonii*), Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*), Gambel's water cress (*Nasturtium gambelii*), white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*), Miles' milk-vetch (*Astragalus didymocarpus* var. *milesianus*), surf thistle (*Cirsium rhotophilum* – occurs in coastal sand dunes should include in survey efforts), red sand-verbena (*Abronia maritima*), and cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*).

For the potential presence of all special-status species Mitigation Measures BIO-3a- BIO-3E relies on a randomly timed pre-construction survey for detection and waiting for said species to leave the area before Project construction resumes. Impacts to burrows and occupied habitat should also be disclosed in the DEIR.

**Specific impact:** Project implementation includes staging and using heavy equipment resulting in noise/vibration/percussive waves within and adjacent to areas that potentially support special status species. These activities include increased ambient noise and vibration, night lighting, and other activities that may result in direct mortality, population declines, or local extirpation of special status fish, reptile, plant, and mammal species.

**Evidence impact would be significant:** Project activities, directly or through habitat modification, may result in direct mortality, reduced reproductive capacity, population declines, or local extirpation of SSC. CEQA provides protection not only for State and federally listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the City, (CEQA Guidelines, § 15065).

CEQA Guidelines §15070 and §15071 require the document to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, moving out of harm's way, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the entire Project footprint, need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

Absent the above requested information, the DEIR does not analyze impacts to special-status plants or animals, and the DEIR does not provide any alternatives discussion or any avoidance strategies to mitigate the loss of occupied habitat.

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**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** The CSLS should retain a qualified biologist(s) with experience surveying for or is familiar with the life history of each of the species mentioned above. The qualified biologist should conduct focused surveys for special status plants and animals in suitable habitat within the appropriate season to detect presence and disclose presence/absence in the DEIR. Positive detections of special status species and suitable habitat should be mapped and photographed and reported to the California Natural Diversity Database. The qualified biologist should provide a summary report of special status species surveys to CDFW.

Pursuant to the California Code of Regulations, title 14, section 650, the qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. Please visit CDFW's [Scientific Collection Permits](#) webpage for information (CDFW 2020d). A Lake and Streambed Alteration (LSA) Agreement may provide similar take or possession of species as described in the conditions of the agreement.

**Mitigation Measure #2:** CDFW recommends, a qualified entomologist familiar with the species behavior and life history should conduct surveys to determine the presence/absence of globose dune beetle and other special-status arthropods and disclose presence or absence in the DEIR. Surveys should be conducted during the appropriate season when the species is most likely to be detected. Survey results including negative findings should be submitted to CDFW prior to initiation of Project activities

**Mitigation Measure #3:** CDFW recommends avoiding any locations where species specific surveys determine special status species are present. This should be evaluated in the DEIR and any specific avoidance of occupied habitat should be discussed, or meaningful mitigation to mitigate the take of sensitive species as a result of the project, if avoidance is not feasible. Burrows and occupied habitat should be avoided along with the special-status plant or animal species found during species-specific surveys designed for maximum detection.

CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).

**Mitigation Measure #4:** CDFW recommends monitoring noise generated by the Project operations during construction and post-construction operations to ensure noise from the Project does not affect wildlife in the adjacent river habitat. The DEIR should set acceptable noise thresholds that would be part of a daily monitoring and reporting program to ensure impact to adjacent habitat is below a threshold that would have an adverse effect.

Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. Stationary noise sources (e.g., generators, pumps) at staging areas within 1,400 feet of sensitive receptors shall be shielded at the source by an enclosure, temporary sound walls, or acoustic blankets. Where

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feasible, sound walls or acoustic blankets shall have a height of no less than 8 feet, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts. Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, its engine should be shut off.

**Mitigation Measure #5:** Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC should be captured only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan should be submitted to the City prior to implementing any Project-related ground-disturbing activities and vegetation removal.

**Mitigation Measure #6:** If any special status species are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented. A formal report should be sent to CDFW within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

Comment 4-3

**Comment #3: Impacts to Bats**

**Issue:** The preliminary exit survey was sufficient to determine bat presence but is inadequate to determine year-round use and design avoidance, minimization, and mitigation strategies of off.

**Specific Impact:** Bats were detected during the exit survey conducted on July 29, 2001. The Bat Study Memo (Padre, 2022) states "it is believed that this roosting site is used all year long by this relatively small colony of big brown" without providing any data or year-round temperature measurements to justify this conclusion. The mitigation measure (MM-BIO-2) in the DEIR falls short of requiring specific year-round survey information be collected prior to Project implementation. MM-Bio-2 also falls short by not requiring any habitat mitigation or follow-up monitoring for mitigation roost use by bats. MM BIO-2 essentially states a bat exclusion plan shall be prepared and implemented prior to and during the 421-2 caisson demolition activities. The plan shall include confirmation surveys of either seasonal or ongoing bat use of the structure and recommendations regarding the timing for installation of preclusion netting at the caisson roost. This mitigation measure falls short of protecting bats occupying the Project. Exclusion without providing alternative roosting habitat is take of a roosting site, which is an impact. Exclusion without performing adequate surveys (see mitigation measure #2 below) can also result in death of bats.

**Why impact would occur:** Exit surveys on the Project site detected the presence of big brown bats (*Eptesicus fuscus*), Mexican free-tailed bats (*Tadarida brasiliensis*), and California myotis (*Myotis californicus*).

Bats are considered non-game mammals and are protected by state law from take and/or harassment (Fish and Game Code § 4150, CCR § 251.1). Several bat species are also considered Species of Special Concern (SSC), which meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines §15065). CDFW considers adverse impacts to a SSC, for the purposes of CEQA, to be significant without mitigation. Mitigation is

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**Comment 4-3** not just exclusion from maternity roosts, wintering sites, night roosts, mating roosts and foraging sites, but providing similarly functioning habitat to what is impacted.  
**Continued**

Lacking data from surveys to inform how bats utilize the site year-round. Impacts to bats due to the implementation of the Project are not fully disclosed in the DEIR. The DEIR relies on future surveys at an undisclosed time and duration to detect bat species present. No bat mitigation is proposed other than exclusion, which is not considered adequate mitigation for impacts to bat roosting habitat (roosting defined as winter hibernacula, summer, and maternity).

**Evidence Impact would be significant:** CEQA Guidelines §15070 and §15071 require the document to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, moving out of harm's way, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the entire Project footprint, need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

Absent the above requested information, the DEIR does not analyze impacts to bats, and the DEIR does not provide any alternatives discussion or any avoidance strategies to mitigate the loss of occupied bat habitat.

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** For bat species utilizing features of the Project for any roosting activity, the Project should provide as mitigation the same, species-specific roosting features to accommodate the return of roosting bats. CDFW considers the addition of specific roosting features to support continued use of bats in the area to be demolished, coupled with effectiveness monitoring over 5-years, as adequate mitigation. The new habitat should be monitored for 5 years to ensure the intended bats return and utilize the mitigation. Adaptive mitigation should be a component of any mitigation plan for bats. CDFW requests approval of any bat mitigation and relocation plan. This should be developed in a bat mitigation plan and should be approved by CDFW prior to Project initiation.

Additionally, prior to any exclusion of bats from the caissons, temporary or permanent roosting habitat, specific to the parameters of the particular bat species present, should be installed adjacent to the Project. Exclusion should be coupled with ensuring bats have suitable temporary habitat available nearby to move to, as well as monitoring the effectiveness of the exclusion.

**Mitigation Measure #2:** CDFW recommends bat surveys be conducted by a qualified bat specialist to determine baseline conditions within the Project and within a 500-foot buffer and analyze the potential significant effects of the proposed Project on the species (CEQA Guidelines §15125). CDFW recommends the DEIR include the use of acoustic recognition technology to maximize detection of bat species to minimize impacts to sensitive bat species. The DEIR should document the presence of any bats roosting in or near the bridge and include species specific mitigation measures to reduce impacts to below a level of significance.

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Comment 4-3  
 Continued

To avoid the direct loss of bats that could result from removal of trees or bridge structures, that may provide roosting habitat (winter hibernacula, summer, and maternity), the Department recommends the following steps are implemented:

- 1) Identify the species of bats present on the site by conducting appropriate surveys for winter roosting/hibernacula, summer roosting, and maternity roosting;
- 2) Determine how and when these species utilize the site and what specific habitat requirements are necessary (thermal gradients throughout the year, size of crevices, tree types, location of hibernacula/roost (e.g., height, aspect, etc.));
- 3) Avoid the areas being utilized by bats for hibernacula/roosting; if avoidance is not feasible, a bat specialist should design alternative habitat that is specific to the species of bat being displaced and develop a relocation plan in coordination with CDFW;
- 4) The bat specialist should document all demolition monitoring activities and prepare a summary report to the Lead Agency upon completion of tree/rock disturbance and/or building demolition activities. The Department requests copies of any reports prepared related to bat surveys (e.g., monitoring, demolition);
- 5) If confirmed occupied or formerly occupied bat roosting/hibernacula and foraging habitat is destroyed, habitat of comparable size, function and quality should be created or preserved and maintained in the new bridge, or for bats in trees, at a nearby suitable undisturbed area. The bat habitat (not bat houses) mitigation shall be determined by the bat specialist in consultation and approval by CDFW;
- 6) A monitoring plan should be prepared and submitted to CDFW and the Lead Agency. The monitoring plan should describe proposed mitigation habitat, and include performance standards for the use of replacement roosts/hibernacula by the displaced species, as well as provisions to prevent harassment, predation, and disease of relocated bats; and,
- 7) Annual reports detailing the success of roost replacement and bat relocation should be prepared and submitted to Lead Agency and the CDFW for five years following relocation or until performance standards are met, whichever period is longer.

Comment 4-4

**Comment #4: Impacts to Shorebirds**

**Issue:** CDFW is concerned that the Project could potentially impact California Endangered Species Act (CESA)-listed Belding's savannah sparrow (*Passerculus sandwichensis alaudinus*), California least tern (*Sternula antillarum browni*), Fully Protected California brown pelican (*Pelecanus occidentalis californicus*), and species of special concern western snowy plover (*Charadrius nivosus*), and White-tailed Kite (*Elanus leucurus*), through vegetation clearing, crushing, and construction disturbance in and adjacent to areas occupied by the above species.

**Specific Impact:** On-site surveys were not conducted, nor was specific information as to adjacent and nearby sites occupied by these shorebirds that could be affected by indirect impacts (e.g., noise, lighting, vibration, dust, visual disturbance).

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Comment 4-4  
Continued

**Why impact would occur:** Grading, vegetation removal, and other ground disturbances could crush and bury listed or sensitive plants and animals, resulting in direct mortality. The Project may also affect adjacent habitat by loud noises, lighting, increased human presence and activity, fugitive dust, and spreading invasive weeds, resulting in stress, displacement, and mortality of these species.

Site construction and operations may result in a substantial amount of noise, lighting, vibration, and visual disturbance through road use, equipment, and other project-related activities. Increase visual disturbance, from the current low-use baseline, is also a potential impact to listed species.

**Evidence Impact would be significant:** CEQA Guidelines (Section 15358(a)(2)) require discussion of potential indirect impacts of a proposed project. Indirect impacts, also referred to as secondary impacts, are impacts caused by a project that occur later in time or are farther removed in distance but are still reasonably foreseeable. The DEIR should include as assessment of this adjacent beach nesting, foraging, and riparian feature as well as existing culverts, to assess wildlife use of the feature and how the Project might indirectly affect the biological resources that use this general area.

**Recommended potentially feasible mitigation measure(s):**

**Mitigation Measure #1:** CDFW recommends the DEIR include a complete assessment, including focused surveys and data on (with a 500-foot buffer), adjacent to (up to 5000 feet), and nearby (~1 mile) foraging and nesting sites. This will allow CDFW to recommend avoidance and minimization measures specific to the species, timing, and use for birds that would be affected, directly or indirectly, by the Project. The DEIR should include as assessment of this adjacent beach nesting, foraging, and riparian feature as well as existing culverts, to assess wildlife use of the feature and how the Project, even temporarily during construction, might indirectly affect the biological resources that use this general area.

**Mitigation Measure #2:** The DEIR should include a map of all known adjacent nesting and foraging sites for the sensitive shorebirds mentioned above to help with indirect affect analysis.

**Mitigation Measure #3:** CDFW recommends Project construction be limited to outside of the breeding season (1 March – 30 September) to minimize effects on breeding.

**Mitigation Measure #4:** CDFW recommends the Project restrict use of equipment and lighting to hours least likely to disrupt wildlife (e.g., not at night or in early morning before 9am). Generators should not be used except for temporary use in emergencies. CDFW recommends use of noise suppression devices such as mufflers or enclosure for generators. Sounds generated from any means should be below the 55-60 dB range within 50 feet from the source.

**Mitigation Measure #5:** CDFW recommends pile driving not be used during construction of the Project. Alternative methods to construct Project features, that produce less noise and vibration, should be utilized if technically possible.

**Mitigation Measure #6:** Parking, driving, lay-down, stockpiling, and vehicle and equipment storage should be limited to previously compacted and developed areas. No off-road vehicle use should be permitted beyond the Project site and designated access routes. Disturbances to

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**Comment 4-4 Continued** | the adjacent native vegetation should be minimized. CDFW recommends a minimum 250-meter buffer between Project operations and listed species habitat.

**Mitigation Measure #7:** Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council), should be prevented from establishing in temporarily disturbed areas, either by hand-weeding or selective application of herbicide. A weed monitoring program with regular inspection, mapping, and removal should be implemented.

**Marine Region Comments:**

**Comment 4-5** | **Grunion Protection Plan:** CDFW appreciates the DEIR's consideration of potential Project impacts to spawning grunion and inclusion of MM BIO-4: Grunion Spawning Avoidance. CDFW agrees that a grunion protection plan should be developed prior to Project implementation and recommends that the State Lands Commission coordinate with CDFW while developing the grunion protection plan. More information about grunion and the expected grunion run schedule can be found on CDFW's website: <https://wildlife.ca.gov/Fishing/Ocean/Grunion>.

**General Comments:**

**Comment 4-6** | **Long-term Management of Mitigation Lands.** For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

**Comment 4-7** | **Translocation/Salvage of Plants and Animal Species.** Translocation and transplantation is the process of moving an individual from the Project site and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.

**Comment 4-8** | **Moving out of Harm's Way.** The proposed Project is anticipated to result in clearing of natural habitats that support many species of indigenous wildlife. To avoid direct mortality, we recommend that a qualified biological monitor approved by CDFW be on-site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss. If the project requires species to be removed, disturbed, or otherwise handled, we recommend that the DEIR clearly identify that the designated entity shall obtain all appropriate state and federal permits.

**Comment 4-9** | **Revegetation/Restoration Plan.** Plans for restoration and re-vegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration

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**Comment 4-9** techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

**Continued**

- a) CDFW recommends that local on-site propagules from the Project area and nearby vicinity be collected and used for restoration purposes. On-site seed collection should be initiated in the near future to accumulate sufficient propagule material for subsequent use in future years. On-site vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate.
- b) Restoration objectives should include providing special habitat elements where feasible to benefit key wildlife species. These physical and biological features can include (for example) retention of woody material, logs, snags, rocks, and brush piles.

#### CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the CSLS in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Kelly Schmoker, Senior Environmental Scientist (Specialist), at (626) 335-9092, or by email at [Kelly.Schmoker@wildlife.ca.gov](mailto:Kelly.Schmoker@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
B6E58CFE24724F5...

Erinn Wilson-Olgin  
Environmental Program Manager I  
South Coast Region

ec: CDFW

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### References

- [CDFW] California Department of Fish and Wildlife. 2022. Preliminary Descriptions of the Terrestrial Natural Communities of California. <  
<file:///C:/Users/Kschmoker/Downloads/Holland%201986%20Preliminary%20Descriptions%20of%20Terrestrial%20Natural%20Communities.OCRed.pdf.pdf>>
- Francis, C. D., C. P. Ortega, and A. Cruz. 2009. Noise pollution changes avian communities and species interactions. *Current biology*: CB 19: 1415–1419.
- Gillam, E. 2007. Eavesdropping by bats on the feeding buzzes of conspecifics. *Canadian Journal of Zoology* 85: 795–801.
- Kight, C. R., and J. P. Swaddle. 2011. How and why environmental noise impacts animals: an integrative, mechanistic review. *Ecology Letters* 14: 1052–1061.
- Orloff, S. 2007. Migratory Movements of California tiger salamander in upland habitat – a five-year study (Pittsburg, California). Ibis Environmental, Inc., prepared for Bailey Estates LLC, May 2008. 47 pp. + appendices.
- Patricelli, G., and J. Blickey. 2006. Avian Communication in Urban Noise: Causes and Consequences of Vocal Adjustment. *The Auk* 123: 639–649.
- Quinn, J., M. Whittingham, S. Butler, and W. Cresswell. 2006. Noise, predation risk compensation and vigilance in the Chaffinch *Fringilla coelebs*. *Journal of Avian Biology* 37: 601–608.
- Rabin, L., R. Coss, and D. Owings. 2006. The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). *Biological Conservation - BIOL CONSERV* 131: 410–420.
- Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2008. *A manual of California Vegetation*, 2nd ed. ISBN 978-0-943460-49-9.
- Slabbekoorn, H., and E. A. P. Ripmeester. 2008. Birdsong and anthropogenic noise: implications and applications for conservation. *Molecular Ecology* 17: 72–83.
- Sun, J., and P. Narins. 2005. Anthropogenic sounds differentially affect amphibian call rate. *Biological Conservation* 121: 419–427.
- Thorp, Robbin W., Horning Jr, Donald S., and Dunning, Lorry L. 1983. Bumble Bees and Cuckoo Bumble Bees of California. *Bulletin of the California Insect Survey* 23.
- USFWS. 1981. *Ecological Characterization of the Central and Northern California Coastal Region: pt.1. Regional characterization. pt.2. Species.* Department of the Interior, U.S. Fish and Wildlife Service.

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**CDFW recommends the following language to be incorporated into a future environmental document for the Project.**

Comment 4-10 (Includes Entire Table)

<b>Biological Resources</b>			
	<b>Mitigation Measure</b>	<b>Timing</b>	<b>Responsible Party</b>
<b>MM-Bio-1-CEQA-</b>	CDFW recommends that floristic, alliance- and/or association-based mapping and vegetation impact assessments be conducted at the Project site and neighboring vicinity. Alliance/association-based mapping should have no minimum mapping unit and reflect the outline of the polygon of spatially heterogenic vegetation. If the botanical vegetation mapping of the site yields polygons that do not conform to a known alliance/association, contact CDFW to discuss how this should be handled as new alliances must be vetted prior to use. The DEIR document should identify, map, and discuss the specific vegetation alliances within the Project Area following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (Survey Protocols) see: <a href="https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities">https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities</a> .	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-2-CEQA-</b>	CDFW recommends avoiding any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. CDFW recommends following the Coastal Commission's Environmentally Sensitive Habitat Area ratio of 4:1 for impacts to the sensitive vegetation communities including some S4 and S5 habitats like found onsite due to cumulative loss of these vegetation communities along the Santa Barbara coast.  All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-3-CEQA-</b>	Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-	Prior to Finalizing the EIR	CSLS

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	<p>free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in MCV2, ensuring one species or layer does not disproportionately dominate a site but conditions mimic the reference site and meets the alliance membership requirements.</p> <p>CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.</p>		
<p><b>MM-Bio-4-CEQA-</b></p>	<p>The CSLS should retain a qualified biologist(s) with experience surveying for or is familiar with the life history of each of the species mentioned above. The qualified biologist should conduct focused surveys for special status plants and animals in suitable habitat within the appropriate season to detect presence and disclose presence/absence in the DEIR. Positive detections of special status species and suitable habitat should be mapped and photographed and reported to the California Natural Diversity Database. The qualified biologist should provide a summary report of special status species surveys to CDFW.</p> <p>Pursuant to the California Code of Regulations, title 14, section 650, the qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2020d). A Lake and Streambed Alteration (LSA) Agreement may provide similar take or possession of species as described in the conditions of the agreement.</p>	<p>Prior to Finalizing the EIR</p>	<p>CSLS</p>

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<p><b>MM-Bio-5-CEQA-</b></p>	<p>CDFW recommends, a qualified entomologist familiar with the species behavior and life history should conduct surveys to determine the presence/absence of globose dune beetle and other special-status arthropods and disclose presence or absence in the DEIR. Surveys should be conducted during the appropriate season when the species is most likely to be detected. Survey results including negative findings should be submitted to CDFW prior to initiation of Project activities</p>	<p>Prior to Finalizing the EIR</p>	<p>CSLS</p>
<p><b>MM-Bio-6-CEQA-</b></p>	<p>CDFW recommends avoiding any locations where species specific surveys determine special status species are present. This should be evaluated in the DEIR and any specific avoidance of occupied habitat should be discussed, or meaningful mitigation to mitigate the take of sensitive species as a result of the project, if avoidance is not feasible.</p> <p>CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish &amp; G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).</p>	<p>Prior to Finalizing the EIR</p>	<p>CSLS</p>
<p><b>MM-Bio-7-CEQA-</b></p>	<p>CDFW recommends monitoring noise generated by the Project operations during construction and post-construction operations to ensure noise from the Project does not affect wildlife in the adjacent river habitat. The DEIR should set acceptable noise thresholds that would be part of a daily monitoring and reporting program to ensure impact to adjacent habitat is below a threshold that would have an adverse effect.</p> <p>Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. Stationary noise sources (e.g., generators, pumps) at staging areas within 1,400 feet of sensitive receptors shall be shielded at the source by an enclosure, temporary sound walls, or acoustic blankets. Where feasible, sound walls or acoustic blankets shall have a height of no less than 8 feet, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts. Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, its engine should be shut off.</p>	<p>Prior to Finalizing the EIR</p>	<p>CSLS</p>

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<b>MM-Bio-8-CEQA-</b>	Wildlife should be protected, allowed to move away on its own (non- invasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC should be captured only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan should be submitted to the City prior to implementing any Project-related ground- disturbing activities and vegetation removal.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-9-CEQA-</b>	If any special status species are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented. A formal report should be sent to CDFW within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-10-CEQA-</b>	For bat species utilizing features of the Project for any roosting activity, the Project should provide as mitigation the same, species-specific roosting features to accommodate the return of roosting bats. CDFW considers the addition of specific roosting features to support continued use of bats in the area to be demolished, coupled with effectiveness monitoring over 5-years, as adequate mitigation. The new habitat should be monitored for 5 years to ensure the intended bats return and utilize the mitigation. Adaptive mitigation should be a component of any mitigation plan for bats. CDFW requests approval of any bat mitigation and relocation plan. This should be developed in a bat mitigation plan and should be approved by CDFW prior to Project initiation.  Additionally, prior to any exclusion of bats from the caissons, temporary or permanent roosting habitat, specific to the parameters of the particular bat species present, should be installed adjacent to the Project. Exclusion should be coupled with ensuring bats have suitable temporary habitat available nearby to move to, as well as monitoring the effectiveness of the exclusion.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-11-CEQA-</b>	CDFW recommends bat surveys be conducted by a qualified bat specialist to determine baseline conditions within the Project and within a 500-foot buffer and analyze the potential significant effects of the proposed Project on the species (CEQA Guidelines §15125). CDFW recommends the DEIR include the use of acoustic recognition technology to maximize detection of bat species to minimize impacts to sensitive bat species. The DEIR should document the	Prior to Finalizing the EIR	CSLS

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	<p>presence of any bats roosting in or near the bridge and include species specific mitigation measures to reduce impacts to below a level of significance.</p> <p>To avoid the direct loss of bats that could result from removal of trees or bridge structures, that may provide roosting habitat (winter hibernacula, summer, and maternity), the Department recommends the following steps are implemented:</p> <ol style="list-style-type: none"> <li>1) Identify the species of bats present on the site by conducting appropriate surveys for winter roosting/hibernacula, summer roosting, and maternity roosting;</li> <li>2) Determine how and when these species utilize the site and what specific habitat requirements are necessary [thermal gradients throughout the year, size of crevices, tree types, location of hibernacula/roost (e.g., height, aspect, etc.)];</li> <li>3) Avoid the areas being utilized by bats for hibernacula/roosting; if avoidance is not feasible, a bat specialist should design alternative habitat that is specific to the species of bat being displaced and develop a relocation plan in coordination with CDFW;</li> <li>4) The bat specialist should document all demolition monitoring activities and prepare a summary report to the Lead Agency upon completion of tree/rock disturbance and/or building demolition activities. The Department requests copies of any reports prepared related to bat surveys (e.g., monitoring, demolition);</li> <li>5) If confirmed occupied or formerly occupied bat roosting/hibernacula and foraging habitat is destroyed, habitat of comparable size, function and quality should be created or preserved and maintained in the new bridge, or for bats in trees, at a nearby suitable undisturbed area. The bat habitat (not bat houses) mitigation shall be determined by the bat specialist in consultation and approval by CDFW;</li> <li>6) A monitoring plan should be prepared and submitted to CDFW and the Lead Agency. The monitoring plan should describe proposed mitigation habitat, and include performance standards for the use of replacement roosts/hibernacula by the displaced species, as well as provisions to prevent harassment, predation, and disease of relocated bats; and,</li> </ol>		
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	7) Annual reports detailing the success of roost replacement and bat relocation should be prepared and submitted to Lead Agency and the CDFW for five years following relocation or until performance standards are met, whichever period is longer.		
<b>MM-Bio-12-CEQA-</b>	CDFW recommends the DEIR include a complete assessment, including focused surveys and data on (with a 500-foot buffer), adjacent to (up to 5000 feet), and nearby (~1 mile) foraging and nesting sites. This will allow CDFW to recommend avoidance and minimization measures specific to the species, timing, and use for birds that would be affected, directly or indirectly, by the Project. The DEIR should include an assessment of this adjacent beach nesting, foraging, and riparian feature as well as existing culverts, to assess wildlife use of the feature and how the Project, even temporarily during construction, might indirectly affect the biological resources that use this general area.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-13-CEQA-</b>	The DEIR should include a map of all known adjacent nesting and foraging sites for the sensitive shorebirds mentioned above to help with indirect affect analysis.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-14-CEQA-</b>	CDFW recommends Project construction be limited to outside of the breeding season (1 March – 30 September) to minimize effects on breeding.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-15-CEQA-</b>	CDFW recommends pile driving not be used during construction of the Project. Alternative methods to construct Project features, that produce less noise and vibration, should be utilized if technically possible.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-16-CEQA-</b>	Parking, driving, lay-down, stockpiling, and vehicle and equipment storage should be limited to previously compacted and developed areas. No off-road vehicle use should be permitted beyond the Project site and designated access routes. Disturbances to the adjacent native vegetation should be minimized. CDFW recommends a minimum 250-meter buffer between Project operations and listed species habitat.	Prior to Finalizing the EIR	CSLS
<b>MM-Bio-17-CEQA-</b>	Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council), should be prevented from establishing in temporarily disturbed areas, either by hand-weeding or selective application of herbicide. A weed monitoring program with regular inspection, mapping, and removal should be implemented.	Prior to Finalizing the EIR	CSLS

**RESPONSE TO COMMENT SET 4: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

4-1 The use of the vegetation classification system provided in the Manual of California Vegetation would not have any effect on the significance of Project-related vegetation removal since all native vegetation within or adjacent to the Project site is considered environmentally sensitive habitat (ESHA), including coastal bluff scrub, southern coastal salt marsh, southern foredunes, coastal brackish marsh, cattail marsh, coyote brush scrub, California sagebrush scrub, and willow riparian forest. Project-related impacts to ESHA are considered significant and mitigation is provided in the Draft EIR (see Impact BIO-9). Impacts to special-status species are identified based on known occurrence in the Project area and generalized habitat requirements, use of the vegetation classification system provided in the Manual of California Vegetation would not change the impact analysis with regard to special-status species. Mitigation measure MM BIO-6 provided in the Draft EIR to address loss of ESHA includes preparation of a coastal bluff scrub replacement plan which will include success criteria.

4-2 Adequate literature research and field surveys were conducted to determine the presence and potential impacts to special-status species (see Table 4.3-5). Most of the species listed in this comment do not occur in the Project area. Note that there are no special-status species in the Project area that reside in burrows. Handling and relocation of wildlife would be avoided (see MM BIO-3d), but if required under unusual circumstances would be conducted by a biologist with the appropriate permits. Mitigation measures MM BIO-3a through MM BIO-3e are adequate to avoid/minimize impacts to special-status wildlife species known from the immediate Project area. Further, a letter previously received from the U.S. Fish and Wildlife Service (dated March 10, 2009) during permitting of the Santa Barbara Channel Hazards Removal Program, which occurs in the same Project location, has provided concurrence that removal of derelict oil and gas structures in this area is not likely to adversely affect California least tern, brown pelican, light-footed clapper rail, western snowy plover, tidewater goby, southern sea otter, and California red-legged frog or their critical habitat.

Noise monitoring was not included as mitigation, since affected species (primarily shorebirds) are anticipated to leave the work area to forage in abundant alternative shoreline habitat in the Project area. Noise blankets were not considered because there are no noise sensitive special-status species (excluding shorebirds discussed above) adjacent to work areas, there is no practical location to install them, and they would interfere with local wildlife movements and beach users.

In the unlikely event, mitigation measure MM BIO-3d includes stopping work and notifying CSLC if special-status species are inadvertently injured.

- 4-3 The bat survey results indicate the 421-1 caisson provides crevice habitat used by up to three different bat species, all of which are common in the region and not vulnerable to extirpation. These species do not meet the definition of rare, threatened, or endangered under Section 15380 of the State CEQA Guidelines, such that loss of the roost would not typically be considered a significant impact under CEQA. However, the Draft EIR provides mitigation measure MM BIO-2 to determine the seasonal use of the crevice habitat and provide preclusion netting to avoid bat mortality. The 421-1 caisson is unlikely to be a maternity roost due to the large diurnal temperature fluctuations associated with contact with cold ocean water alternating with solar heating of the steel sheet pile forming the crevices. Therefore, it is anticipated that alternative roosts are used by the affected bat populations and the provision of replacement bat habitat is not necessary and unlikely to be used by these bats.
- 4-4 The Project does not involve large-scale vegetation clearing, only the removal of 0.3 acres of coastal bluff scrub along the existing access roadway. This habitat is not used by shorebirds or special-status bird species. The Project site does not provide nesting habitat for any shorebirds or special-status bird species. In any case, implementation of mitigation measure MM BIO-3d would prevent impacts to bird and other wildlife species that may be present in work areas. As stated on page 4-71 of the Draft EIR, Project impacts to shorebirds would be limited to precluding post-breeding foraging on a small area of beach (about 500 feet) which would not adversely affect local bird populations.
- 4-5 A grunion protection plan will be prepared and implemented under mitigation measure MM BIO-4, if beach access by heavy equipment is required during grunion spawning season.
- 4-6 The Project does not include nor require management of mitigation lands.
- 4-7 Translocation or salvage of plants or animals is not proposed.
- 4-8 Moving wildlife out of harms' way is not anticipated to be required based on the habitats to be disturbed. However, mitigation measure MM BIO-3d includes provisions to avoid mortality to wildlife if they are encountered.
- 4-9 The coastal wetlands mitigation plan and coastal bluff scrub replacement plan required by mitigation measures MM BIO-5a and MM BIO-6a will be prepared by a qualified restoration specialist with experience in restoration of southern California native plant communities. These plans will include success criteria and monitoring as requested in this comment.
- 4-10 Response 4-10 applies to the entire table provided in the letter. The Draft EIR provides adequate mitigation measures to address identified impacts. No additional measures are required.

**COMMENT SET 5: SURFRIDER FOUNDATION**



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March 4, 2022

*Via Electronic Mail Only*

Eric Gillies  
Environmental Program Manager I  
California State Lands Commission  
100 Howe Avenue, Suite 100-South  
Sacramento, CA 95825-8202  
E: [CEQA.comments@slc.ca.gov](mailto:CEQA.comments@slc.ca.gov)  
P: (916) 574-1897

Re: PRC 421 Decommissioning Project DEIR Comments

Dear Mr. Gillies and State Lands Commission Staff:

Shute, Mihaly & Weinberger submits this comment letter on behalf of the Santa Barbara Chapter of the Surfrider Foundation (“Surfrider”) regarding the State Lands Commission’s Draft Environmental Impact Report (“DEIR”) for the PRC 421 Decommissioning Project (“Project”). Surfrider’s mission is the protection and enjoyment of ocean, waves, and beaches for all people through a powerful activist network. It has worked for decades to protect public resources in and around the City of Goleta (“City”), including access to the sandy beach, Goleta Beach Park, and recreational amenities.

Surfrider appreciates the care the Commission has taken in preparing the DEIR. We welcome the removal of harmful legacy oil and gas infrastructure from the Goleta shoreline, restoring the beach to a natural state, and enhancing public enjoyment of the coast. The public, however, has limited opportunities to experience those benefits given the dearth of vertical access to Haskell’s Beach.

In Surfrider’s July 9, 2021 comments on the Notice of Preparation (“NOP”),<sup>1</sup> we urged the Commission to consider repurposing the upland assets of PRC 421, including

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<sup>1</sup> Surfrider’s NOP comments are included as Attachment A and are incorporated in this letter by reference.

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the access roadway, for public beach access and parking. Currently, the public can only access the beach at two points: the Bacara Resort property trail and trails through the Santa Barbara Shores Park. *See* General Plan Fig. 3-1. Use of the Bacara trail is severely constrained by limited parking spaces, while the Santa Barbara Shores Park provides parking nearly three quarters of a mile from the actual beach access. As such, there is an immediate need for additional safe and convenient public beach access.

**Comment 5-1** Surfrider is disappointed to see that the Project as described in the DEIR does not incorporate provisions for new public access, and that the DEIR does not at least consider an alternative that would repurpose the existing access road for public beach access and parking. Instead, the DEIR merely mentions possible future conditions along the vertical access road, without providing any analysis of those options. Particularly given the foreseeable decommissioning of the adjacent Ellwood Onshore Facility (“EOF”), the Commission must meaningfully consider how the PRC 421 roadway and infrastructure could contribute to future public access. The Commission and responsible agencies cannot wait for some unidentified future trigger to analyze the site’s public access potential.

**I. Vertical public access is consistent with Project objectives.**

**Comment 5-2** In response to Surfrider’s NOP comments, the Commission stated that “decommissioning of the access roadway is required to accomplish the Component 2 Project objectives.” DEIR Appendix A at A-10. But the record discloses that the Project objectives can be met while also enhancing vertical public access. Specifically, the Project objectives include decommissioning the piers, caissons, wells “and other infrastructure, including the pipelines within the access roadway . . . and the access roadway and supporting rock revetment.” In addition, the Project aims to “[r]estore the beach area to conditions . . . appropriate for safe public use.” DEIR at 1-6. The DEIR proposes to achieve these objectives through two Project Components. Component 1 would remove pier and caisson structures and flush and isolate pipelines back to their connections at the EOF. DEIR at ES-3. Component 2 would excavate and remove the pipelines to the 12th tee of the Sandpiper Golf Course (i.e., the southern terminus of the vertical access road), remove the revetment and seawall supporting the horizontal access road,<sup>2</sup> restore the access road to a natural grade. *Id.*

**Comment 5-3** Because some elements of Component 2 are not yet funded, however, the Commission analyzed a Single Component Abandonment Alternative, completely

<sup>2</sup> Surfrider strongly supports removal of the revetment and seawall as a strong coastal management option in the face of sea level rise.

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**Comment 5-3**  
**Continued** eliminating Component 2. DEIR at ES-6. This analysis revealed that Project objectives would still be met without completing Component 2, let alone decommissioning the vertical access road. DEIR at ES-7.

**Comment 5-4** Further, even if the Commission proceeds with Component 2, the DEIR leaves the fate of the access road undetermined and unclear. Component 2 expressly plans for removal of the “rock base from the road” where it stretches along the beach, following removal of the supporting rock revetment and wooden sea wall. *See* DEIR at 2-33 & Fig. ES-1 Project Overview Map. However, it does not decide the fate of that portion of the road between the 12th tee of the golf course and the EOF. DEIR at 2-34. Once contaminated materials and soil are removed, the Project will have successfully eliminated the public safety and environmental threats of the PRC 421 legacy infrastructure, fulfilling the Project Objectives. *See* DEIR at ES-4. We see no reason, and the Commission provides none, why Component 2 cannot be completed alongside additional efforts to create public beach access. In fact, Component 2 may conclude by *repairing* the access roadway through the golf course. DEIR at 2-34. Given that the Commission anticipates some future use of or changes to the vertical accessway, analysis of a Project alternative which provides parking in addition and public access would supplement the Project Components, not conflict with them.

**II. Where, as here, adequate access does not exist, the Coastal Act requires projects to provide new public access from the nearest public road to the shoreline.**

**Comment 5-5** As Surfrider explained in its NOP comments, the Coastal Act *requires* the Commission and responsible agencies to provide for new vertical public access opportunities.<sup>3</sup> In particular, Public Resources Code section 30212 mandates that “[p]ublic access from the nearest public roadway to the shoreline and along the coast *shall be provided* in new development projects,” except in limited circumstances not relevant here. Pub. Resources Code § 30212(a) (emphasis added).<sup>4</sup> Additionally, “[w]herever appropriate and feasible, public facilities, including parking areas or facilities, *shall be* distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.”

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<sup>3</sup> As noted in the DEIR, the “California Coastal Commission is responsible for issuance of a coastal development permit required on behalf of the Project for all components (since all are within the coastal zone).” DEIR Appendix A at A-10 (response 6-3).

<sup>4</sup> Unless otherwise noted, all statutory citations are to the Public Resources Code.

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**Comment 5-5** § 30212.5 (emphasis added); *see also* § 30223 (“Upland areas necessary to support  
**Continued** coastal recreational uses shall be reserved for such uses, where feasible.”).

The Commission incorrectly claims that the Coastal Act’s access obligations do not apply here because the Project is not “new development.” DEIR Appendix A at A-10 (response 6-4). But the Project *is new development* under the Coastal Act. Public Resources Code section 30212 defines “new development” in exclusionary terms. § 30212; *Whaler’s Village Club v. California Coastal Com.* (1985) 173 Cal.App.3d 240, 258; *Georgia-Pacific Corp. v. California Coastal Com.* (1982) 132 Cal.App.3d 678, 698. Any “projects not reached by the exclusionary definitions of section 30212 subdivision (b) are ‘new developments’” *Whaler’s Village Club*, 173 Cal.App.3d at 258 (“When statutes express certain exceptions to a general rule, other exceptions are not to be implied or presumed”; *accord Georgia-Pacific Corp.*, 132 Cal.App.3d at 698. And, critically, the Project here does not fit any of the exclusionary definitions of section 30212(b).

The Project does not involve the replacement of any structure destroyed by a disaster (§ 30212(b)(1)); the Project does not involve the demolition and reconstruction of a single-family residence (§ 30212(b)(2)); the Project does not involve improvements to a structure that do not change the intensity of its use (§ 30212(b)(3)); the Project does not involve the reconstruction or repair of a seawall (§ 30212(b)(4)); and the Project does not involve a repair or maintenance activity under section 30610 (§ 30212(b)(5)). Rather, the Project includes a suite of decommissioning activities that will remove existing oil and gas infrastructure, change the condition of the bluff to a more natural state, and, in so doing, change the intensity of use of the beach. Accordingly, the Project is a “new development project” for the purposes of section 30212. *Georgia-Pacific Corp.*, 132 Cal.App.3d at 698 (new project that meets the definition of “development” and that does not fall within the exceptions of section 30212(b) is “new development”); *see also* § 30106 (“Development” includes any “change in the density or intensity of use of land;” any “change in the intensity of use of water, or of access thereto;” and the “demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility.”)<sup>5, 6</sup>

<sup>5</sup> “As used in this section, “structure” includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.” § 30106 (emphasis added).

<sup>6</sup> In every other context, the DEIR treats the Project as “new development.” *See, e.g.*, DEIR at 4-112 (citing as relevant Goleta General Plan policies governing “new development”); *id.* at 4-134 (same); *id.* at 4-146 (same); *id.* at 4-182 (same).

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**Comment 5-6** The DEIR also responds that the Project will not preclude existing public access during Project activities. DEIR Appendix A at A-10. But that is not the State’s only obligation here. Section 30212 establishes a requirement to provide *new or increased* public access. *See* § 30212. This requirement “is mandatory” and provides for *both* vertical and lateral access. *Grupe v. California Coastal Com.* (1985) 166 Cal.App.3d 148, 161; *see also id.* at 170 (“[T]he Regional Commission would be derelict in its duty under section 30212 if it did not at least provide the possibility of future public access where appropriate when approving ‘new development projects.’”). Accordingly, while the Commission’s efforts to minimize impacts to lateral beach access during Project operations and to increase lateral beach access upon completion are laudable and much needed, such efforts on their own do not fulfill the Coastal Act’s public access mandate. The final EIR must consider how the Commission and responsible agencies could provide public access to Haskell’s Beach.

### III. City plans clearly envision vertical public access at the Project site.

**Comment 5-7** In addition, and as explained in Surfrider’s NOP comments, committing to a decommissioning program that could foreseeably result in the elimination of the access roadway without analyzing the roadway’s value for public beach access would run counter to the City’s long-documented plans for the site. The DEIR claims the Project is consistent with the City’s General Plan because it will improve lateral beach access and will not negatively impact any existing vertical accessways. DEIR at 4-167 – 4-168. But in so doing, the DEIR disregards key General Plan policies designed to add *new* vertical access, including policies that specifically identify the Project site and access road for such access.

For example, the Open Space Element of the City’s General Plan directs the City to “provide for expanded and enhanced public vertical access to Goleta’s shoreline” by “establishing new vertical access opportunities at key locations,” including the Project site. General Plan Policies OS 2 & OS 2.2; *see also* General Plan Fig. 3.1; General Plan Fig. 2.2 (identifying the Sandpiper Golf Course for reference). The Open Space Element expressly identifies the PRC 421 access road as one of the few “planned vertical accessways” that will allow the City to facilitate “increased opportunities for public enjoyment of [the] beach.” General Plan Policy OS 2.2 (citing General Plan Fig. 3.1); General Plan Fig. 3.1; *see also* General Plan Fig. 2.2 (identifying the Sandpiper Golf Course for reference).

Similarly, the Land Use Element anticipates the opportunity for new vertical public access upon decommissioning of oil and gas infrastructure. Land Use Policy LU 9.2 provides that the EOF shall be repurposed for coastal-dependent and coastal-related

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**Comment 5-7** recreational uses, and shall include “[a]dequate onsite parking.” General Plan Policy LU  
**Continued** 9.2(d). Additionally, Policy LU 9.3(e) envisions lateral bluff trails at the Sandpiper Golf Course that “transition down the bluff to the SL 421 access road.”

The DEIR explains how the Project largely aligns with the City’s plan for “proper abandonment” of State Lease 421, the piers and the riprap seawall, and subsequent site restoration. DEIR Table 4.10-1. The DEIR also states that this Project intends to partially fulfill the decommissioning requirements that the City has set out for the adjacent EOF. DEIR at 4-165. However, the DEIR does not provide a clear plan for the vertical accessway, much less analyze how those plans might comport with the City’s longstanding land use plans.

While removal of the legacy oil and gas infrastructure is important to meet City goals for safe public enjoyment of the coast, the access road, which has long been identified as a potential future accessway, must be preserved and analyzed for its public access potential.

**IV. Short-term Ellwood Onshore Facility operations should not foreclose public access priorities.**

**Comment 5-8** The Commission also stated, in response to Surfrider’s NOP comments, that the roadway cannot be repurposed for public access because it passes through the still-operational EOF. DEIR Appendix A at A-10. This is short-sighted. The limited operations at the EOF are slated to be discontinued in the next 18 months. *See* Ellwood/South Ellwood Decommissioning Project Update, State Lands Commission, December 8, 2021, slides 6-7.<sup>7</sup> Such a short-term impediment should not foreclose the consideration of vertical public access that would provide public benefit for decades to come. The fact that the City will so soon begin a process to repurpose the adjacent EOF site to enhance coastal recreation necessitates that the Commission consider vertical access opportunities in the present Project. *See, e.g.*, General Plan Policy LU 9.2(d).

The DEIR states that the timing of decommissioning and final disposition of Platform Holly is “currently uncertain.” DEIR at 3-5. Although this may be true of the overall project timeline, EOF operations will be shut down following the plugging and abandonment of the 32 wells at Platform Holly in early 2023. Ellwood/South Ellwood

<sup>7</sup> This presentation is available at [https://slcprdwordpressstorage.blob.core.windows.net/wordpressdata/2021/12/12-8-21\\_HollyTownHallPresentation\\_webacc.pdf](https://slcprdwordpressstorage.blob.core.windows.net/wordpressdata/2021/12/12-8-21_HollyTownHallPresentation_webacc.pdf)

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**Comment 5-8** Decommissioning Project Update, State Lands Commission, December 8, 2021, slides 6-  
**Continued** 7. This means that decommissioning of the EOF facility will likely begin within the  
Project timeline.

Upon decommissioning of the EOF, the City plans to repurpose the site to enhance public recreation in the area. General Plan Policy LU 10.2. The City has identified the EOF area as a Key Pacific Shoreline Site, which “shall be [used for] coastal-dependent and coastal-related recreational uses.” General Plan Policy LU 9.2(d). It further mandates that “[a]dequate onsite parking shall be provided” to support this recreational use. *Id.* Because the transformation of the EOF property for coastal recreation use is imminent, and includes the addition of public parking, the Commission cannot rely on EOF operations as a barrier to considering new vertical beach access at the PRC 421 site.

#### V. Conclusion

**Comment 5-9** The Project described in the DEIR falls short of providing the much needed vertical beach access and parking that the City of Goleta has historically envisioned for the Project site. Surfrider respectfully requests that the final EIR for this Project be revised to consider the potential for public access and parking using decommissioned PRC 421 infrastructure. At a minimum, the EIR should explicitly address how the access roadway could be preserved for future public access.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Andrew Miller

Attachments: A: Surfrider’s July 9, 2021 Comments on the NOP

cc: Via E-Mail  
Bob Keats, Surfrider Foundation  
Mark Morey, Surfrider Foundation  
Mandy Sackett, Surfrider Foundation  
Angela Howe, Surfrider Foundation

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Anne Wells, Planning Manager, Advance Planning Division, City of Goleta  
Steve Hudson, California Coastal Commission  
California Coastal Commission South Central Coast District

1474929.8

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# **ATTACHMENT A**

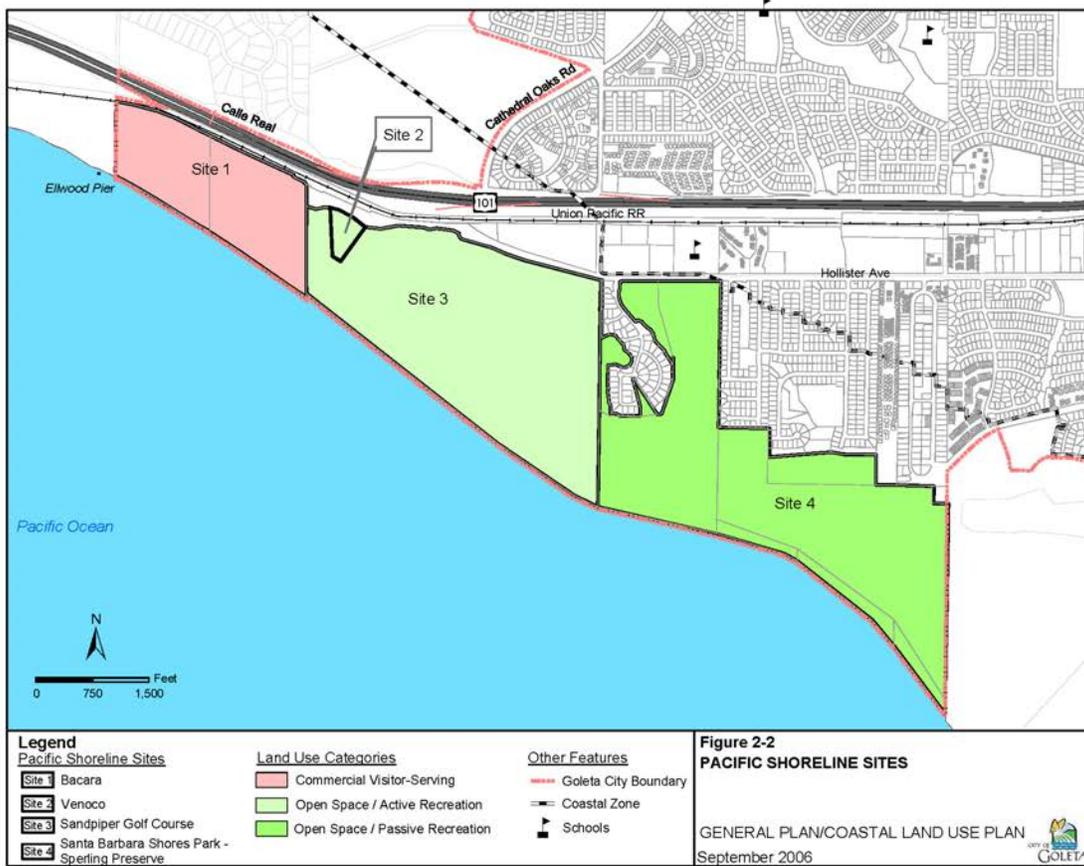
## **Original NOP Comment Letter Dated July 9, 2021**

**A copy of this document can be reviewed online** within the DEIR at <https://www.slc.ca.gov/ceqa/prc-421-decommissioning-project/>

**ATTACHMENT A - City of Goleta  
General Plan/Coastal Land Use Plan:  
Chapter 2, Land Use Element**

A copy of this document can be reviewed online at  
[www.cityofgoleta.org/city-hall/planning-and-environmental-review/general-plan](http://www.cityofgoleta.org/city-hall/planning-and-environmental-review/general-plan)

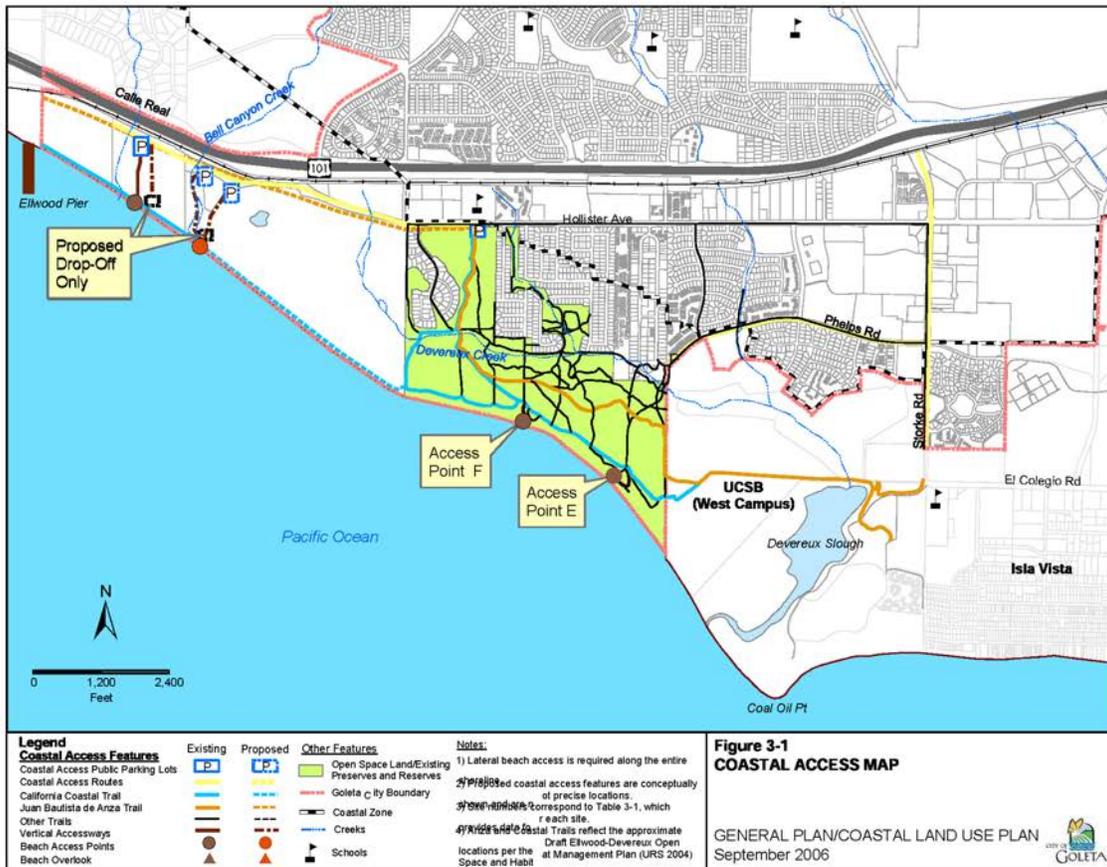
**ATTACHMENT B: City of Goleta  
General Plan Figure 2.2**



**ATTACHMENT C - City of Goleta  
General Plan/Coastal Land Use Plan:  
Chapter 3.0, Open Space, Recreation,  
and Coastal Access (OS)**

A copy of this document can be reviewed online at  
[www.cityofgoleta.org/city-hall/planning-and-environmental-review/general-plan](http://www.cityofgoleta.org/city-hall/planning-and-environmental-review/general-plan)

**ATTACHMENT D: City of Goleta  
General Plan Figure 3.1**



**ATTACHMENT E: City Council  
Resolution No. 15-55, Approving the  
City of Goleta Coastal Hazards  
Vulnerability and Fiscal Draft Report**

**RESOLUTION NO. 15-55**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GOLETA, CALIFORNIA, APPROVING THE CITY OF GOLETA COASTAL HAZARDS VULNERABILITY AND FISCAL IMPACT DRAFT REPORT**

**WHEREAS**, the risk of coastal hazards is significant for people living on the south coast of the Santa Barbara County, including the City of Goleta, due to the potential loss of life, property damage, and potential loss of natural and cultural resources; and

**WHEREAS**, in consideration of coastal hazards risks, the City of Goleta retained consultant Revell Coastal, LLC to assist with the development of the Coastal Hazards Vulnerability and Fiscal Impact Draft Report; and

**WHEREAS**, public outreach was coordinated via one public workshop on August 12, 2015, for the purpose of providing the public with information, receiving input on the development of the Coastal Hazards Vulnerability and Fiscal Impact Draft Report, and establishing climate adaptation strategies and Local Coastal Program recommendations; and

**WHEREAS**, future implementation of the Coastal Hazards Vulnerability and Fiscal Impact Draft Report will protect life and safety, enhance community values, and sustain natural, cultural, visual, and recreational resources; and

**WHEREAS**, on December 1, 2015, the City Council considered the Coastal Hazards Vulnerability and Fiscal Impact Draft Report and oral and written testimony from interested persons.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GOLETA AS FOLLOWS:**

**SECTION 1. Recitals**

The City Council hereby finds and determines the foregoing recitals, which are incorporated herein by reference, are true and correct.

**SECTION 2. Approving of Coastal Hazards Vulnerability and Fiscal Impact Draft Report**

The City Council has reviewed the Coastal Hazards Vulnerability and Fiscal Impact Draft Report, attached as Exhibit 1, and hereby finds that the Coastal Hazards Vulnerability and Fiscal Impact Draft Report adequately addresses the risk of coastal hazards and is consistent with the City's General Plan / Coastal Land Use Plan. The City Council hereby

Resolution No. 15-55  
Coastal Hazards Vulnerability and Fiscal Impact Draft Report

approves the Coastal Hazards Vulnerability and Fiscal Impact Draft Report.

**SECTION 3. Documents**

The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of the City Clerk, City of Goleta, 130 Cremona Drive, Suite B, Goleta, California, 93117.

**SECTION 4. California Environmental Quality Act**

Approving of the informational Coastal Hazards Vulnerability and Fiscal Impact Draft Report is not a project subject to CEQA.

**SECTION 5. Certification**

The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

**PASSED, APPROVED AND ADOPTED** this 1<sup>st</sup> day of December, 2015.

  
PAULA PEROTTE, MAYOR

ATTEST:

APPROVED AS TO FORM:

\_\_\_\_\_  
DEBORAH S. LOPEZ  
CITY CLERK

  
\_\_\_\_\_  
TIM W. GILES  
CITY ATTORNEY

Resolution No. 15-55  
Coastal Hazards Vulnerability and Fiscal Impact Draft Report

STATE OF CALIFORNIA            )  
COUNTY OF SANTA BARBARA    )    ss.  
CITY OF GOLETA                 )

I, DEBORAH S. LOPEZ, City Clerk of the City of Goleta, California, DO  
HEREBY CERTIFY that the foregoing City Council Resolution No. 15-55 was  
duly adopted by the City Council of the City of Goleta at a regular meeting held  
on the 1<sup>st</sup> day of December, 2015, by the following vote of the Council:

AYES:       MAYOR PEROTTE,   MAYOR PRO TEMPORE FARR,  
              COUNCILMEMBERS ACEVES, BENNETT AND VALLEJO.

NOES:       NONE

ABSENT:     NONE

(SEAL)

\_\_\_\_\_  
DEBORAH LOPEZ  
CITY CLERK

**EXHIBIT 1**

**Coastal Hazards Vulnerability and Fiscal Impact Draft Report**

A copy of this report can be viewed online at: [www.healthocean.org/slrcity-of-goleta-coastal-hazards-vulnerability-assessment-and-fiscal-impact-report-2015](http://www.healthocean.org/slrcity-of-goleta-coastal-hazards-vulnerability-assessment-and-fiscal-impact-report-2015)

## RESPONSE TO COMMENT SET 5: SURFRIDER FOUNDATION

- 5-1 The proposed Project is limited to decommissioning of the facilities noted within the EIR. As indicated in response to Surfrider’s NOP Comment Letter submitted on July 9, 2021, only portions of the Project below the mean high tide line are located within the jurisdictional area of the CSLC. Additionally, the portion of the access roadway leading from the 12<sup>th</sup> tee back to the Ellwood Onshore Facility (EOF) is located within a private property easement that is currently being used in support of the Platform Holly plugging and abandonment activities. The EOF remains under private ownership, and the CSLC is unaware of the owner’s future plans or purpose for the site. The proposed Project would not result in any permanent impacts to public access; therefore, no replacement of public access has been proposed. Consideration of all facilities associated with decommissioning of the EOF would be included within an EIR completed by the City of Goleta, as the likely lead agency for that activity.
- 5-2 Correct. Project objectives can be met through implementation of Component 1 only, however enhancement of vertical public access is not required or included as part of the Project. This comment restates general elements of the overall Project.
- 5-3 Correct. Project objectives can be met through implementation of Component 1 only, however enhancement of vertical public access is not required or included as part of the Project.
- 5-4 Details regarding decommissioning of Component 2 are included within Section 2.3.3 of the EIR. As indicated, following removal of the 2-inch-diameter and 6-inch-diameter pipelines and petroleum hydrocarbon containing soil, as well as removal of the rock revetment and wooden seawall, the existing access roadway would be graded to match adjacent contours, and native hydroseed or equivalent planting would be completed in accordance with the Coastal Bluff Scrub Replacement Plan to aid in slope stability and erosion control. A final grading plan would be developed by the contractor selected for implementation of Component 2. With regards to why coastal access is not a part of the Project, see response to Comment 5-5, below.
- 5-5 The CSLC disagrees that the Project is a “new development” and that section 30212 of the Coastal Act applies to either Component 1 or 2. The CSLC is undertaking the Project as part of its larger police power action to secure oil and gas infrastructure deserted in the Ellwood and South Ellwood fields by the previous operator. The Project is to remove existing infrastructure using privately held easements which run through private lands for which no known history of public use exists. Both the Sand Piper Golf Course and the EOF remain under private ownership, and no expansion of those facilities are anticipated as part of the Project. While the definition of a “development” is broad under section 30106 and encapsulates the Project, the CSLC believes it

falls outside the spirit and purpose of the Coastal Act to consider it a “new” development, requiring the CSLC to undertake a costly and lengthy condemnation process for new public access. The common thread in the two cases cited in the comment was the need for an applicant to obtain public access across its land when a new structure was either placed, or proposed to be placed (i.e., a revetment in *Whaler’s Village Club* and a new residential home in *Grupe*). The facts in those cases are opposite to the Project’s decommissioning purpose. A commonality in section 30212 is that its “new” development exclusions apply to activities where there is no expansion of existing development, which is consistent with the Project. And section 30212(a) expressly excludes the requirement for new public access where doing so is inconsistent with public safety, which is the case where the CSLC acts to remediate deserted oil and gas infrastructure. In short, the CSLC is unaware of any caselaw or directive where a state agency undertaking actions to remediate deserted and derelict equipment in the coastal zone was required to create or enhance public access as a condition of remediating that harm.

The Coastal Act requires for new vertical public access opportunities where adequate access does not exist. Project decommissioning activities would not preclude access to the beach, as the areas east and west of the Project work area would remain open and no public access points would be impeded. Public access opportunities to this area are located at the public parking at the Ritz Carlton Bacara approximately 0.35 mile west of the Project site and along Ellwood Mesa located approximately 1.0 mile east of the Project site. The existing access roadway does not constitute an “upland area necessary to support coastal recreational uses, where feasible” as described in Section 30223 because there is no previous record of its use for those purposes, meaning it lacks the element of necessity. Additionally, the Project would return 0.4 acre of beach to public use, which is a benefit. The Project would not create a change in density or intensity of the land use but would provide an opportunity for the existing recreational use to be slightly improved in this area.

- 5-6 See response to Comments 5-1 and 5-5, above. Additionally, the Project would not preclude existing public access during Project activities. Section 30212(a) of the Coastal Act indicates that public access to the shoreline and along the coast shall be provided in new development projects except where it is inconsistent with public safety, or the protection of fragile coastal resources. The proposed Project is to decommission and remove deserted and derelict oil and gas facilities and return the beach to natural conditions; therefore, it is not a new development project. Further, it states that a dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway. The access roadway from the EOF to the 12<sup>th</sup> tee is located within a lateral easement that passes through the Sandpiper Golf Course, and along the east side of Bell Canyon Creek riparian corridor. The current configuration of this easement would not be safe for the general public (through the golf

course fairway and a privately owned oil and gas processing facility) and is therefore not subject to the requirements of Section 30212.

- 5-7 See response to Comment 5-1 above. As indicated within Section 2.2.2.3 of the EIR, the pipelines through the golf course easement are in common trenches with the pipelines servicing Platform Holly offshore. The two PRC 421 pipelines would be flushed with freshwater to obtain a residual hydrocarbon level of 15 parts per million (ppm) or less and isolated. No further work activities within the access roadway from the 12<sup>th</sup> tee back to the EOF will occur, as this corridor is currently being utilized in support of the Platform Holly decommissioning activities.
- 5-8 See response to Comments 5-1 and 5-7 above.
- 5-9 The scope of this EIR is related to completion of the decommissioning of the PRC 421 facilities described herein. Consideration of all facilities associated with decommissioning of the EOF will be included within an EIR completed by the City of Goleta, as the likely lead agency for that activity.

COMMENT SET 6: SANDPIPER GOLF COURSE



March 7, 2022

Beth A. Collins  
 Attorney at Law  
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VIA ELECTRONIC MAIL

Eric Gillies  
 Environmental Program Manager I  
 California State Lands Commission  
 Email: [CEQA.comments@slc.ca.gov](mailto:CEQA.comments@slc.ca.gov)

RE: PRC 421 Decommissioning Project Draft EIR Comments

Dear Mr. Gillies,

Thank you for the opportunity to submit this letter on behalf of Sandpiper-Golf Trust, LLC, a Delaware limited liability company ("Sandpiper"), owner of that certain property located at 7925 Hollister Avenue, Goleta, California ("Sandpiper Golf Course"). As a general matter, Sandpiper is supportive of the removal of the 421 oil facilities proposed as part of the 421 Decommissioning project (the "Project") and believes that this removal project is in the best interest of the public. However, there remain outstanding considerations that Sandpiper would like clarified and further analyzed. Accordingly, we submit the following comment on the Draft Environmental Impact Report ("DEIR") for the California State Lands Commission ("CSLC") PRC 421 Decommissioning Project ("Project"):

Comment  
 6-1

I. CSLC's EIR Should Analyze Removal of Pipeline Sections in the Golf Course Corridor

As discussed in the DEIR, while Component 2 of the Project entails the removal of the pipelines "up to the golf course easement near the 12th tee area . . . [t]he remaining portions located from the 12th tee area back to the vault near the south entrance to the EOF would remain grouted in-place." (DEIR 2-31.) While we agree that removal of the pipelines and the associated contaminated soil is preferable to abandoning the pipelines, it is unclear why the Project arbitrarily stops the removal at the 12th tee as opposed to removing the entirety of the pipelines.

As noted in the DEIR, component 2 of the Project involves removal of portions of the pipelines and access road that "currently reside on private uplands . . . and outside the bounds of CSLC's territorial and statutory jurisdiction." Despite this, and despite not having identified funding for elements of component 2, this portion of the Project is still "analyzed as part of the Project because it remains feasible and foreseeable that funding could be allocated to undertake Component 2, at some time." By the same logic, we believe that the DEIR should analyze the removal of the *entire* pipelines. While the pipelines are outside the bounds of CSLC's territorial and statutory jurisdiction, and there may not be identified funding for their removal, it similarly remains feasible that funding could be allocated to undertake their removal and thus the EIR should analyze the impact of said removal.

The entirety of the pipelines should be removed at the same time because (1) It reduces the various potential environmental impacts of staging and construction on separate occasions, (2) environmental analysis of the future removal of these pipeline sections could constitute illegal "piecemealing" under

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Comment  
6-1  
Continued

CEQA, and (3) undertaking the Project without removing the remainder of the pipelines could result in significant environmental impacts.

First, as the DEIR recognizes, the staging of equipment, transportation of equipment, grading and ground disturbance, noise and pollution from construction on the site, and access to the Project site result in potential environmental impacts. It therefore stands to reason that the entirety of the 421 facilities (including the entire pipelines) should be removed simultaneously to avoid unnecessarily causing these construction impacts on numerous occasions.

Second, the environmental analysis of any future removal of the 421 pipelines could constitute illegal "piecemealing" under CEQA. Piecemeal environmental review that ignores the environmental impacts of the end result is not permitted. (See *Citizens Ass'n for Sensible Dev. V. County of Inyon* (1985) 172 Cal.App.3d 151, 167 (county improperly prepared negative declaration for general plan amendment and rezoning for proposed shopping center followed by later negative declaration for subdivision map and road abandonment for same project, because, by bifurcating review, county failed to examine potential impacts of entire development).) The test to determine whether a separate EIR is required was set forth in *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376. The court in that case held that an EIR must analyze future expansion of a project or other action if it is "a reasonably foreseeable consequence of the initial project" and the future expansion or other action "will likely change the scope or nature of the initial project and its environmental effects." (47 Cal.3d 376, 396.) Here, the 2-inch and 6-inch pipelines run uninterrupted from the pier to the EOF, the entirety of the pipelines will be flushed as part of the Project, and yet only part of the pipelines will be removed. Therefore, the removal of the remaining pipeline portions is a reasonably foreseeable consequence of the initial project. Simply stated, by limiting the project description to the removal of a portion of the pipelines, the DEIR is arbitrarily cutting up a larger project.

Finally, undertaking the Project without removing the remainder of the pipelines could result in additional environmental impacts. For instance, hydrocarbon impacted soils may become exposed by the increased shoreline/coastal bluff erosion after the revetment/seawall structures are removed. Without the full removal of the pipelines and impacted soil beyond the 12th tee, future shoreline retreat in that area will could expose the pipelines and potentially result in the erosion of contaminated soil to the beach and tidal areas. CSLC in its DEIR readily admits to this potential impact, stating that "[a]bandonment in place for inactive pipelines associated with State Lease 421 production shall not be permitted, as subsequent coastal erosion could expose these structures." (DEIR 4-114.) However, this is exactly what is being proposed by the Project. Additionally, as discussed below, there is a risk that flushing the pipelines could release residual petroleum into surrounding soil because as discussed further below, the pipes are old and may be cracked or degraded in places. This hazardous risk could be mitigated, however, by simultaneously removing the pipelines and any contaminated soil.

For the foregoing reasons, Sandpiper believes that the DEIR should be expanded to include the removal of the entire 2-inch and 6-inch pipelines.

Comment  
6-2

## II. CSLC Should Obtain Consent From Easement Holders

As the DEIR recognizes, "the 2-inch-diameter and 6-inch-diameter pipelines and access roadway between Pier 421-1 and 12th hole of the Sandpiper Golf Course currently reside on private uplands." (DEIR ES-6.) Further, these components are "located within the easements granted to Venoco by the property owners." Therefore, the easement area may be impacted by the use of the golf course access road, removal of the coastal access road and supporting improvements, the flushing and grouting of the pipelines, and the removal of the coastal portions of the pipelines. (DEIR 2-11.) Accordingly, while Sandpiper does not (subject to the considerations raised in this letter) object to the Project's use of the Sandpiper Golf Course

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**Comment  
 6-2  
 Continued**

property and easement area, Sandpiper is also under an obligation as grantor of the easements to not interfere with the easement holder's use of the easement area and to not alter, demolish or repair any equipment or facilities on or across any portion of the easement property. Therefore, Sandpiper is unable to permit or license CSLC to use and affect the portions of the Sandpiper Golf Course property within the easement area without the written consent of any and all easement holders.

This issue appears to be flagged in the DEIR as a known area of controversy or an unresolved issue. (DEIR ES-6). However, it would be helpful to have additional clarity from CSLC as to whether and to what extent easement holders have provided their consent to the Project.

**Comment  
 6-3**

### **III. CSLC's EIR Must Analyze the Impacts of Flushing Pipelines**

We understand that as part of Component 1 of the Project, CSLC intends to flush and isolate "the 2-inch-diameter and 6-inch-diameter pipelines from the 421-1 pier back through the golf course pipeline corridor to the EOF." (DEIR ES-3.) However, as the NOP noted, "the 6-inch former production pipeline, may contain residual crude oil." The DEIR similarly states that "[t]he 6-inch-diameter pipeline may contain residual petroleum hydrocarbons and water, and the 2-inch-diameter pipeline may contain water, gas, condensate, and scale deposits." (DEIR 4-133.) Furthermore, these pipelines are outdated and may be in a deteriorated state. Accordingly, there is a risk that flushing a petroleum pipeline that has holes in it could release residual petroleum into surrounding soil.

The DEIR briefly mentions this potential environmental impact, stating that the residual hydrocarbons "could be released during flushing and isolation operations during Component 1." (DEIR 4-137; Impact HAZ-1.) The DEIR then concludes that this impact would be less than significant with mitigation, specifically because the Project would comply with an Oil Spill Contingency Plan. (DEIR 4-139; MM HAZ-1c.) However, this mitigation measure does not appear to include any monitoring or inspection of the soil surrounding the pipelines that run from the 12th tee to the EOF. Therefore, this mitigation measure would be insufficient to address the potential environmental impacts caused by releasing residual hydrocarbons during flushing. Furthermore, if the pipelines remain underground, there is risk that the pipelines could leak with flushing without the contractor being aware. This contingency must be considered and mitigation measures must be put in place to avoid to the extent possible such risks, and to mitigate harm from any such spills should they occur.

As stated above, the risk of contamination caused by flushing the pipelines could be mitigated by removal of the pipelines and contaminated soil (as is being done along the coastal portion of the site). However, if the Project ultimately abandons the portions of the pipeline from the 12th tee to the EOF, the EIR must include adequate mitigation measures to address the potential contamination caused by flushing.

Finally, it is unclear from the DEIR whether the entirety of the pipelines will be grouted. Please provide confirmation as to whether the pipelines will be grouted in place in addition to flushed.

**Comment  
 6-4**

### **IV. CSLC's EIR Must Analyze the Impacts of Using the Access Road on Golf Course Activities**

Pursuant to the Project Description in the DEIR, the Project relies on an access road that runs through the Sandpiper Golf Course and along an easement area for equipment and employee access. (DEIR 2-25; 2-40.) While the specifics of this access arrangement appear to be an "unresolved issue" in the DEIR (DEIR ES-7), CSLC should provide additional information regarding the design features that will be implemented to avoid disrupting golf course activities and to ensure the safety of the golf course employees and guests as well as the construction staff engaged in the Project. The DEIR briefly mentions the use of traffic controllers to "direct personnel and equipment through the golf course corridor to minimize public disruption

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Comment  
6-4  
Continued

and ensure safety.” However, a more robust description of limits on hours of operation and safety protocols (including hard hat requirements) should be included in this analysis.

Finally, Sandpiper expects that any and all activities occurring on the Sandpiper Golf Course property including, but not limited to, the use of the access road, the cleaning of the pipelines, and the removal of improvements on the property will be subject to, at a minimum, access agreements, indemnification agreements, and liability waivers. Furthermore, as discussed above, any and all activities occurring on or impacting easement areas shall require the written consent of any and all easement holders whose property rights may be affected.

Thank you for considering the above comments.

Sincerely,



Beth A. Collins

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## RESPONSE TO COMMENT SET 6: SANDPIPER GOLF COURSE

- 6-1 Pipeline removal from the 12<sup>th</sup> tee back to the Ellwood Onshore Facility (EOF) will not be added to the scope of the EIR. This segment was proposed for isolation and abandonment in place at this time to minimize potential disruption to Sandpiper Golf Course operations, as one of the pipelines traverses the sand trap and greens on the 11<sup>th</sup> hole. Further, this pipeline segment is located next to the active Platform Holly pipelines that are still in operation in support of the active plugging and abandonment work on Platform Holly. Complete removal of the 2-inch-diameter pipeline and 6-inch-diameter pipeline within this area at this time would have the potential to put the active pipelines (and plugging and abandonment work) at risk. Removal of the pipelines can be included within the Platform Holly decommissioning scope of work if removal is preferred, which would minimize potential disturbance to the Golf Course (i.e., the use of heavy equipment and exclusion of the pipeline removal area from golf course users), as it would occur only one time (versus twice if the pipelines were removed now and at a future date when the Platform Holly plugging and abandonment work is complete and the EOF is decommissioned).
- 6-2 The terms of the pipeline easement throughout private Sandpiper Golf Course property are understood. The CSLC will coordinate with Sandpiper to ensure Project activities are undertaken in accordance with easement provisions.
- 6-3 As described in Section 2.3.2.3 (Pipeline Flushing and Isolating), the two PRC 421 pipelines would be flushed with freshwater to obtain a residual hydrocarbon level of 15 parts per million (ppm) or less and isolated in place. Starting at the 421-1 pier location, both pipeline endpoints would be exposed within the existing access roadway. Likewise, both pipelines would be unearthed near their northern terminus at the EOF. The pipeline ends would be secured and prepared with proper fittings to flush both lines with fresh water, taking returns to properly stationed vacuum trucks. During flushing, both pipelines would be checked for integrity based on pipeline pressure and returns.
- If at any time a loss of pressure or returns is noted during these activities (indicating a loss of internal contents of the pipeline), flushing will be immediately stopped so the pipelines can be inspected for leaks in the suspected area. Preliminary oil spill response equipment will be staged, and any required cleanup activities will be conducted in accordance with MM HAZ-1c and the Facility's existing Oil Spill Contingency Plan. These procedures will be included in the Project Workplan that will be developed by the decommissioning contractor and approved by CSLC prior to construction. The proposed methodology and mitigation are sufficient to prevent significant impacts.

- 6-4 As indicated in this comment, use of the access road through the golf course was discussed within the Draft EIR, including the use of traffic controllers to minimize potential conflicts. Detailed procedures regarding construction access through this area, including safety provisions and hours of operation will be outlined within the Project Workplan developed by the decommissioning contractor and approved by CSLC prior to construction. Coordination with Sandpiper regarding any specifications for use of this easement will be conducted by CSLC and incorporated into the Project Workplan.

## **SUBPART II.B – PUBLIC COMMENTS**

The following comment was transcribed from the February 10, 2022, public meeting via Zoom online on the Draft EIR.

### **COMMENT O1: GET OIL OUT! – CARLA FRISK**

#### ***Oral comments submitted at Public Meeting on PRC 421 Decommissioning Project Draft EIR, February 10, 2022***

Ms. Frisk representing Get Oil Out! voiced her support for the Project and stressed the importance of including both Components 1 and 2 in the immediately planned decommissioning activities.

### **RESPONSE TO COMMENT O1: GET OIL OUT! – CARLA FRISK**

O1 CSLC appreciates the support of the Project and notes the support for implementing both Components 1 and 2.

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*California State Lands Commission*

# **PART III – REVISIONS TO DRAFT EIR**

Final Environmental Impact Report for the PRC 421  
Decommissioning Project, March 2022

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### 1 BACKGROUND AND PROJECT LOCATION

2 The objective of this Executive Summary is to provide a brief description of the  
3 California State Lands Commission (CSLC) PRC 421 Decommissioning Project  
4 (Project). The existing facilities at the former State Oil and Gas Lease PRC 421 include  
5 two piers and caissons, Pier 421-1 and Pier 421-2, on State tide and submerged lands  
6 as well as the upland access roadway and revetment, located on private lands, below  
7 the bluffs marking the southern limit of the Sandpiper Golf Course in the city of Goleta,  
8 California<sup>2</sup> (Figure ES-1 and Figure 1-2). The original oil and gas lease (Lease Number  
9 89) was issued in 1929, terminated and renewed under PRC 421 in 1949, and  
10 subsequently reassigned several times with the last assignment to Venoco, Inc.  
11 (Venoco) in 1997.

12 In March 2016, Venoco filed for Chapter 11 Bankruptcy to reorganize. In April 2017,  
13 Venoco again filed for bankruptcy and subsequently began liquidation of its assets  
14 which included quitclaiming its oil and gas leases back to the State of California. Lease  
15 PRC 421 and the associated two wells and pier structures were among the deserted  
16 assets turned over to the State. The wells were shut-in (non-productive) at the time the  
17 State took control of them.

18 In 2019, the two wells, 421-1 and 421-2, were successfully plugged to the surface under  
19 the direction and supervision of the CSLC and the Division of Oil, Gas, and Geothermal  
20 Resources (DOGGR), now known as the California Geologic and Energy Management  
21 Division (CalGEM), in compliance with regulatory specifications. With the plugging and  
22 abandonment of the last two wells remaining in the oilfield, the piers have no further  
23 use.

24 The proposed Project analyzed within this Environmental Impact Report (EIR) consists  
25 of two primary components, one primarily occurring on State-owned sovereign lands  
26 within the CSLC's jurisdiction and one occurring on private uplands. Component 1,  
27 located on tide and submerged lands within the jurisdiction of the Commission, includes  
28 the complete removal of both well casings and welding a cap on the two plugged and  
29 abandoned wells at bedrock or below, removal of the caissons and piers back to the  
30 existing seawall, and flushing and isolating the 2-inch-diameter and 6-inch-diameter  
31 pipelines (pipelines) from the piers to their terminus close to the Ellwood Onshore  
32 Facility (EOF). Component 2 of the Project, located on private uplands, would include  
33 removal of the two pipelines that extend from Pier 421-1, beneath the existing access  
34 roadway, and through the golf course to the 12<sup>th</sup> tee location at the golf course.

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<sup>2</sup> Based upon mean high tide line (MHTL) survey last performed 8/14/18 by CSLC boundary staff.

Figure ES-1. Project Overview Map



1 Additionally, Component 2 would involve the removal of the existing pier abutments  
2 within the access roadway, as well as the supporting infrastructure (wooden seawall,  
3 rock revetment) that supports the road. Any contaminated soil encountered within the  
4 access roadway would be removed, and the roadway area would be restored as  
5 appropriate to a more natural grade.

6 A summary of the primary Project elements include:

7 Component 1 – Caisson and Pier Removal (421-1 and 421-2)

- 8 • Removal of soil and fill inside both caissons down to the existing bedrock,  
9 including all interior debris (buried timber, steel, and concrete support structures)
- 10 • Cutting and removal of well casings down to existing bedrock elevation and  
11 installation of a final welded well cap
- 12 • Removal of both caissons' external sheet pile and concrete walls including  
13 concrete footings
- 14 • Full removal of both pier structures and supports to the bedrock interface
- 15 • Flushing and isolating the 2-inch-diameter and 6-inch-diameter pipelines from the  
16 421-1 pier back through the golf course pipeline corridor to the EOF

17 Component 2 – Access Roadway, Production Pipelines, Pier Abutments, Rock  
18 Revetment and Wooden Seawall Removal

- 19 • Excavation and removal of the 2-inch-diameter and 6-inch-diameter pipelines  
20 from the 421-1 pier location west to the 12<sup>th</sup> tee location at the golf course
- 21 • Complete removal of both pier abutment structures originally installed in 2001
- 22 • Removal of rock revetment from the beach (between the 12<sup>th</sup> tee and 421-2 pier  
23 area)
- 24 • Removal of wooden seawall and its structural components (from the 421-2 pier  
25 area and extending approximately 75 feet to the southeast)
- 26 • Removal of any unrecorded historical debris
- 27 • Removal of any petroleum hydrocarbon-containing soil identified within access  
28 roadway
- 29 • Sloping and restoration of access roadway area (1,600 feet) to a natural grade
- 30 • Final Site restoration

1    **PROJECT PURPOSE AND NEED**

2    The PRC 421 piers and facilities were installed in 1929 and 1930 for the purpose of oil  
3    and gas development of the Ellwood Oil Field. With the plugging of the last two wells  
4    remaining in the oilfield, the piers and caissons have no further use. These deteriorating  
5    piers and caissons now represent a physical coastal obstruction, a potential public  
6    safety hazard, and a potential environmental hazard represented by the known  
7    presence of hydrocarbon-impacted soil and fill contained within the pier caissons. The  
8    removal of the piers and caissons would be a significant public benefit, would allow full  
9    use of the beach coastline by the public, and would eliminate an existing threat to public  
10   safety and the environment. The existing access roadway and supporting revetment  
11   would be used for decommissioning activities of the piers, caissons, and pipelines and  
12   would also be subsequently decommissioned.

13   **SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

14   This EIR identifies potential significant impacts of the Project on the following  
15   environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Cultural Resources – Tribal
- Geology, Soils, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation and Traffic

16   Impacts within each affected environmental issue area are analyzed in relation to  
17   pertinent significance criteria. Impacts are classified as one of five categories:

- 18   • **Significant and Unavoidable:** A substantial or potentially substantial adverse  
19   change from the environmental baseline that meets or exceeds significance  
20   criteria, where either no feasible mitigation can be implemented, or the impact  
21   remains significant after implementation of mitigation measures.
- 22   • **Less than Significant with Mitigation:** A substantial or potentially substantial  
23   adverse change from the environmental baseline that can be avoided or reduced  
24   to below applicable significance thresholds.
- 25   • **Less than Significant:** An adverse impact that does not meet or exceed the  
26   significance criteria of a particular resource area and, therefore, does not require  
27   mitigation.
- 28   • **Beneficial:** An impact that would result in an improvement to the physical  
29   environment relative to baseline conditions.

- **No Impact:** A change associated with the Project that would not result in an impact to the physical environment relative to baseline conditions.

Potential significant environmental impacts anticipated during Project implementation are discussed in Section 4.0, *Environmental Impact Analysis*. With the implementation of best management practices (BMPs) and mitigation measures (MMs) identified in this EIR (see Table ES-1 at the end of this Executive Summary and Section 7.0, *Mitigation Monitoring Program*), the Project would avoid significant impacts. The CSLC staff or CSLC-contracted monitors would monitor all MMs during implementation of the Mitigation Monitoring Program.

## SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires identification and evaluation in an EIR of a reasonable range of alternatives to a proposed project plus a “no project” alternative to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. Pursuant to State CEQA Guidelines<sup>3</sup> section 15126.6, subdivision (a), an EIR need only consider a range of feasible alternatives that would foster informed decision making and public participation; therefore, while an EIR need not consider every conceivable alternative, an EIR must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. The range of potential alternatives that must be and are considered in this EIR are limited to those that would feasibly attain most of the Project objectives while avoiding or substantially reducing any of the significant effects of the Project. Alternatives that were considered but rejected are identified and accompanied by brief, fact-based explanations of the reasons for rejection. Among the factors that may have been used to eliminate alternatives from detailed consideration, as permitted by CEQA, are: (1) a failure to meet most of the proposed Project objectives; (2) infeasibility; or (3) inability to avoid significant impacts (State CEQA Guidelines, § 15126.6, subd. (c)). Alternatives carried forward for analysis in this EIR are summarized below and in Table ES-2.

- **No Project Alternative.** This Alternative consists of no action, such that all PRC 421 facilities would be left in their current location and condition. Natural processes would continue to degrade these existing facilities including corrosion of the pipelines, piers and caisson sheet pile, deterioration of the concrete caissons due to wave action and internal corrosion, and deterioration of the wooden seawall due to wave action and wood decomposition. The No Project Alternative does not meet the purpose of the Project or any of the Project objectives.

<sup>3</sup> The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

- 1       • **Single Component Abandonment Alternative.** This Alternative consists of not  
2 implementing Component 2 as described in Section 2.3.3. Therefore, the buried  
3 pipelines within the access roadway (following flushing and isolation), access  
4 roadway, pier abutments, rock revetment and wooden seawall would be left in  
5 place following the full implementation of Component 1. This Alternative meets  
6 the Project objectives as former oil and gas production facilities would be  
7 decommissioned and the beach area would be restored and appropriate for safe  
8 public access and use.

## 9 **ALTERNATIVES NOT CONSIDERED FOR FULL EVALUATION**

10 A number of alternatives were evaluated in the engineering design and were considered  
11 either infeasible or had no environmental benefits over the proposed Project and were  
12 eliminated from further consideration. The alternatives considered, but rejected, are  
13 listed below (see Section 5.3, *Alternatives Eliminated from Further Consideration*, for  
14 further details):

- 15       • Installation and use of a sheet pile cofferdam to potentially increase the work  
16 time from rising tides
- 17       • Installation and use of a portable dam to potentially increase the work time from  
18 rising tides
- 19       • Installation of an alternative temporary ramp for construction beach access in  
20 between the two piers

## 21 **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

22 Two alternatives were analyzed in detail in this EIR: the No Project Alternative and the  
23 Single Component Abandonment Alternative. Table ES-2 compares the environmental  
24 impacts associated with implementation of the proposed Project with the other  
25 alternatives. As discussed in Section 5.4.1, the No Project Alternative would not result in  
26 any new direct impacts to the environment. However, ongoing deterioration of the  
27 caissons by natural processes would ultimately lead to discharge of hydrocarbons to the  
28 ocean (from hydrocarbon contaminated fill material and possibly free oil in the  
29 caissons). The resulting discharge and related impacts to water quality and marine  
30 organisms would be greater than the proposed Project which includes procedures to  
31 remove hydrocarbons from the caissons to the extent feasible prior to caisson  
32 demolition to minimize any discharge. Because of these ongoing environmental impacts  
33 if the decommissioning Project is not implemented, the No Project Alternative is not  
34 considered the environmentally superior alternative.

35 The State CEQA Guidelines section 15126.6, subdivision (e)(2) states, in part, that an  
36 EIR shall identify an environmentally superior alternative among the other alternatives if  
37 the “environmentally superior alternative is the ‘no project’ alternative.” Because the No

1 Project Alternative is not considered the environmentally superior alternative, the State  
2 CEQA Guidelines do not require identification of an environmentally superior alternative  
3 among the remaining alternatives.

#### 4 **KNOWN AREAS OF CONTROVERSY OR UNRESOLVED ISSUES**

5 Pursuant to State CEQA Guidelines section 15123, the EIR shall identify “areas of  
6 controversy known to the lead agency including issues raised by agencies and the  
7 public.” An area of controversy known to the CSLC, as the lead agency, is the scope of  
8 the Project that the CSLC can itself undertake, as the administrator of State sovereign  
9 lands. This EIR analyzes the entirety of the Project, which includes Component 1,  
10 Component 2, and site restoration. As explained in Section 1.2 of this EIR, the area  
11 waterward of the mean high tide line (MHTL) was within the boundary of former State  
12 Oil and Gas Lease PRC 421, which was at one point leased to the Mobil Exploration  
13 and Producing, Inc. (now ExxonMobil). After Venoco, the last lessee of PRC 421,  
14 dissolved in bankruptcy, the CSLC and ExxonMobil entered into an agreement for  
15 ExxonMobil to undertake the plugging and abandonment of the two PRC 421 wells  
16 (completed in 2019) and decommissioning and removal of the PRC 421 caissons and  
17 piers (the elements of Component 1). The CSLC understands that the 2-inch-diameter  
18 and 6-inch-diameter pipelines and access roadway between Pier 421-1 and 12<sup>th</sup> hole of  
19 the Sandpiper Golf course currently reside on private uplands (Table 1-3) and outside  
20 the bounds of CSLC’s territorial and statutory jurisdiction. As of fiscal year 2021/2022,  
21 the CSLC does not have authorized funding from the California Legislature to undertake  
22 the removal of the pipelines or roadway (elements of Component 2). However,  
23 Component 2 is analyzed as part of the Project because it remains feasible and  
24 foreseeable that funding could be allocated to undertake Component 2, at some time,  
25 whether by the California Legislature, an agency of the State of California, or a local  
26 agency.

#### 27 **ORGANIZATION OF THE EIR**

28 The EIR is presented in nine sections:

- 29 • **Section 1.0 – Introduction** provides background on the Project, previous related  
30 environmental review, and the CEQA process.
- 31 • **Section 2.0 – Project Description** describes the Project, its location,  
32 construction activities, monitoring, and schedule.
- 33 • **Section 3.0 – Cumulative Projects** identifies the projects that are analyzed for  
34 potential cumulative effects and the EIR’s approach to cumulative impact  
35 analysis.

- 1 • **Section 4.0 – Environmental Impact Analysis** describes existing  
2 environmental conditions, impacts of the Project, mitigation measures, and  
3 evaluates cumulative impacts.
- 4 • **Section 5.0 – Project Alternatives Analysis** describes the alternatives  
5 screening methodology, alternatives screened from full evaluation, and  
6 alternatives carried forward for analysis, and analyzes impacts of each  
7 alternative carried forward.
- 8 • **Section 6.0 – Other Required CEQA Sections and Environmentally Superior**  
9 **Alternative** addresses other required CEQA elements, including significant and  
10 irreversible environmental and growth-inducing impacts, comparison of the  
11 Project and alternatives, and discussion of the environmentally superior  
12 alternative.
- 13 • **Section 7.0 – Mitigation Monitoring Program** describes the monitoring  
14 authority, enforcement and mitigation compliance responsibilities, and general  
15 monitoring procedures, and presents the mitigation monitoring table.
- 16 • **Section 8.0 – Other Commission Considerations** presents information  
17 relevant to CSLC’s consideration of the Project that are in addition to the  
18 environmental review required pursuant to CEQA. These include: (1) climate  
19 change and sea level rise considerations; (2) commercial fishing  
20 (socioeconomics); (3) environmental justice; and (4) state tide and submerged  
21 lands identified as possessing significant environmental values within CSLC’s  
22 Significant Lands Inventory. Other considerations may also be addressed in the  
23 staff report presented at the time of CSLC’s consideration of the lease  
24 application.
- 25 • **Section 9.0 – Report Preparation Sources and References** lists the persons  
26 involved in preparation of the EIR and the reference materials used.

27 The EIR also contains the following Appendices:

- 28 • **Appendix A** – Public Scoping Documents
- 29 • **Appendix B** – Federal and State Regulations
- 30 • **Appendix C** – Project Distribution List
- 31 • **Appendix D** – Air Quality and GHG Calculations
- 32 • **Appendix E** – Bat Study Memo
- 33 • **Appendix F** – Wetland Delineation Report
- 34 • **Appendix G** – Bluff Retreat Study
- 35 • **Appendix H** – Archaeological Report
- 36 • **Appendix I** – NV5 Coastal Processes Study

- 1 • **Appendix J** – Access Roadway and Wooden Seawall Site Assessment Report
- 2 • **Appendix K** – Asbestos and Lead-Based Paint Survey Report

**Table ES-1. Impact and Mitigation Summary (Proposed Project)**

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>AESTHETICS</b>		
<b>AES-1:</b> Effects on Public Views from Decommissioning Activities (Component 1)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM AES-1b:</b> Material Removal at Construction Completion <b>MM AES-1c:</b> Minimize Night Lighting
<b>AES-2:</b> Visual Improvements due to Removal of Component 1 Infrastructure (421-1 and 421-2 Pier and Wells/Caissons)	B	None Required
<b>AES-3:</b> Effects on Public Views from Decommissioning Activities (Component 2)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM AES-1b:</b> Material Removal at Construction Completion <b>MM BIO-5a:</b> Coastal Wetlands Mitigation <b>MM BIO-5b:</b> Retain Coastal Wetlands adjacent to Pier 421-2
<b>AES-4:</b> Potential for Cumulative Aesthetic Impacts to Public Views (Components 1 and 2)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM AES-1b:</b> Material Removal at Construction Completion <b>MM AES-1c:</b> Minimize Night Lighting
<b>AIR QUALITY</b>		
<b>AQ-1:</b> Decommissioning-related Air Pollutant Emissions (Component 1)	LTS	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures
<b>AQ-2:</b> Decommissioning-related Air Pollutant Emissions (Component 2)	LTS	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>AQ-3:</b> Cumulative Air Quality Impacts (Components 1 and 2)	LTS	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures
<b>BIOLOGICAL RESOURCES</b>		
<b>BIO-1:</b> Disturbance of Nesting Birds	LTSM	<b>MM BIO-1:</b> Avoidance of Active Cliff Swallow Nests
<b>BIO-2:</b> Loss of a Bat Roost	LTSM	<b>MM BIO-2:</b> Transitional Bat Habitat
<b>BIO-3:</b> Temporary Effects of Potential Hydrocarbon Discharge	LTSM	<b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation
<b>BIO-4:</b> Loss of Coastal Wetlands (Component 1)	LTS	None Required
<b>BIO-5:</b> Disturbance of Terrestrial and Aquatic Special-Status Wildlife Species	LTSM	<b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation <b>MM BIO-3b:</b> CRLF Fencing at the EOF <b>MM BIO-3c:</b> Environmental Awareness Training <b>MM BIO3d:</b> Biological Pre-activity Surveys and Monitoring <b>MM BIO-3e:</b> Delineation of Work Limits
<b>BIO-6:</b> Disturbance of Intertidal ESHA	LTS	None Required
<b>BIO-7:</b> Disturbance of Marine Special-Status Species	LTSM	<b>MM BIO-4:</b> Grunion Spawning Avoidance
<b>BIO-8:</b> Loss of Coastal Wetlands (Component 2)	LTSM	<b>MM BIO-5a:</b> Coastal Wetlands Mitigation <b>MM BIO-5b:</b> Retain Coastal Wetlands Adjacent to Pier 421-2

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>BIO-9:</b> Loss of Terrestrial ESHA/Sensitive Natural Communities	LTSM	<b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement <b>MM BIO-6b:</b> Southern Foredunes Avoidance
<b>BIO-10:</b> Loss of Special-Status Plant Species	LTS	None Required
<b>BIO-11:</b> Cumulative Impacts to Biological Resources (Components 1 and 2)	LTSM	<b>MM BIO-1:</b> Avoidance of Active Cliff Swallow Nests <b>MM BIO-2:</b> Transitional Bat Habitat <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation <b>MM BIO-3b:</b> CRLF Fencing at the EOF <b>MM BIO-3c:</b> Environmental Awareness Training <b>MM BIO-3d:</b> Biological Pre-activity Surveys and Monitoring <b>MM BIO-3e:</b> Delineation of Work Limits <b>MM BIO-4:</b> Grunion Spawning Avoidance <b>MM BIO-5a:</b> Coastal Wetlands Mitigation <b>MM BIO-5b:</b> Retain Coastal Wetlands adjacent to Pier 421-2 <b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement <b>MM BIO-6b:</b> Southern Foredunes Avoidance
<b>Cultural Resources</b>		
<b>CR-1:</b> Potential Impacts to Previously Undiscovered Cultural Resources During Implementation of Decommissioning (Component 1)	LTS	None Required

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>CR-2:</b> Potential Impacts to Previously Undiscovered Cultural Resources During Implementation of Decommissioning (Component 2)	LTSM	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains
<b>CR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)	LTSM	<b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)
<b>CR-4:</b> Cumulative Impacts to Cultural Resources (Components 1 and 2)	LTSM	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)
<b>Cultural Resources - Tribal</b>		
<b>TCR-1:</b> Potential Impacts to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 1)	LTS	None Required

Impact	Impact Class <sup>1</sup>	Recommended MMs
<p><b>TCR-2:</b> Potential Impacts to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 2)</p>	<p>LTSM</p>	<p><b>MM CUL-1/TCR-1:</b> Tribal Cultural Resources Monitoring  <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training  <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources  <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains</p>
<p><b>TCR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)</p>	<p>LTSM</p>	<p><b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training  <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)</p>
<p><b>TCR-4:</b> Cumulative Impacts to Tribal Cultural Resources (Components 1 and 2)</p>	<p>LTSM</p>	<p><b>MM CUL-1/TCR-1:</b> Tribal Cultural Resources Monitor (Component 2 only)  <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training  <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources  <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains  <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)</p>
<p><b>Geology, Soils, and Paleontological Resources</b></p>		
<p><b>GEO-1:</b> Littoral Transport and Beach Width (Component 1)</p>	<p>LTS</p>	<p>None Required</p>
<p><b>GEO-2:</b> Weathering and Erosion/Bluff Retreat (Component 1)</p>	<p>LTS</p>	<p>None Required</p>

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>GEO-3:</b> Littoral Transport and Beach Width (Component 2)	LTS	None Required
<b>GEO-4:</b> Weathering and Erosion/Bluff Retreat (Component 2)	LTS	None Required
<b>Greenhouse Gas Emissions</b>		
<b>GHG-1:</b> Decommissioning-related GHG Emissions (Component 1)	LTS	None Required
<b>GHG-2:</b> Decommissioning-related GHG Emissions (Component 2)	LTS	None Required
<b>GHG-3:</b> Project Contribution to Global Climate Change (Components 1 and 2)	LTS	None Required
<b>Hazards and Hazardous Materials Impacts</b>		
<b>HAZ-1:</b> Exposure of Public or Environment to Hazardous Materials (Component 1)	LTSM	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>HAZ-2:</b> Use of Hazardous Materials During Decommissioning Activities (Component 1)	LTSM	<b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>HAZ-3:</b> Exposure of Public or Environment to Hazardous Materials (Component 2)	LTSM	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs

Impact	Impact Class <sup>1</sup>	Recommended MMs
		<b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>HAZ-4:</b> Use of Hazardous Materials During Decommissioning Activities (Component 2)	LTSM	<b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>HAZ-5:</b> Potential Cumulative Hazardous Materials Impacts	LTSM	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>Hydrology and Water Quality</b>		
<b>HWQ-1:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 1)	LTSM/B	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>HWQ-2:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 1)	LTSM	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>HWQ-3:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 2)	LTSM/B	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>HWQ-4:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 2)	LTSM	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>HWQ-5:</b> Potential for Cumulative Water Quality Impacts (Components 1 and 2)	LTSM	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>Land Use and Planning</b>		
<b>LU-1:</b> Temporary Conflicts with State and Local Policies (Components 1 and 2)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM AES-1b:</b> Material Removal at Construction Completion <b>MM AES-1c:</b> Minimize Night Lighting <b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures <b>MM BIO-1:</b> Avoidance of Active Cliff Swallow

Impact	Impact Class <sup>1</sup>	Recommended MMs
		<p>Nests</p> <p><b>MM BIO-2:</b> Transitional Bat Habitat</p> <p><b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation</p> <p><b>MM BIO-3b:</b> CRLF Fencing at the EOF</p> <p><b>MM BIO-3c:</b> Environmental Awareness Training</p> <p><b>MM BIO-3d:</b> Biological Pre-activity Surveys and Monitoring</p> <p><b>MM BIO-3e:</b> Delineation of Work Limits</p> <p><b>MM BIO-4:</b> Grunion Spawning Avoidance</p> <p><b>MM BIO-5a:</b> Coastal Wetlands Mitigation</p> <p><b>MM BIO-5b:</b> Retain Coastal Wetlands Adjacent to Pier 421-2</p> <p><b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement</p> <p><b>MM BIO-6b:</b> Southern Foredunes Avoidance</p> <p><b>MM HAZ-1a:</b> Remedial Action Plan Implementation</p> <p><b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs</p> <p><b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation</p> <p><b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan</p> <p><b>MM REC-1:</b> Maximize Beach Access</p>
<p><b>LU-2:</b> Cumulative Impacts of Project Implementation (Components 1 and 2)</p>	<p>LTSM</p>	<p>Same as Above</p>

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>Noise</b>		
<b>N-1:</b> Noise Impacts to Sensitive Receptors (Component 1)	LTS	None Required
<b>N-2:</b> Noise Impacts to Sensitive Receptors (Component 2)	LTS	None Required
<b>N-3:</b> Cumulative Decommissioning/Construction Noise (Components 1 and 2)	LTS	None Required
<b>Public Services</b>		
<b>PS-1:</b> Potential for Short-term Impacts to Public Services During Decommissioning Activities (Components 1 and 2)	LTS	None Required
<b>Recreation</b>		
<b>REC-1:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 1)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM REC-1:</b> Maximize Beach Access
<b>REC-2:</b> Increase in Beach Area Associated with Removal of Piers and Caissons (Component 1)	B	None Required
<b>REC-3:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 2)	LTSM	<b>MM AES-1a:</b> Overnight Storage of Equipment
<b>Transportation and Traffic</b>		
<b>T-1:</b> Decommissioning Vehicle Trip Generation (Component 1)	LTS	None Required
<b>T-2:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 1)	LTSM	<b>MM T-1:</b> Truck Entrance Signage
<b>T-3:</b> Decommissioning Vehicle Trip Generation (Component 2)	LTS	None Required

Impact	Impact Class <sup>1</sup>	Recommended MMs
<b>T-4:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 2)	LTSM	<b>MM T-1:</b> Truck Entrance Signage
<b>T-5:</b> Contribution to Cumulative Transportation/Traffic impacts (Components 1 and 2)	LTSM	<b>MM T-1:</b> Truck Entrance Signage
<b>Utilities and Service Systems</b>		
<b>US-1:</b> Generation of Project Waste During Decommissioning Activities (Component 1)	LTS	None Required
<b>US-2:</b> Generation of Project Waste During Decommissioning Activities (Component 2)	LTS	None Required

Notes:<sup>1</sup> B = Beneficial (Green); LTS = Less than Significant; LTSM = Less than Significant with Mitigation; NI = No Impact, SU = Significant and Unavoidable Impact (Red)

Table ES-2. Summary of Impacts: Proposed Project and Alternatives

	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>Section 4.1, Aesthetics</b>			
<b>AES-1:</b> Effects on Public Views from Decommissioning Activities (Component 1)	LTSM	NI	LTSM
<b>AES-2:</b> Visual Improvements due to Removal of Component 1 Infrastructure (421-1 and 421-2 Pier and Wells/Caissons)	B	SU	B
<b>AES-3:</b> Effects on Public Views from Decommissioning Activities (Component 2)	LTSM	NI	NI
<b>AES-4:</b> Potential for Cumulative Aesthetic Impacts to Public Views (Components 1 and 2)	LTSM	NI	LTSM
<b>Section 4.2, Air Quality</b>			
<b>AQ-1:</b> Decommissioning-related Air Pollutant Emissions (Component 1)	LTS	NI	LTS
<b>AQ-2:</b> Decommissioning-related Air Pollutant Emissions (Component 2)	LTS	NI	NI
<b>AQ-3:</b> Cumulative Air Quality Impacts (Components 1 and 2)	LTS	NI	LTS
<b>Section 4.3, Biological Resources</b>			
<b>BIO-1:</b> Disturbance of Nesting Birds	LTSM	NI	LTSM
<b>BIO-2:</b> Loss of a Bat Roost	LTSM	NI	LTSM

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>BIO-3:</b> Temporary Effects of Potential Hydrocarbon Discharge	LTSM	SU	LTSM
<b>BIO-4:</b> Loss of Coastal Wetlands (Component 1)	LTS	NI	LTSM
<b>BIO-5:</b> Disturbance of Terrestrial and Aquatic Special-Status Wildlife Species	LTSM	NI	LTSM-
<b>BIO-6:</b> Disturbance of Intertidal ESHA	LTS	NI	LTS-
<b>BIO-7:</b> Disturbance of Marine Special-Status Species	LTSM	NI	LTSM-
<b>BIO-8:</b> Loss of Coastal Wetlands (Component 2)	LTSM	NI	NI
<b>BIO-9:</b> Loss of Terrestrial ESHA/Sensitive Natural Communities	LTSM	NI	NI
<b>BIO-10:</b> Loss of Special-Status Plant Species	LTS	NI	NI
<b>BIO-11:</b> Cumulative Impacts to Biological Resources (Components 1 and 2)	LTSM	NI	LTSM-
<b>Section 4.4, Cultural Resources</b>			
<b>CR-1:</b> Potential Impacts to Previously Undiscovered Cultural Resources During Implementation of Decommissioning (Component 1)	LTS	NI	LTS
<b>CR-2:</b> Potential Impacts to Previously Undiscovered Cultural Resources During	LTSM	NI	NI

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
Implementation of Decommissioning (Component 2)			
<b>CR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)	LTSM	NI	LTSM-
<b>CR-4:</b> Cumulative Impacts to Cultural Resources (Components 1 and 2)	LTSM	NI	LTSM-
<b>Section 4.5, Cultural Resources - Tribal</b>			
<b>TCR-1:</b> Potential Impacts to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 1)	LTS	NI	LTS
<b>TCR-2:</b> Potential Impacts to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 2)	LTSM	NI	NI
<b>TCR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)	LTSM	NI	LTSM-
<b>TCR-4:</b> Cumulative Impacts to Tribal Cultural Resources (Components 1 and 2)	LTSM	NI	LTSM-

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>Section 4.6, Geology, Soils, and Paleontological Resources</b>			
<b>GEO-1:</b> Littoral Transport and Beach Width (Component 1)	LTS	NI	LTS
<b>GEO-2:</b> Weathering and Erosion/Bluff Retreat (Component 1)	LTS	NI	LTS
<b>GEO-3:</b> Littoral Transport and Beach Width (Component 2)	LTS	NI	NI
<b>GEO-4:</b> Weathering and Erosion/Bluff Retreat (Component 2)	LTS	NI	NI
<b>Section 4.7, Greenhouse Gas Emissions</b>			
<b>GHG-1:</b> Decommissioning-related GHG Emissions (Component 1)	LTS	NI	LTS
<b>GHG-2:</b> Decommissioning-related GHG Emissions (Component 2)	LTS	NI	NI
<b>GHG-3:</b> Project Contribution to Global Climate Change (Components 1 and 2)	LTS	NI	LTS-
<b>Section 4.8, Hazards and Hazardous Materials Impacts</b>			
<b>HAZ-1:</b> Exposure of Public or Environment to Hazardous Materials (Component 1)	LTSM	NI	LTSM
<b>HAZ-2:</b> Use of Hazardous Materials During Decommissioning Activities (Component 1)	LTSM	NI	LTSM

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>HAZ-3:</b> Exposure of Public or Environment to Hazardous Materials (Component 2)	LTSM	NI	NI
<b>HAZ-4:</b> Use of Hazardous Materials During Decommissioning Activities (Component 2)	LTSM	NI	NI
<b>HAZ-5:</b> Potential Cumulative Hazardous Materials Impacts	LTSM	NI	LTSM-
<b>Section 4.9, Hydrology and Water Quality</b>			
<b>HWQ-1:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 1)	LTSM/B	<b>SU</b>	LTSM
<b>HWQ-2:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 1)	LTSM	NI	LTSM
<b>HWQ-3:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 2)	LTSM/B	NI	NI
<b>HWQ-4:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 2)	LTSM	NI	NI
<b>HWQ-5:</b> Potential for Cumulative Water Quality Impacts (Components 1 and 2)	LTSM	NI	LTSM-
<b>Section 4.10, Land Use and Planning</b>			

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>LU-1:</b> Temporary Conflicts with State and Local Policies (Components 1 and 2)	LTSM	NI	LTSM-
<b>LU-2:</b> Cumulative Impacts of Project Implementation (Components 1 and 2)	LTSM	NI	LTSM-
<b>Section 4.11, Noise</b>			
<b>N-1:</b> Noise Impacts to Sensitive Receptors (Component 1)	LTS	NI	LTS
<b>N-2:</b> Noise Impacts to Sensitive Receptors (Component 2)	LTS	NI	NI
<b>N-3:</b> Cumulative Decommissioning/Construction Noise (Components 1 and 2)	LTS	NI	LTS-
<b>Section 4.12, Public Services</b>			
<b>PS-1:</b> Potential for Short-term Impacts to Public Services During Decommissioning Activities (Components 1 and 2)	LTS	NI	LTS-
<b>Section 4.13, Recreation</b>			
<b>REC-1:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 1)	LTSM	NI	LTSM
<b>REC-2:</b> Increase in Beach Area Associated with Removal of Piers and Caissons (Component 1)	B	SU	B

Impact	Impact Class <sup>1</sup>		
	Proposed Project	No Project Alternative	Single Component Abandonment Alternative
<b>REC-3:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 2)	LTSM	NI	NI
<b>Section 4.14, Transportation and Traffic</b>			
<b>T-1:</b> Decommissioning Vehicle Trip Generation (Component 1)	LTS	NI	LTS
<b>T-2:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 1)	LTSM	NI	LTSM
<b>T-3:</b> Decommissioning Vehicle Trip Generation (Component 2)	LTS	NI	NI
<b>T-4:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 2)	LTSM	NI	NI
<b>T-5:</b> Contribution to Cumulative Transportation/Traffic impacts (Components 1 and 2)	LTSM	NI	LTSM-
<b>Section 4.15, Utilities and Service Systems</b>			
<b>US-1:</b> Generation of Project Waste During Decommissioning Activities (Component 1)	LTS	NI	LTS
<b>US-2:</b> Generation of Project Waste During Decommissioning Activities (Component 2)	LTS	NI	NI

Notes:<sup>1</sup> B = Beneficial (Green); LTS = Less than Significant; LTSM = Less than Significant with Mitigation; NI = No Impact, SU = Significant and Unavoidable Impact (Red), "-" = less than the proposed Project

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## 1.0 INTRODUCTION

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1 The California State Lands Commission (CSLC), as representative owner of the State-  
2 owned sovereign lands known as State Lease PRC 421, is analyzing the potential  
3 environmental impacts associated with decommissioning the remaining pier  
4 infrastructures known as Pier and Well 421-1 and Pier and Well 421-2, and  
5 decommissioning/partial removal of a 2-inch-diameter and 6-inch-diameter pipeline  
6 (pipelines) leading from the 421-1 pier area back to the Ellwood Onshore Facility (EOF).  
7 CSLC is also analyzing the potential environmental impacts associated with  
8 decommissioning the access roadway, pier abutment<sup>4</sup> structures, and  
9 seawall/revetment along the access roadway and between the piers in this area which  
10 reside on non-sovereign (private) land. These facilities were deserted following the  
11 declaration of bankruptcy and subsequent quitclaim of the PRC 421 oil and gas lease  
12 by the previous lease operator Venoco, Inc. (Venoco) in April 2017. CSLC is the lead  
13 agency under the California Environmental Quality Act (CEQA; Pub. Resources Code, §  
14 21000 et seq.) for the PRC 421 Decommissioning Project (Project).

### 15 1.1 PROJECT LOCATION

16 The existing facilities at the former State Oil and Gas Lease PRC 421 include two  
17 caissons<sup>5</sup> and piers referred to as Pier 421-1 and Pier 421-2, on State tide and  
18 submerged lands below the bluffs marking the southern limit of the Sandpiper Golf  
19 Course in the city of Goleta, California, and extending offshore to a water depth of  
20 approximately 50 feet (Figure 1-1). The original oil and gas lease (Lease No. 89) was  
21 issued in 1929, terminated and renewed under PRC 421 in 1949, and subsequently  
22 reassigned several times with the last assignment to Venoco in 1997.

### 23 1.2 PROJECT BACKGROUND

24 The two existing PRC 421 piers are the last remaining production structures associated  
25 with the prolific development of the Ellwood Oil Field that occurred along the Northern  
26 Santa Barbara Channel Coast from the late 1920s to 1990s. The Ellwood Oil Field was  
27 discovered by Barnsdall Oil Company in 1928 and is approximately 4 miles long and 0.5  
28 mile wide, and trends east-west along the shoreline just south of the Sandpiper Golf  
29 Course. The immediate Project vicinity supported numerous onshore and offshore wells  
30 from the 1930s through the 1950s, along with substantial supporting infrastructure.

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<sup>4</sup> As described further in Section 2.2.1.3 of this document, the pier abutment(s) are the structures connecting the piers to the adjacent bluff. The abutments structurally stabilize the transition between the access roadway and the pier structures to allow safe access.

<sup>5</sup> A caisson is a watertight retaining structure used in geotechnical engineering.

Figure 1-1. Project Location Map



1 Peak production from the entire Ellwood Oil Field reached nearly 49,000 barrels of oil  
2 per day (BOPD) in 1930. Remnants of this infrastructure still exist today, including  
3 multiple capped wells, the old timber seawall which lines portions of the Ellwood Coast,  
4 and the surf zone production piers of PRC 421.

5 Construction of the PRC 421 piers began in 1928; Pier 421-1 was completed in  
6 November 1929 and Pier 421-2 was completed in April 1930. A total of nine wells were  
7 drilled within PRC 421 into the Vaqueros Reservoir (a portion of the Ellwood Oil Field),  
8 which is the source of oil produced from PRC 421. Production peaked from the  
9 associated wells in 1931 at nearly 628,000 barrels of oil per year.

10 By the mid-1950s, more than half of the offshore wells in the Ellwood Oil Field were  
11 plugged and abandoned. On PRC 421, all but two wells were plugged and abandoned.  
12 The two that remained were Well 421-2, a producer, and Well 421-1, a former producer  
13 that stopped production in 1972 and was converted in 1973 to an injection well for  
14 produced water. The Ellwood area oil facilities continued to be operated and developed,  
15 with active development occurring in the Ellwood area into the 1990s.

16 By the end of 1993, Well 421-2 became the only producing well in the Ellwood Oil Field.  
17 In May 1994, production from Well 421-2 was terminated following a leak in the 6-inch-  
18 diameter pipeline that transported the produced oil from the pier to the EOF. The leak  
19 occurred in the vicinity of the 12<sup>th</sup> tee at the Sandpiper Golf Course and was repaired,  
20 and the site remediated. Well 421-2 was never returned to active oil production. Limited  
21 production for the purpose of de-pressuring the well and reservoir was allowed in 2001  
22 for safety purposes.

23 In 1997, the owner Mobil Exploration and Producing, Inc. (now ExxonMobil) sold the  
24 Ellwood facilities within the lease area, including the piers, Ellwood Marine Terminal  
25 (EMT), Ellwood Onshore Facility (EOF), and the offshore oil production facility Platform  
26 Holly to Venoco. In April 2014, CSLC certified an Environmental Impact Report (EIR) to  
27 authorize the Venoco PRC 421 Recommissioning Project to return PRC 421 to oil  
28 production from the existing Well 421-2 and process the crude oil emulsion<sup>6</sup> at the EOF.  
29 The EIR was revised and certified in December 2014 ([Item 72](#)); however, the project  
30 was never implemented.

31 In March 2016, Venoco filed for Chapter 11 Bankruptcy to reorganize. In April 2017,  
32 Venoco again filed for bankruptcy due to the loss of the ability to ship oil from the EOF  
33 following the 2015 rupture of the Plains All American Pipeline, Line 901, which remains  
34 out of service to this day, and subsequently began liquidation of its assets which  
35 included quitclaiming its three oil and gas leases (PRC 421, PRC 3120, and PRC 3242)  
36 back to the State of California. The CSLC entered into the leases formerly held by

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<sup>6</sup> Crude oil emulsions form when oil and water (brine) come into contact with each other. Crude oil emulsions must be separated almost completely before the oil can be transported and processed further.

1 Venoco to ensure the preservation of human health and safety and the environment.  
2 Lease PRC 421 and the associated two wells and pier structures were among the  
3 assets turned over to the State. The wells were shut-in (non-productive) at the time the  
4 State took control of them.

5 In 2019, the two wells, 421-1 and 421-2, were successfully plugged to the surface under  
6 the direction and supervision of the CSLC and the Division of Oil, Gas, and Geothermal  
7 Resources (DOGGR), now known as the California Geologic and Energy Management  
8 Division (CalGEM), in compliance with regulatory specifications.

9 While the CSLC is the CEQA lead agency and will undertake the Project pursuant to  
10 previous contractual agreements, ExxonMobil agreed to perform the work of plugging  
11 the two wells located on the piers as well as the decommissioning and removal of the  
12 pier and caisson structures and those facilities that exist waterward of the mean high  
13 tide line (MHTL), in other words, those facilities located within the former lease PRC 421  
14 boundaries and within the CSLC's statutory jurisdiction (Figure 1-2). For purposes of  
15 this Project, the work within this area is considered Component 1.

16 Component 2 of the Project, located on private uplands, would include removal of the  
17 two pipelines that extend from the 421-1 pier beneath the existing access roadway to  
18 the 12<sup>th</sup> tee location at the golf course, and flushing/isolating the pipeline from the 12<sup>th</sup>  
19 tee location to the EOF. Additionally, Component 2 would involve the removal of the  
20 existing pier abutments within the access roadway, as well as the supporting  
21 infrastructure (wooden seawall, rock revetment) that supports the road and foot of the  
22 cliff. Any hydrocarbon impacted soils within the access roadway would be removed and  
23 the roadway area would be restored as appropriate to a more natural grade.

#### 24 **1.2.1 Project Purpose and Need**

25 The PRC 421 piers and facilities were installed for the purpose of oil and gas  
26 development of the Ellwood Oil Field. With the plugging of the last two wells remaining  
27 in the oilfield (421-1 and 421-2), the piers have no further use. These deteriorating piers  
28 and caissons now represent a physical coastal obstruction, a potential public safety  
29 hazard, and a potential environmental hazard represented by the known presence of  
30 hydrocarbon-impacted soil and fill contained within the pier caissons. The removal of  
31 the piers and caissons would be a significant public benefit, would allow full use of the  
32 beach coastline by the public, and would eliminate an existing threat to public safety  
33 and the environment. The existing access roadway and supporting revetment would be  
34 used for decommissioning activities of the piers, caissons, and pipelines and would also  
35 be subsequently decommissioned.

Figure 1-2. Mean High Tide Line Delineation (2018)



1 **1.2.2 Project Objectives**

2 The objectives for the Project are to:

- 3 • Decommission the piers, caissons, and remaining portions of the wells (the riser  
4 pipe from the top of the cement plug and wellheads) and other infrastructure,  
5 including the pipelines within the access roadway and golf course back to the tie-  
6 in points just outside of the EOF, and the access roadway and supporting rock  
7 revetment
- 8 • Restore the beach area to conditions similar to the surrounding area and  
9 appropriate for safe public access and use

10 **1.3 OVERVIEW OF ENVIRONMENTAL REVIEW PROCESS**

11 **1.3.1 Project Context with Respect to CEQA**

12 The actions proposed by the CSLC are subject to CEQA. Pursuant to State CEQA  
13 Guidelines section 15378, the CSLC must review “the whole of [the] action that has a  
14 potential for resulting in either a direct physical change in the environment, or a  
15 reasonably foreseeable indirect physical change in the environment.” With limited  
16 exceptions, CEQA requires the CSLC, before approving a project over which it has  
17 discretionary authority, to consider the environmental consequences of the project.  
18 CEQA establishes procedural and substantive requirements that agencies must satisfy  
19 to meet CEQA’s objectives, which are (State CEQA Guidelines, §§ 15002 and 15083):

- 20 • Inform governmental decision makers and the public about the potential  
21 significant environmental effects of proposed activities
- 22 • Identify ways that environmental damage can be avoided or significantly reduced
- 23 • Prevent significant, avoidable damage to the environment by requiring changes  
24 in projects through the use of alternatives or mitigation measures when the  
25 governmental agency finds the changes to be feasible
- 26 • Disclose to the public the reasons why the agency approved the project in the  
27 manner the agency chose if significant environmental effects are involved
- 28 • Foster multi-disciplinary interagency coordination in the review of projects
- 29 • Enhance public participation in the planning process

30 Other key requirements include carrying out specific noticing and distribution actions to  
31 maximize public involvement in the environmental review process. CEQA section 21002  
32 also states in part that it is the State’s policy that public agencies:

33 *... should not approve projects as proposed if there are feasible*  
34 *alternatives or feasible mitigation measures available which would*

1           *substantially lessen the significant environmental effects of such projects,*  
 2           *and that the procedures required by this division are intended to assist*  
 3           *public agencies in systematically identifying both the significant effects of*  
 4           *proposed projects and the feasible alternatives or feasible mitigation*  
 5           *measures which will avoid or substantially lessen such significant effects.*

6     The CSLC staff determined that the proposed Project could result in significant  
 7     environmental impacts and that an EIR is required to analyze the Project and feasible  
 8     alternatives. The purpose of an EIR is not to recommend either approval or denial of a  
 9     project. The EIR is an informational document that assesses the potential environmental  
 10    effects of a project and identifies mitigation measures and project alternatives that could  
 11    reduce or avoid significant environmental impacts (State CEQA Guidelines, § 15121).  
 12    Consistent with CEQA requirements, the CSLC has engaged in a good faith,  
 13    reasonable effort towards full public disclosure of the potential effects of the Project.

### 14   **1.3.2     Public Scoping**

15    Through the Project's Notice of Preparation (NOP), the CSLC solicited comments on  
 16    the EIR's scope during a 30-day comment period beginning on June 9, 2021, and at  
 17    scoping meetings held on June 24, 2021. Table 1-1 lists commenters on the NOP (see  
 18    Appendix A, *Public Scoping Documents*, for meeting transcripts and an index to where  
 19    scoping comments are addressed in this EIR).

**Table 1-1. NOP Commenters**

<b>Classification</b>	<b>Name</b>	<b>Written</b>	<b>Oral (at scoping meeting)</b>
Agency	California Department of Fish and Wildlife – South Coast Region	●	
	City of Goleta	●	
	Santa Barbara County Air Pollution Control District	●	
	Native American Heritage Commission (NAHC)	●	
Non-Governmental Organization	California State University Channel Islands (CSUCI) – Environmental Science and Resource Management Program (Sean Anderson)		●
	Surfrider Foundation – Santa Barbara Chapter (Andrew Miller)	●	●

Classification	Name	Written	Oral (at scoping meeting)
Individual	Jacqueline Rosa		●
	Sandpiper Golf Course	●	

1 **1.3.3 Availability of EIR**

2 Placing CEQA documents at readily accessible sites such as local libraries can be an  
3 effective way to provide information about a project. This EIR is available for review at  
4 four sites in the proposed Project vicinity (Table 1-2). At this time, the CSLC offices are  
5 closed to the public due to public health and safety concerns regarding the Novel  
6 Coronavirus (COVID-19); therefore, it is not currently feasible to provide paper copies  
7 for review at the CSLC offices. Please contact Eric Gillies at [eric.gillies@slc.ca.gov](mailto:eric.gillies@slc.ca.gov) or  
8 (916) 574-1897 for the most up-to-date information on the availability of the EIR or if you  
9 would like to receive a hard copy. Please note that hard copies will be printed on  
10 demand and may take several days to produce and ship. The full document can also be  
11 viewed on the CSLC website at [www.slc.ca.gov/Info/CEQA.html](http://www.slc.ca.gov/Info/CEQA.html).

12 **Locations to Review the EIR**

Libraries:

Goleta Public Library  
500 N. Fairview Avenue  
Goleta, CA 93117  
(805) 964-7878

Santa Barbara Public Library  
40 E. Anapamu Street  
Santa Barbara, CA 93101  
(805) 962-7653

City/County Offices:

City of Goleta, Planning and Env. Review  
Attn: Anne Wells  
130 Cremona Dr., Suite B  
Goleta, CA 93117  
(805) 961-7557

County of Santa Barbara  
Attn: Errin Briggs  
123 E. Anapamu Street  
Santa Barbara, CA 93101  
(805) 568-2047

## 1 1.4 PURPOSE AND SCOPE OF EIR

2 The purpose of this EIR is to identify the significant impacts on the environment of the  
3 proposed Project, identify alternatives to the Project, and indicate the manner in which  
4 those significant impacts can be mitigated or avoided (Pub. Resources Code, §  
5 21002.1, subd. (a)). The CSLC has prepared this EIR in accordance with CEQA and the  
6 State CEQA guidelines to document the CSLC's evaluation of the potential for  
7 environmental impacts associated with implementation of the PRC 421  
8 Decommissioning Project.

### 9 1.4.1 Baseline Conditions

10 Baseline conditions for this EIR are defined as the existing physical setting that may be  
11 affected by a project (State CEQA Guidelines, § 15125, subd. (a)), which for this Project  
12 includes the PRC 421 lease area (caissons and piers), pipeline corridor and access  
13 roadway back to the EOF, and disposal hauling routes. This setting constitutes the  
14 baseline physical conditions by which the CSLC will determine whether impacts from  
15 the proposed Project and Project alternatives are significant. Impacts are defined as  
16 changes to the environmental setting that are attributable to Project components or  
17 operations. Potential impacts are often analyzed in the context of the local and regional  
18 physical environmental conditions existing at the time the NOP for the EIR was released  
19 (in this case, June 2021).

### 20 1.4.2 Potential Impacts and Summary of Alternatives Evaluated

21 The EIR identifies potential significant impacts of the proposed Project on the  
22 environment and indicates if and how the impacts can be avoided or reduced by  
23 mitigation measures or alternatives. As described in Section 4, *Environmental Impact*  
24 *Analysis*, the following resource areas would not be impacted by the Project:

- Agricultural and Forestry Resources
- Mineral Resources
- Energy
- Population and Housing
- Utilities and System Services
- Wildfire

25 The Project could have a significant impact on the following resource areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Cultural Resources – Tribal
- Geology, Soils, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation and Traffic

1 Pursuant to State CEQA Guidelines section 15126.6, an EIR must describe and  
2 evaluate a range of reasonable alternatives that would feasibly attain most of a project’s  
3 basic objectives and would avoid or substantially lessen any of the significant impacts of  
4 a project as proposed. The State CEQA Guidelines also state that the range of  
5 alternatives required to be evaluated in an EIR is governed by the “rule of reason” (§  
6 15126.6, subd (f)) – that is, an EIR needs to describe and evaluate only those  
7 alternatives necessary to permit a reasoned choice and to foster informed decision  
8 making and public participation. The State CEQA Guidelines also require that the EIR  
9 evaluate a “No Project” alternative and, under specific circumstances, designate an  
10 environmentally superior alternative from among the remaining alternatives. Please see  
11 Section 5.0, *Project Alternatives Analysis*, and Section 6.0, *Other Required CEQA*  
12 *Sections and Environmentally Superior Alternative*, for this discussion.

### 13 **1.4.3 Cumulative Impact Analysis**

14 An EIR must discuss the cumulative impacts of a project when the project’s incremental  
15 effect is “cumulatively considerable” (State CEQA Guidelines, § 15130). A cumulative  
16 impact is an impact that is created through a combination of the project analyzed in the  
17 EIR and other closely related past, present, and reasonably foreseeable probable future  
18 projects in the area causing related impacts. Section 3, *Cumulative Projects*, defines the  
19 applicable geographic scope of the cumulative analysis (cumulative projects study area)  
20 and lists projects included in the cumulative environment.

## 21 **1.5 PROJECT JURISDICTION AND ANTICIPATED APPROVALS**

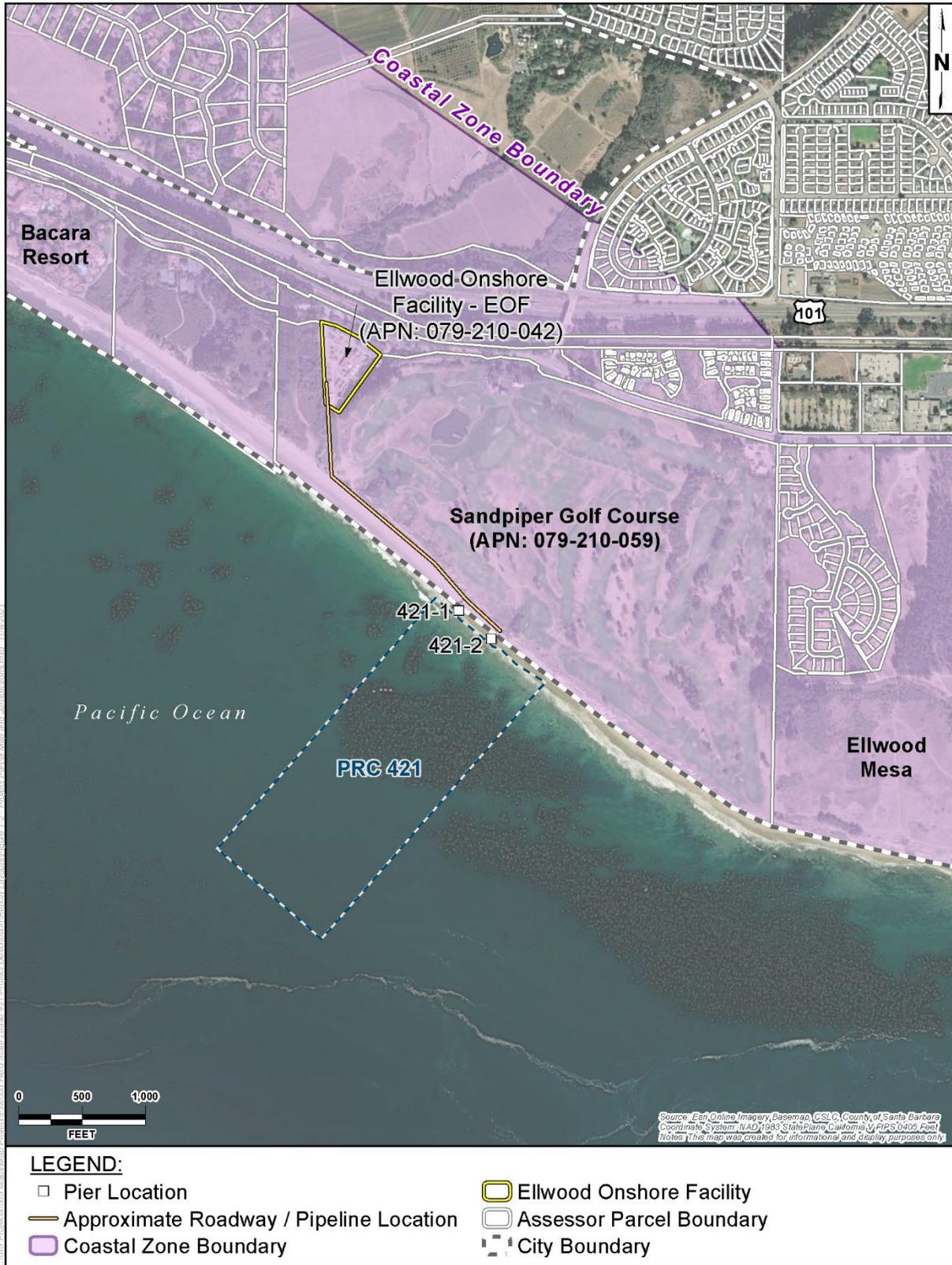
### 22 **1.5.1 Project Jurisdiction**

23 State Oil and Gas Lease PRC 421 is located within the coastal zone off the Ellwood  
24 Coast, just south of Sandpiper Golf Course, southeast of the EOF, and approximately  
25 2,000 feet west of the Ellwood Mesa. The lease area is offshore of the city of Goleta,  
26 extending from the surf zone just above the two well locations offshore to a water depth  
27 of about 50 feet (Figure 1-3).

#### 28 1.5.1.1 Project Parcels

29 Several parcels are included in the Project impact area (Table 1-2). The PRC 421  
30 piers/wells (below the MHTL) are within the jurisdiction of CSLC. All other Project  
31 components above the MHTL are within the city limits of Goleta and under the  
32 jurisdiction of the California Coastal Commission within the coastal zone. Due to the  
33 Venoco bankruptcy, CSLC, through its contractor, currently staffs the property that the  
34 EOF occupies (Assessor’s Parcel Number [APN] 079-210-042), including several  
35 easements with Sandpiper Golf Course (APN 079-210-059) for the access roadway  
36 leading to the PRC 421 piers and the pipelines from Platform Holly and PRC 421.

Figure 1-3. Project Parcel Map and Jurisdictions



**Table 1-2. Parcels and Jurisdictions for the Project Area**

APN	Description	Jurisdiction
079-210-042	Ellwood Onshore Facility (EOF)	California Coastal Commission
079-210-059	Sandpiper Golf Course (Easements for Access Roadway and Pipelines)	California Coastal Commission
079-210-059	PRC 421 Piers above MHTL	California Coastal Commission
State Tideland	PRC 421 Piers below MHTL	CSLC/California Coastal Commission
State Tideland	PRC 421 Wells	CSLC/CalGEM

### 1 1.5.2 Anticipated Project Approvals

- 2 In addition to the action by the CSLC, the Project would require the following permits  
3 and approvals outlined in Table 1-3.

**Table 1-3. Agreements, Permits, and Approvals**

Agency	Anticipated Agreement, Permit, or Approval
City of Goleta <sup>1, 2</sup>	Local Land Use Consistency
Santa Barbara County Air Pollution Control District	Permit Exemption Confirmation
County of Santa Barbara Environmental Health Services	Remedial Action Plan Approval
California Coastal Commission <sup>1</sup>	Coastal Development Permit
California Geologic Energy Management Division	Notice of Intention to Rework Well for Final Casing Cutting and Well Capping; Pipeline Abandonment
California Department of Wildlife, Office of Spill Prevention and Response	Oil Spill Contingency Plan Review (Review completed)
California Department of Fish and Wildlife	California Endangered Species Act Consultation
California Central Coast Regional Water Quality Control Board	Section 401 Water Quality Certification
U.S. Army Corps of Engineers	Section 404 Permit <sup>3</sup>
U.S. Fish and Wildlife Service	Endangered Species Act Consultation

Agency	Anticipated Agreement, Permit, or Approval
National Oceanic and Atmospheric Administration – National Marine Fisheries Services	Endangered Species Act Consultation Essential Fish Habitat Assessment and Review
State Historic Preservation Office	Section 106 Consultation

<sup>1</sup> Prior permits issued for emergency repair work on the PRC 421 piers (Final Development Plan 05-132-DP; 04-EMP-001; E-01-013-G; 2004015765-JCM) included mitigation conditions for the protection of wetlands and coastal resources.

<sup>2</sup> A revised Development Plan from the city of Goleta is required for those portions of the Project that involve onshore facilities above the MHTL, such as those portions of the access roadway, revetment, and pipelines (Component 2).

<sup>3</sup> Amendment of existing Permit No. SPL-2008-00769-JWM for Component 1 as part of the Santa Barbara Channel Coastal Hazards Removal Program. Component 2 activities (access roadway and revetment removal) would require a separate permit.

## 1 1.6 ORGANIZATION OF EIR

2 The EIR is presented in nine sections:

- 3 • **Section 1.0 – Introduction** provides background on the Project, previous related  
4 environmental review, and the CEQA process.
- 5 • **Section 2.0 – Project Description** describes the Project, its location,  
6 construction activities, monitoring, and schedule.
- 7 • **Section 3.0 – Cumulative Projects** identifies the projects that are analyzed for  
8 potential cumulative effects and the EIR’s approach to cumulative impact  
9 analysis.
- 10 • **Section 4.0 – Environmental Impact Analysis** describes existing  
11 environmental conditions, impacts of the Project, mitigation measures, and  
12 evaluates cumulative impacts.
- 13 • **Section 5.0 – Project Alternatives Analysis** describes the alternatives  
14 screening methodology, alternatives screened from full evaluation, and  
15 alternatives carried forward for analysis, and analyzes impacts of each  
16 alternative carried forward.
- 17 • **Section 6.0 – Other Required CEQA Sections and Environmentally Superior**  
18 **Alternative** addresses other required CEQA elements, including significant and  
19 irreversible environmental and growth-inducing impacts, comparison of the  
20 Project and alternatives, and discussion of the environmentally superior  
21 alternative.
- 22 • **Section 7.0 – Mitigation Monitoring Program** describes the monitoring  
23 authority, enforcement and mitigation compliance responsibilities, general  
24 monitoring procedures, and presents the mitigation monitoring table.

- 1       • **Section 8.0 – Other Commission Considerations** presents information  
2 relevant to CSLC’s consideration of the Project that are in addition to the  
3 environmental review required pursuant to CEQA. These include: (1) climate  
4 change and sea level rise considerations; (2) commercial fishing  
5 (socioeconomics); (3) environmental justice; and (4) state tide and submerged  
6 lands identified as possessing significant environmental values within CSLC’s  
7 Significant Lands Inventory. Other considerations may also be addressed in the  
8 staff report presented at the time of CSLC’s consideration of the proposed  
9 Project.
- 10       • **Section 9.0 – Report Preparation Sources and References** lists the persons  
11 involved in preparation of the EIR and the reference materials used.

12 The EIR also contains the following Appendices:

- 13       • **Appendix A** – Public Scoping Documents  
14       • **Appendix B** – Federal and State Regulations  
15       • **Appendix C** – Project Distribution List  
16       • **Appendix D** – Air Quality and GHG Calculations  
17       • **Appendix E** – Bat Study Memo  
18       • **Appendix F** – Wetland Delineation Report  
19       • **Appendix G** – Bluff Retreat Study  
20       • **Appendix H** – Archaeological Report  
21       • **Appendix I** – NV5 Coastal Processes Study  
22       • **Appendix J** – Access Roadway and Wooden Seawall Site Assessment Report  
23       • **Appendix K** – Asbestos and Lead-Based Paint Survey Report

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## 2.0 PROJECT DESCRIPTION

### 2.1 PROJECT SUMMARY

The PRC 421 Decommissioning Project (Project) consists of two primary components, Component 1 and Component 2, followed by site restoration and cleanup. Component 1 of the Project includes the complete demolition and removal of the 421-1 and 421-2 caissons and piers back to the existing seawall, removal of both well casings and capping the well down to the bedrock, and the flushing and isolating of the 2-inch and 6-inch-diameter pipelines (pipelines) through the golf course to the Ellwood Onshore Facility (EOF). Component 2 involves the decommissioning and removal of the pipelines that extend from the 421-1 pier area beneath the access roadway and the subsequent removal of the pier abutments, supporting rock revetment, and wooden seawall beneath the access roadway along the bluff as well as removal of any hydrocarbon impacted soil within the roadway and sloping to a natural grade. Figure 2-1 provides an overview of the proposed Project components. The Project would be completed as follows:

#### Component 1

- Staging/Access (Section 2.3.1)
  - Setup construction staging areas
  - Construction of a temporary access ramp
- Caisson and Pier Removal (Section 2.3.2)
  - Removal of soil and fill inside both caissons down to the existing bedrock, including all interior debris (buried timber, steel, and concrete support structures) in sequence with the eastern, northern, and western concrete and sheet pile walls
  - Cutting and removal of well casings down to existing bedrock elevation and installation of a final welded well cap
  - Removal of both caissons' southern (ocean side) external sheet pile, H-piles, and concrete walls including concrete footings
  - Full removal of both pier structures and supports to the bedrock interface
  - Flushing and isolating the 2-inch-diameter and 6-inch-diameter pipelines beneath the golf course pipeline corridor to the EOF

#### Component 2

- Access Roadway, Production Pipeline Abandonment/Removal, Pier Abutment and Seawall/Revetment Removal (Section 2.3.3)
  - Excavation and removal of the pipelines from the 421-1 pier location west to the 12<sup>th</sup> tee location at the golf course

Figure 2-1. Project Overview Map



- 1       ○ Complete removal of both pier abutment structures originally installed in
- 2       2001
- 3       ○ Removal of rock revetment from the beach (between the 12<sup>th</sup> tee and 421-2
- 4       pier area)
- 5       ○ Removal of wooden seawall and its structural components (from the 421-2
- 6       pier area and extending approximately 75 feet to the southeast)
- 7       ○ Removal of any unrecorded historical debris
- 8       ○ Removal of any petroleum hydrocarbon-containing soil identified within
- 9       access roadway
- 10      ○ Sloping and restoration of access roadway area (1,600 feet) to a natural
- 11      grade
- 12      ○ Final Site restoration
- 13      • Recycling and disposal of soils/materials (Section 2.3.4)

## 14   **2.2   CURRENT (BASELINE) SITE CONDITIONS**

### 15   **2.2.1   421-1 and 421-2 Caissons, Wells, and Piers**

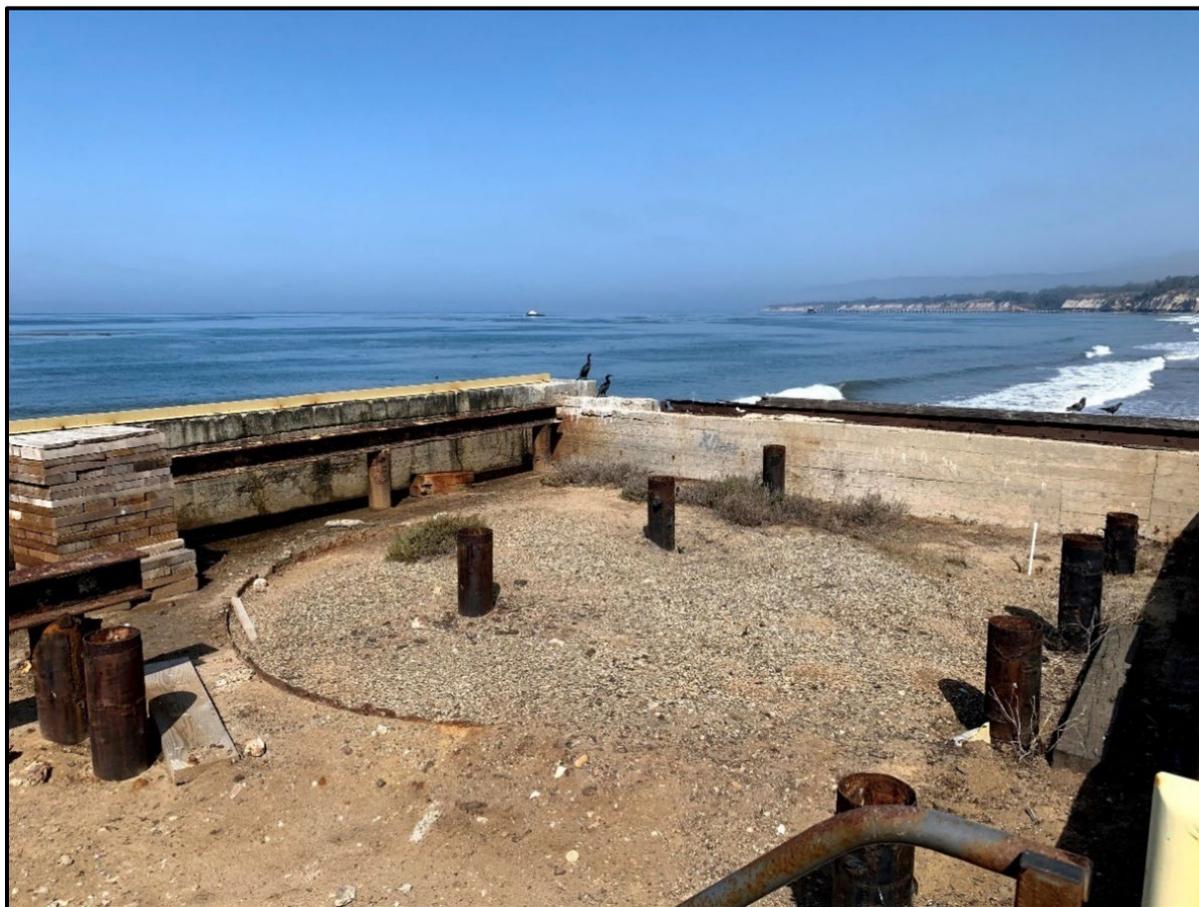
#### 16   2.2.1.1   421-1 Caisson and Well

17   **421-1 Caisson.** The current condition of the 421-1 caisson can be seen in Figures 2-2  
18 through 2-4. The top 3.5 feet of fill has been removed from the interior of the caisson  
19 exposing several concrete interior walls, the original 1930 derrick 2 foot by 2 foot  
20 support footings (four in total), and several rows of steel piles. The caisson is  
21 approximately 68 feet wide, 42 feet long, and 20 feet above mean sea level (msl). The  
22 outer sheet piles are interlocking steel and grouted with concrete that is approximately  
23 14 inches thick. The outer sheet pile walls are severely weathered on the northern,  
24 western, and eastern sides; however, the southern (ocean side) seawall was repaired in  
25 in 2004 and remains in good condition (Figure 2-4). The southern seawall contains 12-  
26 inch-thick precast concrete panels set inside steel H-piles that were drilled and  
27 cemented in place to a depth of approximately 15 feet below grade. The area between  
28 the precast panels and the original caisson walls were filled with clean grout during the  
29 repair install. The southern seawall on the 421-1 caisson does not have any wave  
30 deflectors. Instead, the structure was retrofitted with a 4 inch angle iron fixed to the top  
31 of the seawall to divert the wave-generated water from entry, but water into the interior  
32 of caisson 421-1 does occur.

33   **421-1 Well.** Well 421-1 plugging and abandonment operations were completed May 13,  
34 2019. The well was cemented up to 6 feet below the bedrock (approximately 26 feet

- 1 down from the top of the well cellar<sup>7</sup>). The wellhead and riser are secured inside a 12-
- 2 foot-diameter and 12-foot-deep concrete cellar. The cellar has a steel approach floor
- 3 secured to the top of the cellar and the top of the caisson wall. Figure 2-5 shows the
- 4 existing condition of the 421-1 well riser in the concrete cellar.

**Figure 2-2. 421-1 Caisson Interior**



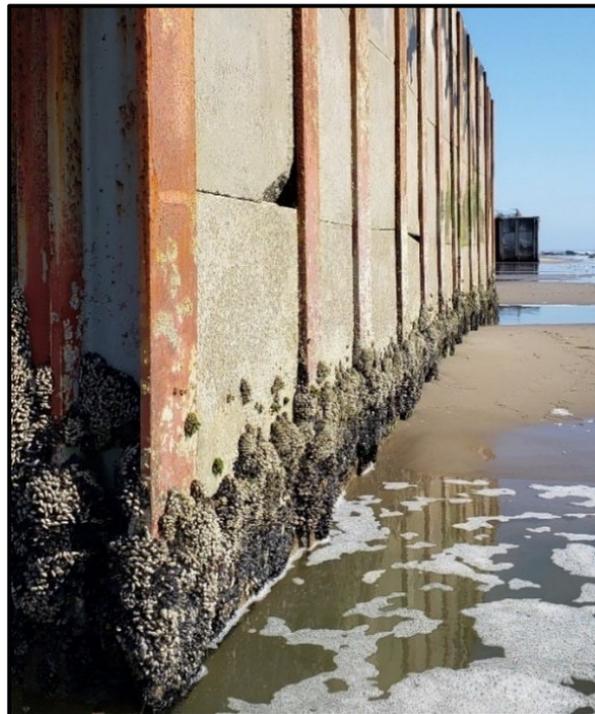
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<sup>7</sup> A well cellar is the area around the wellhead that was previously dug out to provide space for equipment at the top of the wellbore.

**Figure 2-3. 421-1 Sheet Pile Conditions (West and Northern Walls)**



**Figure 2-4. 421-1 Caisson – Repaired Southern Seawall (Southern Wall)**



**Figure 2-5. 421-1 Well Riser**



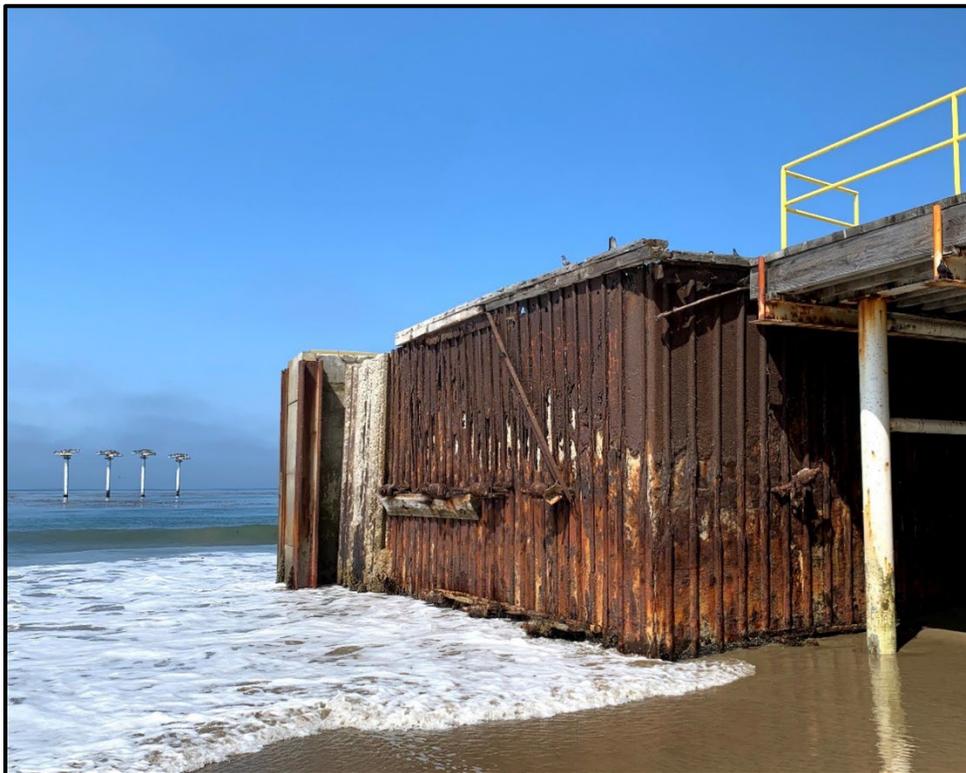
1 2.2.1.2 421-2 Caisson and Well

2 **421-2 Caisson.** The current condition of the 421-2 caisson can be seen in Figures 2-6  
3 and 2-7. The caisson is about the same size as the 421-1 caisson (approximately 68  
4 feet wide, 42 feet long, and 20 feet above msl). The interior of the 421-2 caisson is filled  
5 with soil and miscellaneous debris ranging from the pier deck level to approximately 3  
6 feet from the top of the caisson. A 4-foot-wide perimeter of soil has been left around the  
7 outer edges to facilitate access for viewing the caisson walls and seawall from above. A  
8 chain link fence is present along the outer edges of the top of the caisson. A single H-  
9 pile is currently exposed just south of the well cellar. Two of the original 1930 derrick 2  
10 foot by 2 foot support footings and stem walls were also previously uncovered. The  
11 outer sheet piles are interlocking steel and grouted with concrete that is approximately  
12 14 inches thick. The outer sheet pile walls are severely weathered on the northern,  
13 western, and eastern sides; however, the southern (ocean side) seawall was repaired in  
14 2011 and remains in good condition, similar to the 421-1 caisson described above. The  
15 upper row of the 421-2 caisson includes precast concrete seawall panels with an  
16 outward-facing bullnose to redirect ocean wave energy away from the structure and  
17 keep ocean water from coming over the seaward facing wall and side returns.

Figure 2-6. 421-2 Caisson Interior



Figure 2-7. 421-2 Caisson Sheet Pile Condition



1 **421-2 Well.** Well plugging and abandonment operations on 421-2 were completed  
2 September 14, 2019. The well was cemented up to 5 feet below bedrock (approximately  
3 15 feet down from the top of the caisson). The original concrete well cellar and  
4 approach were replaced in 2018 prior to the well abandonment. A 6-foot-tall and 12-  
5 foot-diameter steel ring was secured to the top of the remaining concrete cellar. A new  
6 steel cellar approach structure was constructed joining the retaining ring to the pier.  
7 Figure 2-8 shows the 421-2 well riser and concrete cellar ring from above.

**Figure 2-8. 421-2 Well Riser (Within Concrete Cellar Ring)**



8 2.2.1.3 Caisson Fill Soil Analysis

9 A soil sampling and analysis investigation was undertaken in 2019 to test soils within  
10 the 421-1 and 421-2 caissons (Padre 2019). The results of the investigation indicated  
11 that in the 421-1 caisson, the highest reported concentration of total petroleum  
12 hydrocarbons (TPH) (carbon range C<sub>4</sub>-C<sub>40</sub>) in soil is 41,000 milligrams per kilogram  
13 (mg/kg) at an approximate depth of 10 feet below topside surface grade, and TPH-  
14 containing soil was observed to a depth of approximately 19 feet at the approximate  
15 contact with the Monterey Formation siltstone/claystone bedrock. Within the 421-2  
16 caisson, hydrocarbon-containing soil is present within the caisson at depths ranging  
17 from approximately 6 feet to 19 feet below topside surface grade. Monterey formation  
18 siltstone/claystone bedrock is present at depths greater than approximately 19 feet  
19 below topside surface grade. The laboratory analytical results indicate the highest  
20 reported TPH C<sub>4</sub>-C<sub>40</sub> concentration in soil is 56,200 mg/kg at an approximate depth of 6  
21 feet below surface grade within the 421-2 caisson.

1 Laboratory analysis to date indicates the soil fill can be disposed of under Non-  
2 Hazardous Materials Manifests. Additional sampling and analysis would be required to  
3 verify non-hazardous conditions at the time of removal to determine the final disposition.  
4 The volume of soil estimated for disposal from inside the two caissons is approximately  
5 3,550 cubic yards (gross volume). The total resulting volume may be less depending on  
6 the volume of the internal structures (concrete and steel), and other debris within each  
7 caisson.

#### 8 2.2.1.4 421-1 and 421-2 Piers

9 The primary facilities associated with PRC 421 occupy approximately 11,600 square  
10 feet of pier space and include two piers on State tidelands and submerged lands below  
11 the bluffs at the southern limit of Sandpiper Golf Course (Figure 2-9). The two piers,  
12 Pier 421-1 and Pier 421-2, are built with vertical tubular steel piles with overlying  
13 horizontal steel I-beams and wood timber decking and are approximately 325 feet apart.  
14 Each pier is approximately 80 feet in length. Venoco reinforced the pier pilings and  
15 substructures with additional steel in 2001, and the earlier pier supports were removed.  
16 New 12 inch piles were driven on average 13 feet into the underlying shale and new  
17 W16 (wide flange, 16 foot) beams were placed on top of those. These improvements  
18 increased the load-bearing capacity of the pier bridges.

**Figure 2-9. PRC 421 Pier Areas**



1 **421-1 Pier.** Pier 421-1 is approximately 85 feet in length and approximately 40 feet in  
2 width. The 421-1 pier is comprised of reinforced wood decking material surrounded by  
3 yellow pipe safety railing. The 421-1 caisson and well head are located at the end of the  
4 pier past a locked chain link entryway fence with razor wire across and at the western  
5 and eastern extents. A double gate provides access to the caisson and well area.  
6 Figure 2-10 shows the existing topside and underside of the 421-1 pier structure.

**Figure 2-10. 421-1 Pier Structure**



**Topside of 421-1 Pier Looking South**



**Underside of 421-1 Pier Structure**

7 **421-2 Pier.** Pier 421-2 is approximately 76 feet in length and approximately 30 feet in  
8 width. Similar to Pier 421-1, the 421-2 pier is comprised of reinforced wood decking  
9 material surrounded by yellow pipe safety railing. The 421-2 caisson and well head are  
10 located at the end of the pier past a locked chain link entryway fence with razor wire  
11 across and at the western and eastern extents. A double gate provides access to the  
12 caisson and well area. Figure 2-11 shows the existing topside and substructure of the  
13 421-2 pier.

**Figure 2-11. 421-2 Pier Structure**



**Topside of 421-2 Pier Looking North**



**Substructure of 421-2 Pier**

## 1 *Pier Supports Sampling*

2 Sampling of the painted pier substructure was conducted in November 2021 to  
3 determine if lead-based paint was present. The sampling results indicated that no lead  
4 was present in the painted surfaces of either pier substructure within laboratory  
5 reporting limits (Appendix K)

6 **Pier Abutments.** Both the 421-1 and 421-2 pier abutments (the portion of the access  
7 roadway adjacent the pier entrances) were upgraded in 2001 prior to planned well  
8 workovers to structurally stabilize the transition between the access roadway and the  
9 pier structures to allow safe access for the heavy equipment needed for the well work.  
10 Soldier piles made of H-pile beams were installed by grouting them vertically in place.  
11 Timbers were installed between the H-piles as illustrated in Figure 2-12 below. New  
12 walers<sup>8</sup> and tiebacks were then secured from the original seawall back to the H-piles  
13 and timber abutment wall, where they were buried below the grade of the access  
14 roadway. Additional maintenance along the road surface, the bluff, and the transition  
15 area to the rock revetment was completed to provide a safe access route to the wells for  
16 the large equipment needed for the well work. An 80,000 pound service rig and other  
17 support equipment were driven along this route and across the pier abutments during  
18 the well abandonment work with no impact.

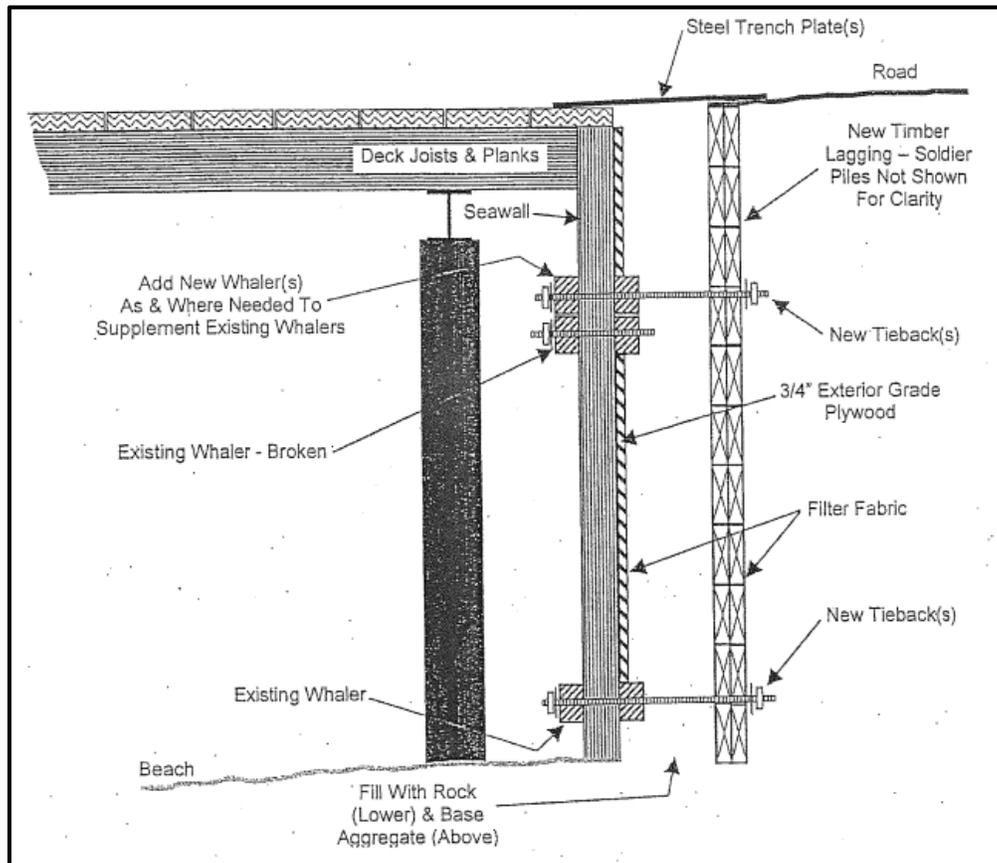
### 19 **2.2.2 Access Roadway**

20 A dirt and gravel road originating near the EOF provides vehicle access to the two  
21 shoreline piers at PRC 421. This road was historically part of a more extensive service  
22 road that was originally built to connect at least 11 individual oil piers and nearly 50 oil  
23 wells with onshore services and oil production facilities in this area. The access  
24 roadway is located within easements granted to Venoco by the property owners of the  
25 Sandpiper Golf Course and extends in a southerly direction from the EOF for 600 feet  
26 across Sandpiper Golf Course and then turns southeast and extends approximately  
27 1,600 feet along the base of the bluff to the PRC 421 piers (Figure 2-13). The entirety of  
28 the access roadway resides landward of the MHTL (Figure 1-2). The segment of the  
29 access roadway along the base of the bluff is protected by a rock and wooden seawall  
30 revetment (Section 2.2.4).

---

<sup>8</sup> A horizontal beam that is attached with bolts to a larger upright structure.

**Figure 2-12. Side View of Pier Abutment Upgrades**



1 As shown in Figure 2-14, the vegetation that lines the pier access roadway is dominated  
 2 by coastal scrub with smaller areas of riparian habitat in localized areas. The road and  
 3 remaining section of wooden seawall, along with the 421-2 pier abutment, impede water  
 4 drainage from the golf course where the road terminates at the 421-2 pier, creating a  
 5 well-established wetland (Figure 2-15). The wetland has been documented in previous  
 6 CEQA reviews and site permit proceedings.

7 **2.2.2.1 Access Roadway Soil Investigation**

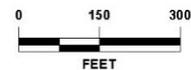
8 A soil investigation of the access roadway was conducted in November 2021 (Appendix  
 9 J). Soil samples were collected from twenty drill hole locations spaced approximately 80  
 10 feet apart along the access roadway from the 421-2 pier back to the entrance gate of  
 11 the access roadway. Soil samples were collected from each drill hole from depths  
 12 ranging from approximately 4 feet to 16 feet below ground surface (bgs). Earth  
 13 materials encountered included aggregate road base materials, artificial fill materials  
 14 composed of lean clay with varying amounts of silt, sand, and fine-grained gravel. The  
 15 potential presence of petroleum hydrocarbons was measured with handheld  
 16 instruments. Field observations indicated low petroleum hydrocarbon concentrations  
 17 and slight petroleum hydrocarbon odor at several drill hole locations.

Figure 2-13. Pier Access Roadway Through Golf Course



**LEGEND:**

- Pier Location
- Proposed Beach Access Ramp
- Access Route
- Ellwood Onshore Facility (EOF)



Source: Esri Online 'Clarity' Basemap  
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet  
Notes: This map was created for informational and display purposes only

**Figure 2-14. Pier Access Roadway Along Southern Boundary of Golf Course**



*Access Roadway Looking East*



*Access Roadway Looking West*

**Figure 2-15. Existing Wetlands Located North of Terminus of Access Roadway**



1 The laboratory analytical results for 40 soil samples indicated the presence of TPH  
2 identified as diesel fuel (C<sub>13</sub>-C<sub>22</sub>) and motor oil (C<sub>23</sub>-C<sub>40</sub>) in 25 soil samples at depths of  
3 approximately 4 feet and 8 feet below ground surface (Figure 2-16). The laboratory  
4 analytical results indicated that the chemically analyzed soil samples did not contain  
5 VOCs, SVOCs, or PCBs constituent concentrations in excess of the analytical method  
6 reporting limits. The laboratory analytical results indicated that the soil samples  
7 contained metals concentrations that were less than the applicable ESLs or published  
8 background concentrations. Based on the laboratory analytical results for soil samples  
9 collected from within the access roadway; artificial fill materials, beach deposits, and  
10 weathered Monterey Formation materials contain detectable concentrations of  
11 weathered petroleum hydrocarbons at various depths and locations along the access  
12 roadway.

### 13 **2.2.3 Pipelines**

14 A 6-inch-diameter pipeline historically transferred produced oil, water, and gas from  
15 Lease PRC 421 to the old Line 96 just outside the EOF and former Ellwood Marine  
16 Terminal, downcoast. This pipeline extends from a valve box at the southern end of the  
17 EOF and passes under the golf course 11<sup>th</sup> fairway and green within a pipeline  
18 easement corridor. This easement also contains various pipelines that service Platform  
19 Holly and the offshore seep tents<sup>9</sup> approximately 2 miles offshore. In an area just above  
20 the beach face, the pipeline turns parallel to the shore and runs southeast on the ocean  
21 side of the golf course 12<sup>th</sup> tee box towards the access roadway gate. In this area, the  
22 pipeline is exposed at the surface. This pipeline continues another 1,170 feet below the  
23 surface, where it terminates in the subsurface near the 421-1 pier. Of this 1,170 foot  
24 segment, approximately 280 feet of this pipeline is located beneath the shoreline rock  
25 revetment, while the remainder of the pipeline is buried under the access roadway  
26 surface.

27 A 2-inch-diameter pipeline (which historically supplied natural gas from the EOF to the  
28 421 piers) originates at a surface location in the southeast corner of the EOF. This  
29 pipeline follows beneath the road easement through the golf course corridor adjacent to  
30 the 11<sup>th</sup> fairway and continues north of the 12<sup>th</sup> tee. It continues beneath the road to a  
31 point where it begins to parallel the 6-inch-diameter pipeline described above at a point  
32 near the access road gate. From there, the 2-inch-diameter pipeline continues beneath  
33 the road to the area where it terminates near the 421-1 pier.

---

<sup>9</sup> In 1982 a seep containment device was placed on the sea floor 1.5 km east of oil platform Holly in a joint effort by ARCO and Mobil oil companies. This device comprises two steel pyramids or tents measuring 100 by 100 feet each that capture emissions from numerous hydrocarbon seeps on the sea floor.

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Figure 2-16. Access Roadway Sampling



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1 All pipelines leading from the EOF to the 421 piers and to offshore locations through the  
2 golf course easement were surveyed in May and June 2020. Additionally, the two  
3 pipelines related to the Project were re-verified utilizing a pipeline location service in  
4 November 2021. The subsurface locations and depth of burial was mapped along the  
5 onshore length of each line. Figure 2-17 shows the relationship of the 421 Project  
6 pipelines to the pipelines that lead to offshore locations and to the existing access road  
7 and rock revetment under which some of the 6-inch-diameter line is buried.

#### 8 2.2.3.1 Pipeline Coating Asbestos Sampling

9 A representative sample on the coatings of the exposed 6-inch-diameter pipeline was  
10 tested for the presence of asbestos containing materials (ACM) in November 2021.  
11 Both the outer and inner wrap of the pipeline was sampled. No ACM were detected in  
12 the pipeline coating material(s).

#### 13 2.2.4 Rock Revetment and Wooden Seawall

14 Armor rock protection was placed at the base of the access roadway during the 1980s,  
15 starting at the access roadway gate area at the west side of the road adjacent to the  
16 golf course. Additional revetment rock was placed prior to the 2019 well plugging to  
17 shore up the road where wave action over time caused erosion and loss of the  
18 protective rock in certain areas. This revetment currently continues southeast below the  
19 access roadway for approximately 1,400 feet until it reaches approximately 200 feet to  
20 the east of Pier 421-1 (Figure 2-18).

21 A wooden seawall then runs from the end of the rock revetment to approximately 75  
22 feet to the east past PRC 421-2 (Figure 2-19). Historically, this wooden seawall  
23 extended for several thousand feet southeastward along the coast. Much of this has  
24 been compromised by storm and wave activity over many decades but remaining  
25 sections of this structure are present for a distance southeast of the subject piers. The  
26 wooden seawall is left in its original state from about 75 feet to the east of 421-2 pier  
27 along the wetlands and is generally deteriorated as shown below in Figure 2-20. Past  
28 that point, only pieces of this former structure remain. The wetlands are formed from a  
29 natural ravine originating on the Sandpiper Golf Course, closed off by the access  
30 roadway, 421-2 pier abutment, and wooden seawall. Irrigation and natural runoff  
31 drainage saturate the area in the proximal area to the north of the pier, forming the  
32 localized wetland feature. Beneath pier 421-2, the wetlands continuously drain through  
33 the wooden seawall via outfall piping and natural seep drainage. This drainage can also  
34 be observed at the far eastern end of the existing wooden seawall where it is  
35 compromised in places.

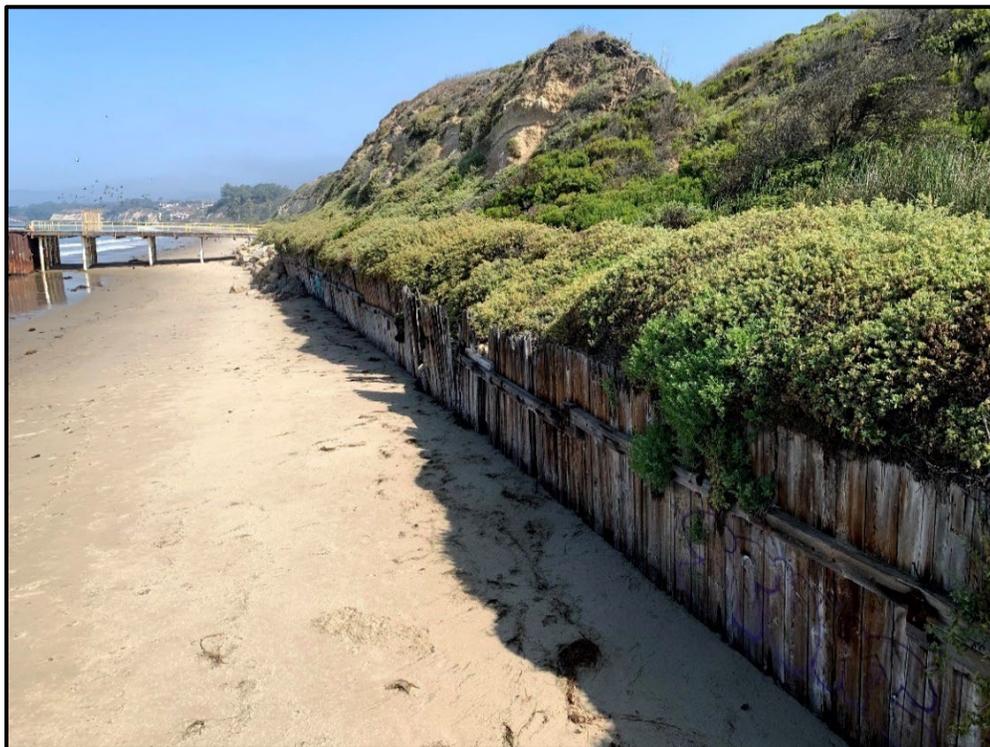
Figure 2-17. Pipelines from the EOF to the 421-1 and 421-2 Piers



**Figure 2-18. Existing Rock Revetment Along Base of Access Roadway**



**Figure 2-19. Existing Wooden Seawall Between Pier 421-1 and 421-2**



**Figure 2-20. End of Wooden Seawall (75 feet east of 421-2 Pier)**



1    2.2.4.1    Wooden Seawall Testing

2    Padre collected three representative samples of the wooden seawalls at the Project Site  
3    in November 2021. The wood samples were collected from biased locations using  
4    destructive sampling techniques using battery-powered coring equipment. The wood  
5    samples were contained in laboratory provided containers and were logged, labeled,  
6    and placed in a cooler with ice pending delivery to the analytical laboratory.

7    The laboratory analytical results for the wooden sea walls samples indicated the  
8    presence of petroleum hydrocarbons identified as diesel fuel (C<sub>13</sub>-C<sub>22</sub>) and motor oil  
9    (C<sub>23</sub>-C<sub>40</sub>), volatile organic compounds (VOCs), semi-volatile organic compounds  
10    (SVOCs), and polynuclear aromatic compounds (PAHs) constituents which indicate the  
11    presence of wood preservative and should be managed in accordance with Assembly  
12    Bill 332 and the new Alternative Management Standards for treated wood waste that  
13    are codified in Health and Safety Code section 25230.

14    **2.3    PROJECT DECOMMISSIONING METHODOLOGY**

15    This section summarizes the decommissioning procedures for the removal of both PRC  
16    421 caissons, wells, and piers (Component 1), as well as removal of the pier access  
17    roadway, two pipelines, pier abutments, and seawall/revetments (Component 2). The

1 following provides the anticipated sequencing of each major step in each of the two  
2 Project components.

3 Component 1: Caisson and Pier Removal (421-1 and 421-2)

- 4 • Remove well cellars
- 5 • Remove caisson fill
- 6 • Cut corresponding north, east, and west caisson walls
- 7 • Cut well casing and weld final plug and abandonment (P&A) cap at bedrock
- 8 • Demolish oceanside (south) caisson wall
- 9 • Remove pier structures (anticipated to be 421-1, then 421-2)
- 10 • Flush, inert, and isolate the two pipelines
- 11 • Beach restoration

12 Component 2: Access Roadway, Production Pipeline, Revetment and Seawall Removal

- 13 • Remove pipelines from 421-1 former pier connection back to 12<sup>th</sup> tee
- 14 • Remove pier abutments, wooden seawall, and rock revetment
- 15 • Removal of hydrocarbon-containing soil (where present) and final grading of
- 16 former access roadway area; site restoration

17 Removal of the structures would require, in part, working within low tide windows that  
18 allow for the most efficient and safe operations that minimize risk and impacts to  
19 personnel, the public, and the environment. This would require operations occurring in  
20 both daylight and nighttime hours that best accommodate the low tide events, hours of  
21 possible beach closure, and other logistical, environmental, and safety concerns.  
22 Additionally, a designed wave deflector would be installed on the Pier 421-1 caisson  
23 seawall to improve the ability to prevent wave-generated water from entering the interior  
24 of the caisson.

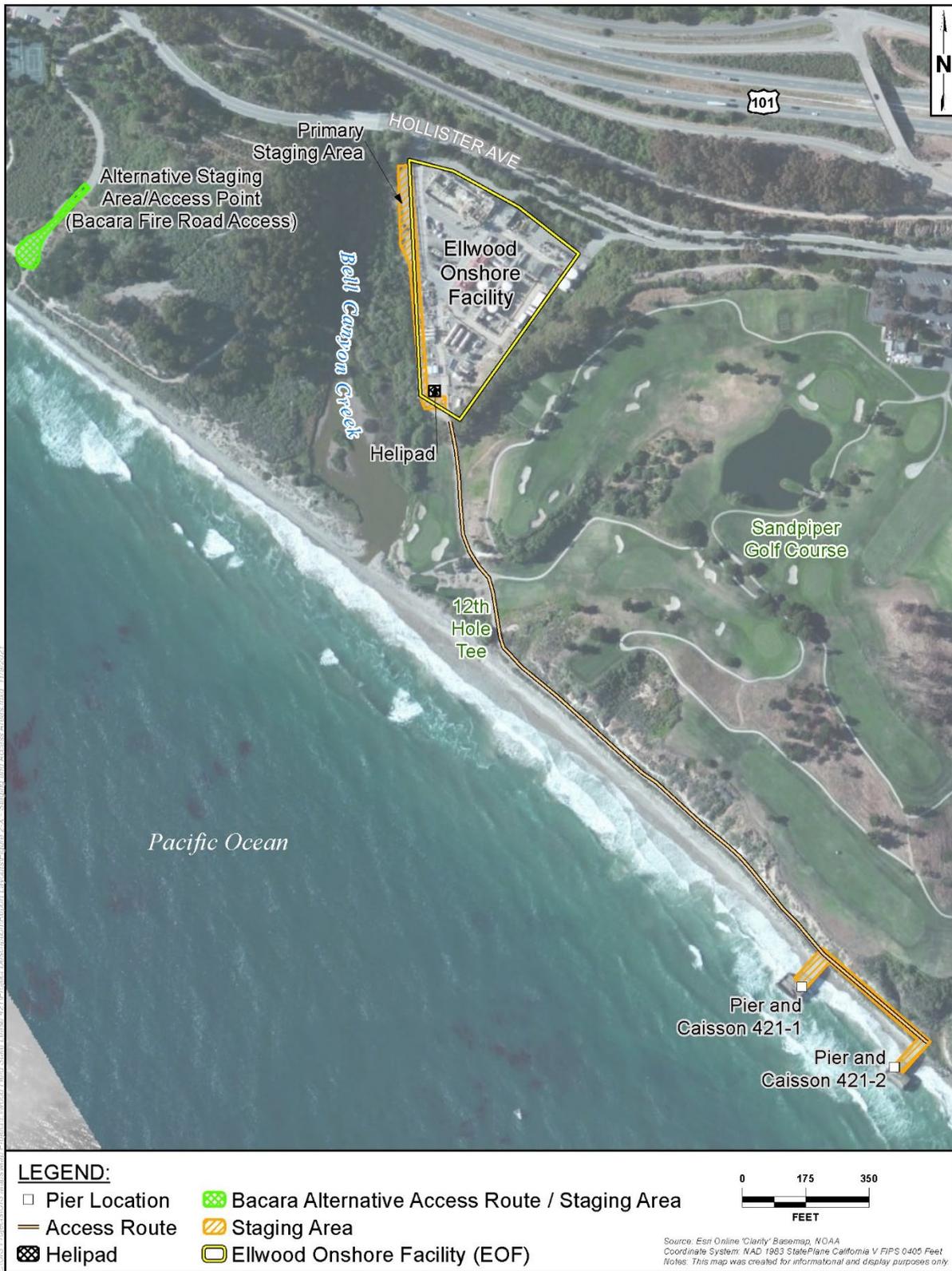
25 All structures and debris to be removed would be (or have been) evaluated for the  
26 presence of hazardous materials, including polychlorinated biphenyls (PCBs), metals,  
27 polycyclic aromatic hydrocarbons (PAHs), benzene, toluene, ethylbenzene, xylene,  
28 asbestos, and other oil-related byproducts prior to demolition.

29 **2.3.1 Staging/Access**

30 2.3.1.1 Construction Staging Areas

31 Construction equipment and materials are likely to be staged in an existing easement  
32 area located immediately adjacent to the EOF western fence line (Figure 2-21).  
33 Additionally, the Bacara Resort fire road access would be utilized as a staging area (as  
34 required, primarily prior to installation of the temporary construction ramp) for staging of  
35 equipment and bins along its length as it has in previous projects (further described in

Figure 2-21. Project Staging Areas



1 Section 2.3.1.3 below). Additionally, an existing 30 foot by 30 foot helipad and area  
2 surrounding it at the south end of the EOF may also be available for staging of vehicles,  
3 materials, and emergency equipment. Temporary construction fencing and delineation  
4 signs currently isolate the identified wetland located immediately north of the entrance  
5 to Pier 421-2 and serve to protect the wetland from construction activities. Similar  
6 fencing would be placed along Bell Canyon Creek riparian habitat corridor and other  
7 sensitive habitat areas prior to Project implementation from the Project staging and  
8 access areas as needed. Oil spill response equipment outlined within the facilities  
9 existing Oil Spill Contingency Plan Addendum prepared on behalf of the Project (CSLC  
10 2021) would also be mobilized and kept in the designated staging area(s).

#### 11 2.3.1.2 Security Program

12 Access to piers 421-1 and 421-2 are restricted via 8-foot-tall chain-link fences that block  
13 entry to the caissons. The facility gates are kept closed and locked unless access is  
14 required. Security is provided to PRC 421 by a CSLC contractor as needed. Due to the  
15 site location and accessibility to the public, 24 hour security will be implemented for both  
16 site security and public safety once decommissioning operations commence.

#### 17 2.3.1.3 Equipment Access

18 A more gradually sloped rock revetment area near the bluff access roadway gate was  
19 previously utilized as a ramp to provide beach access for maintenance work on PRC  
20 421 or the production pipelines coming from Platform Holly (which are not associated  
21 with the Project). This location is void of the coastal scrub vegetation which lines both  
22 sides of the bluff access roadway to the east. Prior to construction, a ramp in this same  
23 area would be reestablished using heavy equipment to reposition existing rock material  
24 and importation of additional rock to establish a suitable ramp for heavy equipment  
25 access to the beach. This proposed location is approximately 1,200 feet west of the  
26 421-1 pier and east of Bell Creek and the Holly production lines; therefore, once  
27 reconstructed for the Project, equipment use of this ramp would eliminate the need to  
28 cross the Bell Creek outfall (when present) or the Holly production lines (when  
29 seasonally exposed).

30 The Bacara Resort fire road access point is located west of the EOF, approximately 0.2  
31 mile west along Hollister Avenue. This access point includes an existing access  
32 roadway that runs north to south along the eastern property line of the Bacara Resort  
33 and is maintained for emergency vehicle use (should the local fire department need to  
34 launch small rescue craft from the beach). There is a locked gate near Hollister Ave.  
35 preventing public entry. This area will be utilized as an alternative Project staging area  
36 but will also be utilized as a secondary site access point prior to construction of the  
37 temporary construction ramp. The temporary construction ramp will be the primary

1 access due to its closer proximity to the construction areas and location past Bell Creek  
2 and the Holly production line crossing.

### 3 **2.3.2 Component 1: Caisson and Pier Removal (421-1 and 421-2)**

4 Following setup of the Project staging and access areas, caisson and pier removal  
5 activities would be conducted first. Figure 2-22 provides an overview of the Project  
6 components related to the caisson and pier removal portion of the Project.

#### 7 2.3.2.1 Well and Caisson Demolition

8 **Well Cellars and Riser Preparation.** In order to access the wellhead risers for cutting,  
9 any cellar fill material must first be removed. Following removal of any fill material; the  
10 wellhead risers would be cut, and a temporary cap would be installed over the casing  
11 stub inside the well cellar. It may be possible to unbolt the well riser at the base as an  
12 alternative to a cut and install a temporary blind flange plate at that location. After the  
13 cap is installed, fill dirt would be placed from the caisson on top of the casing stub to  
14 serve as a protective layer for future cellar demolition (if any cellar remains) and prevent  
15 any exposure that could create a beach hazard.

16 **Caisson Fill Removal/Caisson Wall Demolition (Northern, Western, and Eastern**  
17 **Walls).** Excavators and 20 yard bins would be staged along each respective pier to  
18 facilitate excavation of caisson fill soil and fill debris (anticipated to be concrete, wood,  
19 and steel). The smaller excavators would remove the soil and associated structural  
20 debris from the caisson and temporarily stockpile it, while the larger excavator would  
21 load that material into the staged 20 yard bins. All recovered materials would be sorted  
22 into appropriate bins for disposal or recycling at appropriate receiving facilities. The  
23 caisson structures are decades old, and there are unknowns regarding the structural  
24 integrity once demolition begins. Removal of the caisson fill and associated concrete  
25 and steel pile walls will be completed in increments to ensure the structural integrity of  
26 the caisson as a whole. Project engineers would make regular evaluations regarding the  
27 structural integrity of the caisson walls and internal structures at predetermined stages  
28 throughout the removal process. Appropriate shoring steps would be taken to ensure  
29 the ongoing safety of the workers and the public during the operation. The need of  
30 temporary structural reinforcement and bracing would be evaluated on an ongoing basis  
31 and installed as necessary. As a contingency in the event of a failure in the containment  
32 capacity of the caisson wall, preliminary oil spill response equipment will be staged  
33 along the access roadway for deployment within the project area to contain soiled fill  
34 from within the caisson from spilling onto the beach and ocean (see Section 2.6.3).

Figure 2-22. Component 1: Caisson and Pier Removal Project



1 The interior caisson walls may be contaminated with residual hydrocarbons and would  
2 be steam cleaned or pressure washed as needed to remove residue. Contaminated  
3 water would be removed using a vacuum truck or pumped into a sealed container for  
4 disposal. The interior caisson walls remain intact and would effectively contain the  
5 hydrocarbon liquids prior to removal. Following the incremental removal of fill and  
6 cleaning of the caisson walls, excavators with concrete breakers working from inside the  
7 caisson would begin demolishing the north, east, and west caisson walls. Concrete  
8 material removed inward would be recovered and placed into the staged 20 yard bins. If  
9 any material falls outward onto the beach, attempts would be made to immediately  
10 recover the material within the tide-cycle, as practical, or removed at next low tide. An  
11 example of this type of demolition (for an unrelated Project) is provided in Figure 2-23.

12 The 421-2 steel well cellar ring (currently sitting on top of the remaining concrete well  
13 cellar) and the steel rig access and support platform that connects the well cellar at the  
14 surface to the pier bridge-to-caisson abutment (this formerly ensured rig structural  
15 stability during well servicing operations) would both be removed using a crane and  
16 welders. The cellar in 421-1 is the original concrete structure so no steel retaining ring  
17 would need to be removed. 421-1 also has many vertical 12 inch steel piles throughout  
18 its structure that would need to be removed as excavation proceeds.

**Figure 2-23. Example of Caisson (Vault) Demolition Methodology  
(Unrelated Project Site)**



1 Demolition of the concrete slabs would continue along with the remainder of the  
2 concrete well cellar. Caution would be taken while cleaning out around the previously  
3 cut well head. During excavation of the caisson, if steel piles are uncovered, these  
4 would be vibrated or cut out and removed as well. Additional interior fill material would  
5 then be removed with an excavator to uncover the top row of structural tie rods which  
6 would be cut and removed as necessary to continue excavation until bedrock is reached  
7 or conditions change, such as saturated soil or structural concerns of the caisson walls.

8 **Cutting of Well Casing.** The structural condition of the existing caisson walls would be  
9 evaluated prior to cutting the well casing. Temporary shoring would be installed around  
10 the well casing as necessary for additional protection from falling debris. The bedrock  
11 around the well casing would be excavated in preparation of cutting and removal of the  
12 casing and wellhead. The well casing would be cut, and a final plate would be welded  
13 on per CalGEM requirements.

14 **Final or Oceanside Caisson Demolition.** The newer south facing (ocean side) caisson  
15 walls and extensions have been determined by structural engineers to be safe to stand  
16 alone during the demolition of the caissons (Bengal Engineering 2020). These walls  
17 would remain at full height until the interior contaminated soil and wellhead is removed  
18 to protect against ocean tide action.

19 Temporary guardrails would be installed across both pier edges in preparation of  
20 demolition of the remaining beachside walls. A large crane would be mobilized and  
21 staged on each pier. Once the tide has receded, demolition equipment would also be  
22 mobilized to the beach from the temporary beach access ramp, anticipated to consist of  
23 four excavators with concrete breakers and two loaders.

24 As the tide allows, the excavators and loaders would demolish the remaining ocean side  
25 caisson walls. Bins would be staged on the pier and cranes would also lower empty bins  
26 to the beach to fill with scrap material. Concrete and steel materials would be loaded  
27 into separate bins. As necessary, rebar and steel would be cut into manageable sized  
28 pieces. Flatbed trucks would be staged at the entrance of the piers to receive full bins  
29 from the beach and to transport materials off-site for recycling or disposal. The Bacara  
30 Resort fire road access point and staging area adjacent to the EOF would be used to  
31 stage empty and full bins during this phase of work. Both roads can be accessed by  
32 entry off Hollister Avenue, west of the EOF. All equipment and loose material would be  
33 loaded and taken off the beach before the next high tide cycle. A freshwater truck would  
34 be brought in to rinse off all beach sand and saltwater from the equipment, at the EOF  
35 staging area, to preserve their working integrity.

36 Work would continue until all walls and footings of the caissons are removed to bedrock  
37 or just below (as feasible). Steel sheet piles and steel seawall H-piles would also be cut  
38 at, or slightly below bedrock (as feasible).

1 2.3.2.2 Pier Removal

2 In preparation for work, temporary barricades would be installed at both piers across the  
3 entire abutment's edge. Additionally, temporary scaffolding and containments would be  
4 hung below the pier as needed to allow cutting access and to collect any material that  
5 may fall from the area to minimize the potential for interaction with the marine  
6 environment. During low tide events tarps would be draped on the beach to collect any  
7 material that could fall during the dismantling process.

8 With a crane positioned behind each pier along the access roadway, the timber decking  
9 of the pier would be removed in sections. Wood joists, structural steel stringers, and  
10 cross-members would be removed, working between one section of support piles at a  
11 time. Pile cross-bracing would be removed along the way. Vertical pipe piles would be  
12 cut leaving approximately 3 foot stubs above the beach sand level.

13 The remaining pile sections would be removed by vibrating them out in separate steps,  
14 either by accessing them from the remaining pier sections above or from the beach  
15 level. Specifically, a 60-ton rough terrain crane would be brought onto the beach via the  
16 temporary access ramp. Temporary rig mats would be placed down the ramp surface  
17 and on the beach to mobilize the crane to the pier location. The crane would use these  
18 mats at each pile location. Using a 150 Vibro-Hammer or equivalent (larger telescoping  
19 rig with vibrating hammer) the pier piles would be vibrated out. All piles would be  
20 removed from the beach for recycling.

21 If pile removal to below the bedrock interface is unsuccessful with the vibratory removal  
22 method, standard cutting methods would be employed to remove the pile stub(s) at the  
23 bedrock interface. This method would continue, section by section, until the pier has  
24 been fully removed back to the pier abutments. It is likely that each pier would be  
25 removed separately for logistical reasons to reduce traffic on the access roadway and  
26 provide an area for staging.

27 2.3.2.3 Pipeline Flushing and Isolating

28 The pipelines through the golf course easement are in common trenches with the  
29 pipelines servicing Platform Holly offshore. The two PRC 421 pipelines would be  
30 flushed with freshwater to obtain a residual hydrocarbon level of 15 parts per million  
31 (ppm) or less and isolated, then grouted in place.

32 Starting at the 421-1 pier location, both pipeline endpoints would be exposed within the  
33 existing roadway. Likewise, both pipelines would be unearthed near their northern  
34 terminus at the EOF. The pipeline ends would be secured and prepared with proper  
35 fittings to flush both lines with fresh water, taking returns to properly stationed vacuum  
36 trucks. During flushing, both pipelines would be checked for integrity based on pipeline  
37 pressure and returns. Once the receiving water has been tested and confirmed to be at

1 15 ppm or less of residual hydrocarbons, the flush water would be profiled (tested to  
2 determine composition) and taken to an appropriate receiving facility for disposal. The  
3 pipelines would then be isolated by installation of an isolation flange or other capping  
4 mechanism at the 421-1 pier location.

### 5 **2.3.3 Component 2: Access Roadway, Pipelines, Pier Abutments, and Rock** 6 **Revetment/Wooden Seawall Removal**

7 This part of the decommissioning program would take place sometime following the  
8 caisson and pier removal. Figure 2-24 provides an overview of the Project components  
9 related to the access roadway, pipelines, pier abutments, and rock revetment/wooden  
10 seawall removal portion of the Project.

#### 11 2.3.3.1 2-Inch-Diameter and 6-Inch-Diameter Pipeline Removal

12 The pipelines buried beneath the access roadway (a portion of which is within the golf  
13 course) and in part of the revetment would have been flushed and isolated during  
14 Component 1, as described in Section 2.3.2 above. Starting at their terminus at the 421-  
15 1 pier location, both the 2-inch-diameter and 6-inch-diameter pipelines would be  
16 removed working back toward the golf course easement near the 12<sup>th</sup> tee area using a  
17 backhoe and removing the pipelines from the excavated trench in approximately 20 foot  
18 sections. Portions of the pipelines are buried under the revetment and not directly under  
19 the road base and soil. Therefore, the revetment would be removed to access those  
20 portions. The pipelines would be removed up to the golf course easement near the 12<sup>th</sup>  
21 tee area. At this point, the pipeline ends would be capped at the agreed location near  
22 the southern entrance to the golf course easement. The remaining portions located from  
23 the 12<sup>th</sup> tee area back to the vault near the south entrance to the EOF would remain  
24 grouted in-place. The discarded pipeline scrap would be cut and placed in waste bins  
25 for transport and disposal or recycling.

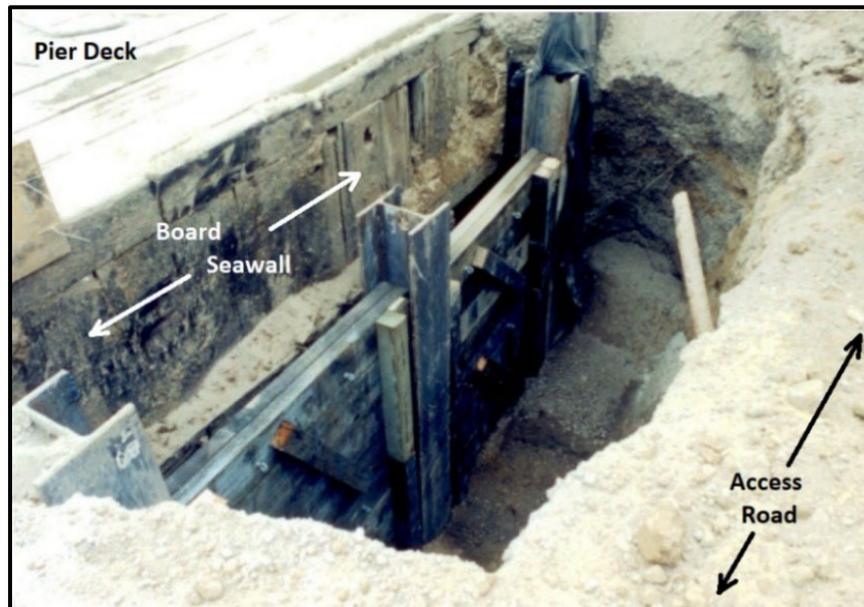
#### 26 2.3.3.2 Removal of Pier Abutments, Rock Revetment, and Wooden Seawall

27 **Pier Abutments.** Removal of the pier abutments would be done with an excavator.  
28 Figure 2-25 provides a photograph of pier abutments when they were originally installed  
29 in 2001. The abutments connect to the wooden seawall and provide structural stability  
30 from the access roadway onto the pier deck. To remove these structures, they would  
31 first be exposed by excavating soils behind them within the access roadway and the  
32 excavation shall be conducted in compliance with the Cal/OSHA standards and other  
33 applicable local and State regulations.

**Figure 2-24. Component 2: Access Roadway, Pipelines, Pier Abutments, and Rock Revetment/Wooden Seawall Removal**



**Figure 2-25. Pier Abutment During Installation (2001)**



1 Following removal of the pier abutments, all timbers and walers connected to the  
 2 wooden seawall would be cut and removed using an excavator and chainsaws. The H-  
 3 piles at the bedrock interface would be torch cut and the pile stubs would be removed  
 4 by the excavator. Cut wood, metal, and soil would be removed by a dump truck into  
 5 staged bins on the adjacent access roadway.

6 **Rock Revetment and Wooden Seawall.** Demolition of the existing rock revetment and  
 7 wooden seawall along the base of the bluffs (located along the distance of the access  
 8 roadway and extending approximately 75 feet southeast of Pier 421-2) would be  
 9 accomplished using excavators, cutting tools, and hand torches, as appropriate. Steel  
 10 tie-back rods and all concrete block debris from the beach back to the 421-2, would also  
 11 be removed. Removal of some existing vegetation that extends from behind the wooden  
 12 seawall would be required to facilitate removal.

13 As approximately 20 foot sections of wooden seawall and rock revetment are removed,  
 14 equipment would slope and compact the bank, removing hydrocarbon impacted soil as  
 15 necessary and grading to achieve a safe slope. Finally, the excavator would scrape the  
 16 top 6 to 12 inches of rock base from the road, where present, and remove to a staging  
 17 area at the EOF.

#### 18 2.3.3.3 Final Site Restoration and Cleanup

19 After completion of Components 1 and 2, native hydroseed or equivalent planting would  
 20 be completed in accordance with the Coastal Bluff Scrub Replacement Plan to aid in  
 21 slope stability and erosion control (see **MM BIO-6a**).

1 All surplus construction materials and equipment would be removed from the Project  
2 site and the laydown area. The access roadway through the golf course may require  
3 repair to restore it to either pre-construction condition or to any requirement dictated by  
4 the easement agreement. The temporary equipment access ramp to the beach would  
5 be returned to its pre-construction condition.

## 6 **2.3.4 Recycling and Disposal of Soils/Materials**

### 7 2.3.4.1 Estimated Waste Volumes and Waste Receiving Facilities

8 The estimated waste materials, volumes, and linear footages (where applicable) of  
9 concrete, rebar metal, rock, and wooden material that are anticipated to be generated  
10 during the decommissioning Project is provided in Tables 2-1a and b. Soil within these  
11 structures that has been impacted by hydrocarbons has been classified as non-  
12 hazardous waste based on multiple laboratory analyses completed on caisson soil  
13 taken at various levels.

14 Hydrocarbons may have impacted internal debris and structural members within the  
15 caissons. During the removal process, all internal concrete caisson walls would be  
16 cleaned to the extent practicable to minimize hydrocarbon residue in preparation for the  
17 demolition. All concrete would be recycled with local companies. There are five  
18 recycling companies within a 50 mile radius from the proposed Project site capable of  
19 processing the concrete waste generated. Structural steel can be sent to Standard  
20 Industries in Saticoy, near Oxnard, California, to be recycled.

21 Soil and related material would be analyzed for chemical profile prior to appropriate  
22 manifest and disposal. Soil material would be disposed of at a proper EPA approved  
23 Treatment, Storage, and Disposal (TSD) Facility. Examples of these within 330 miles of  
24 the Project include Clean Harbors' landfill in Buttonwillow, California; Patriot Wastewater  
25 solidification facility in Bakersfield, California; and Waste Management's Altamont  
26 landfill in Livermore, California. Clean Harbors also accepts wood products that are  
27 crude oil impacted along with other non-hazardous oil field debris material. Based upon  
28 initial sampling results, non-hazardous hydrocarbon impacted soil present within the  
29 access roadway could be taken to Santa Maria Landfill in Santa Barbara County to be  
30 utilized for landfill cover. Additionally, Tajiguas Landfill in Santa Barbara County is  
31 permitted to receive treated wood waste material.

**Table 2-1a. Estimate of Materials to be Generated During Decommissioning  
(Component 1 - Pier and Well Removal)**

Size/ Type	Description	Location	Pier 421-1	Pier 421-2	Total	Units
Contaminated Soil	In Caisson	In Caisson	1,730	1,820	3,550	Cubic Yard (CY)
Concrete/ Rebar	From Concrete Walls	In Caisson	450	476	926	CY
4 Inch H Beams	Caisson Cross Beams	Inside of Sheet Pile	40	40	80	Linear feet
6 Inch Barrier	Wave Guard	Length of Ocean Wall (Pier 421-1)	68	0	68	Linear feet
10 Inch H Beam	Perimeter Support Beams	Perimeter of Caissons	180	96	276	Linear feet
14 Inch H Beam	1. Seawall Pilings	Seawall	462	462	1,024	Linear feet
14 Inch H Beam	2. Horizontal Support Beams	Run Across Surface of Pier 421-1 Caisson	100	0	100	Linear feet
18 Inch Pipe Pile	Access to Pumps, Motors, Etc.	Scattered Around Caisson	196	184	380	Linear feet
6 Inch Pipe Pile	Pier Support Members	Connected to and Support 12 inch Pier Support Piles	288	232	520	Linear feet
12 Inch I Beam	Horizontal Pier Support Beams	Along Underside of Pier	470	370	840	Linear feet
12 Inch Pipe Pile	Pier Support Piles	Pier Vertical Piles	500	400	900	Linear feet
16 Inch I Beam	Pier Support Beams	Main Pier Structural Beams	415	385	800	Linear feet
4 x 15 Inch Wood	Pier Decking and Stringers	Piers	4,500	3,300	7,800	Linear feet

**Table 2-1b. Estimate of Materials to be Generated During Decommissioning  
(Component 2 – Road and Revetment Removal)**

Size/ Type	Description	Location	Pier 421-1	Pier 421- 2	Total	Units
Removal of Hydrocarbon Impacted Soil from Road and Slope Grading	-	Access Road	-	-	4,500	CY
Rock Revetment	-	Beneath Access Road Along Bluffs	-	-	6,000	Tons
Wooden Seawall	Wood Planks – 4 x 12 x 15 foot Tall, 1,000 foot Length Plus Top and Bottom Walers	Beneath Access Road Along Bluffs	-	-	1,700	Linear feet
Wooden Seawall	Metal Tie-Back Rods and other Buried Debris/Pipelines	Beneath Access Road Along Bluffs	-	-	8	Tons
Pipelines	1,400 feet of 2-inch-diameter and 6-inch-diameter pipeline	Within Access Road Back to #12 Tee	-	-	24	Tons
Steel H-Piles and Abutments	13 piles at 15 feet	Beach Along Bluffs	-	-	11	Tons

1 2.3.4.2 Anticipated Truckloads

2 The removal of fill and structural material from the Project site would require the use of  
 3 a variety of trucks including vacuum trucks, bin transport trucks, half-round dump trucks,  
 4 and flatbed trailers, to facilitate the recycling and disposal of the different materials that  
 5 comprise the 421 pier structures and caissons. Approximately 1,146 truck trips from the  
 6 EOF staging area to various disposal facilities have been estimated based on the  
 7 volume of materials that make up the pier structures, access roadway, pipelines, and  
 8 wooden seawall/rock revetment removal (Table 2-2).

**Table 2-2. Truckload Estimate – Material Transport**

<b>Material</b>	<b>Estimated Truckloads</b>
<b><u>Component 1:</u> Pier and Well Removal</b>	
Soil – Caisson Fill	175
Water – HydroEx and Standing Water Removal from Caissons	45
Steel – Caisson and Pier	30
Concrete – Caisson	240
Wood – Pier Decking and Joist Stringers	7
<b>Total for Component 1:</b>	<b>497</b>
<b><u>Component 2:</u> Pipelines, Pier Abutments and Seawall/Revetment Removal</b>	
Soil from Road and Slope Grading	300
Rock Revetment	333
Wood – Wooden Seawall and Abutments	5
Steel-H-Piles, Pipelines, Tieback Rods	11
<b>Total for Component 2:</b>	<b>649</b>

## 1 2.4 EQUIPMENT AND PERSONNEL REQUIREMENTS

### 2 2.4.1 Equipment Requirements

- 3 A scenario identifying the likely primary equipment associated with the proposed Project  
4 is outlined in Tables 2-3a and 2-3b. Equipment would be removed from the beach and  
5 returned to the EOF staging area or pier access roadway at the end of each workday  
6 and during high tides. No refueling of equipment would be allowed on the beach.  
7 Refueling would take place only in designated areas within the onshore staging area(s).

**Table 2-3a. Project Equipment Requirements (Component 1)**

<b>Equipment Type</b>	<b>Quantity</b>	<b>Horsepower</b>	<b>Operating Hours/Day</b>	<b>Days</b>
<b>Well Cellar and Riser Preparation and Caisson Internal Materials Removal</b>				
Excavator	2	272	10	55
Wheeled Loader	2	250	10	55
Hydro-Excavator	1	varies	10	40
Cutting Torch	1	NA	4	5

Equipment Type	Quantity	Horsepower	Operating Hours/Day	Days
Welding Machine	1	25	8	5
Heavy-duty Truck (Water Delivery, Soil, Debris, and Wastewater Disposal)	~4	varies	10	55
<b>Well Abandonment (Cut Casing)</b>				
Excavator	1	272	10	4
Crane	1	275	10	4
Cutting Torch	1	NA	4	4
Welding Machine	1	25	4	2
<b>Caisson Removal</b>				
Excavator (with demolition breaker as needed)	4	272	10	40
Wheeled Loader	2	250	10	40
Crane (with vibratory hammer as needed)	2	275	10	40
Heavy-duty Truck (water delivery, vacuum trucks, wastewater disposal)	~6	varies	8	40
Cutting Torch	1-2	NA	10	40
<b>Pier Removal</b>				
Excavator	2	272	10	11
Wheeled loader	2	250	10	11
Crane (with vibratory hammer as needed)	2	275	10	11
Heavy-duty truck (steel, wood disposal)	~6	varies	10	11
Cutting torch	2	NA	10	11
<b>Pipeline Flushing and Grouting (12<sup>th</sup> Tee Junction back to EOF)</b>				
Backhoe	1	104	10	5
Concrete pump	1	175	10	5
Flush pump	1	20	10	5
Welding machine	1	25	10	2
Heavy-duty truck (water and	~4	varies	10	5

Equipment Type	Quantity	Horsepower	Operating Hours/Day	Days
cement delivery, wastewater disposal)				
<b>Site Restoration</b>				
Excavator	1	272	10	3
Backhoe	1	104	10	3
Crane	1	275	10	3
Hydro-seeder	1	varies	10	1

Table 2-3b. Project Equipment Requirements (Component 2)

Equipment Type	Quantity	Horsepower	Operating Hours/Day	Days
<b>Pipeline Decommissioning and Removal</b>				
Excavator	1	272	10	5
Backhoe	1	104	10	5
Heavy-duty truck (steel disposal)	~4	varies	10	5
<b>Pier Abutment Removal</b>				
Excavator	1	272	10	10
Wheeled loader	1	250	10	10
Heavy-duty truck (wood and steel disposal)	~2	varies	10	10
<b>Wooden Seawall, Other Structures, and Buried Debris Removal</b>				
Excavator	2	272	10	15
Wheeled loader	1	250	10	15
Backhoe	1	104	10	15
Cutting torch	2	NA	10	15
Chain saw	2	10	10	15
Heavy-duty truck (wood and debris disposal)	~4	varies	10	15

Equipment Type	Quantity	Horsepower	Operating Hours/Day	Days
<b>Rock Revetment and Roadway Removal</b>				
Excavator	2	272	10	30
Wheeled loader	2	250	10	30
Dozer	1	215	10	30
Heavy-duty truck (rock, soil, gravel disposal)	~10	varies	10	30

1 **2.4.2 Personnel Accommodations**

2 Worker personal vehicle parking may be accommodated at the EOF or the temporary  
 3 laydown area west of the EOF. Workers not involved in moving equipment could access  
 4 the Project site by walking or utilizing golf carts or other small worker transport vehicles.  
 5 Traffic controllers would be utilized to direct personnel and equipment through the golf  
 6 course corridor to minimize public disruption and ensure safety.

7 **2.5 SCHEDULE**

8 Component 1 would extend over approximately 143 working days over the course of  
 9 approximately 5 months. Component 2 would extend over approximately 63 working  
 10 days over the course of approximately 3 months. Most decommissioning tasks would  
 11 take place between 7:00 a.m. and 7:00 p.m., 5 to 6 days per week. The work windows  
 12 for the caisson walls removal would be dictated by the low tide events allowing heavy  
 13 equipment access to the beach. Some flexibility would be needed regarding the hours  
 14 of operation to allow for nighttime operations or weekend work (as necessary) due to  
 15 the progression of tides and other factors during operations. The caisson removal from  
 16 the beach may require a 6 to 7 day work week to take proper advantage of tide cycles.

17 Low tide events change daily and progress on average 30 minutes each successive  
 18 day. Since the Project site is located within the tidal zone, the average low tide duration  
 19 for beach access (where the caissons are completely out of the ocean) varies. The  
 20 caissons can be accessed with heavy equipment at tide heights of 1 foot and below  
 21 during the later winter/early springtime and tides under 2 feet during the late  
 22 summer/early fall, based on field observations. Tide heights at or below the 2 foot level  
 23 allow equipment to work on the caisson from the beach and time to safely retreat back  
 24 to the access roadway, keeping equipment out of the ocean water.

25 Decommissioning of the access roadway, pipelines, abutments, and wooden  
 26 seawall/rock revetment would need to take place in summer months when sand  
 27 deposition on the beach is highest and the likelihood of large swell events is lowest.

1 Historically, summer month high tides do not reach the rock revetment or wooden  
2 seawalls, allowing equipment to freely traverse the beach.

## 3 **2.6 BEST MANAGEMENT PRACTICES**

### 4 **2.6.1 Standard Practices**

5 Standard safety and environmental practices would be implemented throughout the  
6 decommissioning phase of the proposed Project. The approved contractor would  
7 implement site-specific construction mitigation plans, safety plans, traffic minimization  
8 plans, equipment refueling plans, and habitat protection plans, among other site-specific  
9 plans. These plans would develop the standard practices and operational procedures  
10 necessary for protection of the environment, personnel, and the public.

### 11 **2.6.2 Public Access**

12 Every attempt would be made to keep the beach area open for public access, to the  
13 extent it is safe to do so. During caisson soil removal and wellhead removal activities,  
14 limited temporary beach access restrictions would be necessary. Access to the beach in  
15 the areas surrounding the decommissioning activities would be interrupted during pier  
16 removal and caisson demolition. Proper scheduling, agency and public notifications,  
17 and posting of access limitations would be made in advance to inform the public of  
18 construction operations and possible temporary closures. During potentially hazardous  
19 activities, safety personnel would be stationed on each side of the pier to prevent public  
20 transit through the Project site.

### 21 **2.6.3 Oil Spill Response Capability and Emergency Response Equipment**

22 Initial response oil spill containment equipment would be located onsite at the EOF  
23 staging area and along the access roadway. The EOF staging area would include a fully  
24 equipped spill response trailer including items such as bales of sorbent pads, boom,  
25 sweep, and oil snares; a skimmer with power pack and hoses; 55 gallon drums for  
26 waste; drum liners and plastic bags; plastic sheeting; decontamination pools with  
27 brushes; assortment of hand tools and personal protective equipment (PPE); traffic  
28 cones and delineators; and light plants. Spill response equipment along the access  
29 roadway would include smaller spill kits including containment boom and absorbent  
30 materials. The spill response trailer would be manned by spill response trained  
31 personnel during all phases of soil removal from the caissons, the removal of both well  
32 risers, and for any operations requiring heavy equipment on the beach such as the  
33 removal of the caisson walls and the removal of any pier piles. All other  
34 decommissioning activities would require contractors to provide spill kits on-site for  
35 smaller spills associated with equipment use such as fuel or hydraulic fluid releases of  
36 limited quantity.

1 In addition to the above measures, CSLC's Contract Operator operates under a  
2 comprehensive approved Oil Spill Contingency Plan (OSCP) (Beacon West 2020) that  
3 covers operations for the PRC 421, Platform Holly, and EOF facilities. The OSCP is  
4 approved by the California Department of Fish and Wildlife Office of Spill Prevention  
5 and Response (CDFW-OSPR) and Santa Barbara County Office of Emergency  
6 Management (OEM). The OSCP details response procedures, training and drills for the  
7 covered facilities, spill response capabilities, and Incident Command Structure. An  
8 addendum to the existing facilities OSCP has been developed to address the proposed  
9 Project activities (CSLC 2021).

### 3.0 CUMULATIVE PROJECTS

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1 State California Environmental Quality Act (CEQA) Guidelines section 15130 requires  
2 that an Environmental Impact Report (EIR) discuss cumulative impacts of a project  
3 when the project's incremental effect may be cumulatively considerable.<sup>10</sup> As defined in  
4 State CEQA Guidelines section 15355:

5 *Cumulative impacts refer to two or more individual effects, which, when*  
6 *considered together, are considerable or which compound or increase other*  
7 *environmental impacts. (a) The individual effects may be changes resulting from*  
8 *a single project or a number of separate projects. (b) The cumulative impact from*  
9 *several projects is the change in the environment which results from the*  
10 *incremental impact of the project when added to other closely related past,*  
11 *present, and reasonably foreseeable probable future projects. Cumulative*  
12 *impacts can result from individually minor but collectively significant projects*  
13 *taking place over a period of time.*

14 State CEQA Guidelines section 15130 includes the following additional guidance.

- 15 • Subdivision (a)(1) – An EIR should not discuss cumulative impacts which do not  
16 result in part from the project evaluated in the EIR.
- 17 • Subdivision (a)(2) – When the combined cumulative impact associated with the  
18 project's incremental effect and the effects of other projects:
  - 19 ○ Is not significant, the EIR shall briefly indicate why the cumulative impact  
20 is not significant and is not discussed in further detail in the EIR
  - 21 ○ Is less than significant, the lead agency shall identify facts and analysis  
22 supporting this conclusion
- 23 • Subdivision (b) – The discussion of cumulative impacts:
  - 24 ○ Shall reflect the severity of the impacts and their likelihood of occurrence
  - 25 ○ Need not provide as great detail as is provided for the effects attributable  
26 to the project alone
  - 27 ○ Should be guided by the standards of practicality and reasonableness
  - 28 ○ Should focus on the cumulative impact to which the identified other  
29 projects contribute rather than the attributes of other projects which do not  
30 contribute to the cumulative impact

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<sup>10</sup> “Cumulatively considerable” means that 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 (State CEQA Guidelines, §15065, subd. (a)(3)).

- 1           ○ The geographic (spatial) limits of a cumulative effect; for example, noise  
2           impacts are typically localized, while air quality impacts tend to disperse  
3           over a large area
- 4           ○ The timing and duration of the proposed Project relative to the past,  
5           present, and reasonably foreseeable cumulative projects identified (such  
6           as the construction season for temporary construction projects or long-  
7           term operation if applicable)

8 Key elements to consider when assessing cumulative impacts include:

- 9           • The type and characteristics of the resource (e.g., aesthetics, air quality,  
10           biological resources, cultural resources)
- 11           • The geographic (spatial) limits of a cumulative effect; for example, noise impacts  
12           are typically localized, while air quality impacts tend to disperse over a large area
- 13           • The timing and duration of the proposed Project relative to the past, present, and  
14           reasonably foreseeable cumulative projects identified (such as the construction  
15           season for temporary construction projects or long-term operation if applicable)

### 16 **3.1 METHODOLOGY**

17 For the PRC 421 Decommissioning Project (Project), closely related development  
18 projects from both the city of Goleta and county of Santa Barbara that are in the  
19 planning stages, adopted, under construction, or completed were considered as  
20 outlined in Table 3-2 at the end of this section and Figure 3-1. Information on each  
21 cumulative project was provided by the city (most current list updated February 25,  
22 2021), and the county of Santa Barbara (most current list updated March 5, 2021).  
23 Cumulative impacts evaluated in this EIR would likely represent a “worst-case” scenario  
24 since not all the cumulative projects will be approved, constructed, or coincide with the  
25 proposed Project activities. Additionally, other projects would likely be, or have been,  
26 subject to unspecified mitigation measures that would reduce their impacts and thereby  
27 reduce the potential for contributing to cumulative impacts.

28 To assess if impacts of the proposed Project and closely related projects are  
29 cumulatively considerable, this EIR considers the following circumstances: the type of  
30 resource affected; the proximity of the projects; where an impact might occur (e.g.,  
31 offshore, onshore, both); when projects may occur; and the short-term, temporary  
32 nature of the proposed Project’s construction impacts. The geographic scope of  
33 cumulative effects may extend beyond the scope of the direct, but not indirect, Project  
34 effects. The geographic scope of cumulative effects may be broader than that illustrated  
35 in Figure 3-1 for certain environmental disciplines where impacts could combine in  
36 broad areas (e.g., air quality and marine biological resources; this is described in each

1 section’s analysis). In addition, each project has its own implementation schedule,  
 2 which may or may not overlap with the proposed Project schedule.

3 **3.1.1 Geographic Scope of Proposed Project**

4 The cumulative projects study area is defined as the Project decommissioning area and  
 5 proposed waste hauling routes as defined in Table 3-1. Where applicable, the scope of  
 6 each resource evaluated includes the natural boundaries of the resource affected (e.g.,  
 7 topography), rather than jurisdictional boundaries. The generalized scope of cumulative  
 8 analysis by resource/issue area is presented in Table 3-2.

**Table 3-1. Project Activities and Location**

Stage	Project Component	Location
Project Component 1	Demolition and removal of 421-1 and 421-2 piers and caissons/wells	Project Site
Project Component 2	Decommissioning and removal of two pipelines beneath the access roadway, abandonment in-place of pipelines through the golf course to the Ellwood Onshore Facility (EOF), removal of the pier abutments, rock revetment, and wooden seawall beneath the access roadway along the bluff	Project Site
Waste Hauling (Either Component)	Non-hazardous soil	Up to approximately 330 miles from Project Site: Clean Harbors – Buttonwillow, Patriot – Bakersfield, Waste Management – Livermore
	Concrete	Recycling Facility – Up to approximately 50 miles from Project Site
	Steel	Standard Industries – Up to approximately 50 miles from Project Site

**Table 3-2. Generalized Scope of Cumulative Analysis by Resource/Issue Area**

<b>Resource/Issue Area</b>	<b>Geographic Scope of Cumulative Analysis: Localized</b>	<b>Geographic Scope of Cumulative Analysis: Regional</b>
Aesthetics	Project Site	-
Air Quality	-	Santa Barbara County Air Pollution Control District
Biological Resources	Project Site	City of Goleta, Santa Barbara County
Cultural/Tribal Cultural Resources	Project Site	Santa Barbara County
Geology, Soils, and Paleontological Resources	Project Site	Southern California
Greenhouse Gas Emissions	-	Santa Barbara County Air Pollution Control District
Hazards and Hazardous Materials	Project Site	Santa Barbara County
Hydrology and Water Quality	Project Site	Santa Barbara County and Offshore (Pacific Ocean)
Land Use and Planning	Project Site	City of Goleta
Noise	Project Site	Not applicable
Public Services	Project Site	City of Goleta, Santa Barbara County
Recreation	Project Site	City of Goleta, Santa Barbara County
Transportation and Traffic	Project Site	City of Goleta, Santa Barbara County
Utilities and Service Systems	Project Site	Santa Barbara County

### 1 3.1.2 Project Timing

2 As indicated in Section 2.5, *Schedule*, Project Component 1 would extend over  
3 approximately 143 working days over the course of approximately 5 months.  
4 Component 2 would extend over approximately 63 working days over the course of  
5 approximately 3 months. Component 1 removal would occur during conditions where  
6 the piers and caissons can be accessed with heavy equipment at tidal heights of 1 foot  
7 and below during the later winter/early springtime and tidal heights under 2 feet during  
8 the late summer/early fall, based on field observations. Decommissioning of the access  
9 roadway, production pipelines, abutments, and wooden seawall/rock revetment would  
10 need to take place in summer months when sand deposition on the beach is highest  
11 and the likelihood of large swell events is lowest.

### 1 3.1.3 Cumulative Projects Related to Proposed Project

2 The following cumulative projects located within the vicinity of the proposed Project and  
3 having the potential for similar impacts have been identified for inclusion within the  
4 cumulative analysis. A summary of these cumulative projects is included in Table 3-3  
5 and depicted in Figure 3-1.

#### 6 3.1.3.1 City of Goleta Projects

7 **Beach Hazards Removal (079-200-012, -013; 079-210-059, -069, -013, -014, and -**  
8 **015).** This project is ongoing and contracted by the City of Goleta with the CSLC for  
9 removal of remnant oil and gas infrastructure hazards Permit Nos. 10-083-LUP and 12-  
10 165-LUP within the city coastline. Hazards are removed as they become exposed  
11 during the winter months and extreme weather events. There are a number of known  
12 hazards remaining along the coastline, including two h-beams that are located between  
13 the 421-1 and 421-2 piers along the wooden seawall as well as approximately 200 feet  
14 downcoast to the east (including, but not limited to: additional h-beams, concrete rubble,  
15 and additional segments of the wooden seawall).

16 **Platform Holly Decommissioning (2 miles offshore).** Plugging and abandonment of  
17 32 existing oil wells. This Project is ongoing. The Platform is slated for  
18 decommissioning, but the timing of decommissioning and final disposition are currently  
19 uncertain.

20 **Ellwood Mesa Coastal Trails and Habitat Restoration Project (APN 079-210-024, -**  
21 **069, -015, -014, -013, -072, -071, and 070).** Improve 7.1 miles of trails, including two  
22 beach access points and 13 acres of habitat restoration. The project application has  
23 been approved by the city, but the project has not been constructed.

24 **Bacara Beach House Relocation (8301 Hollister Avenue).** Demolition of existing  
25 beach house and relocating/construction of a new beach house. This project is directly  
26 adjacent to the west of the Bacara Resort fire road access point. Once the new facilities  
27 have been construction, the existing beach house will be demolished and a new east-  
28 west segment of the existing public access trail/path will be installed along the south  
29 edge of the former beach house building footprint parallel to the ocean. The emergency  
30 shoreline protection revetment and sheeting will be removed. A Mitigated Negative  
31 Declaration (MND) was adopted for the project in April 2020. The project application has  
32 been approved by the city and CCC, but the project has not been constructed.

33 **Security Paving (909 S. Kellogg Avenue).** Construction of 11.71-acre industrial  
34 concrete and asphalt recycling facility with temporary and permanent equipment.  
35 Includes creek restoration and drainage improvements. Currently under construction.

**Table 3-3. Summary of Relevant Cumulative Projects in the Project Area**

<b>Project Name/Applicant</b>	<b>Description</b>	<b>Status</b>
<b>City of Goleta</b>		
Beach Hazards Removal	The removal of remnant oil and gas infrastructure hazards	Ongoing
Platform Holly Decommissioning	Plugging and abandonment (P&A) of 32 existing oil wells.	P&A in progress
Ellwood Mesa Coastal Trails and Habitat Restoration Project	Improve 7.1 miles of trails, including 2 beach access points and 13 acres of habitat restoration	Permits approved by the city and other agencies, pending construction (Parks and Open Space)
Bacara Beach House Relocation	Demolition of existing beach house and relocating/construction of a new beach house	Permits approved by the city, pending construction
Security Paving	Construction of concrete and asphalt recycling facility	Under construction
<b>County of Santa Barbara</b>		
Highway 101 Widening – Segment 4B and 4C	4.5 mile HOV (high occupancy vehicle) lane	Approved by the county – in progress
Plains Pipeline Line 901-903 Replacement	123.4 mile pipeline replacement	EIR in progress
ExxonMobil EIR – Interim Trucking for SYU Phased Restart	Phased restart of the existing ExxonMobil Santa Ynez Unit (SYU) Facilities by trucking limited crude oil production to receiver sites	FSEIR in progress. Recommended for denial by the Planning Commission. Second hearing scheduled for November 2021. Final Recommendations will be presented to the Board of Supervisors in a subsequent hearing
Caveletto/Noel Housing	134 new homes	Under construction

Project Name/Applicant	Description	Status
Ocean Meadows Residential Development	Develop a residential community near UCSB	Application in process with county

1 3.1.3.2 County of Santa Barbara Projects

2 **Highway 101 Widening – Segment 4B and 4C (PM 4.6 to 9.2).** This project adds a  
3 part-time, continuous access 4.5-mile HOV (high occupancy vehicle) lane in both the  
4 northbound and southbound directions. Segment 4B is located between postmile (PM)  
5 4.6 to 7.5 between the city of Carpinteria and Summerland. Segment 4C is located  
6 between PM 7.5 to 9.2 in Summerland. The Project has been approved by the county  
7 and is in progress.

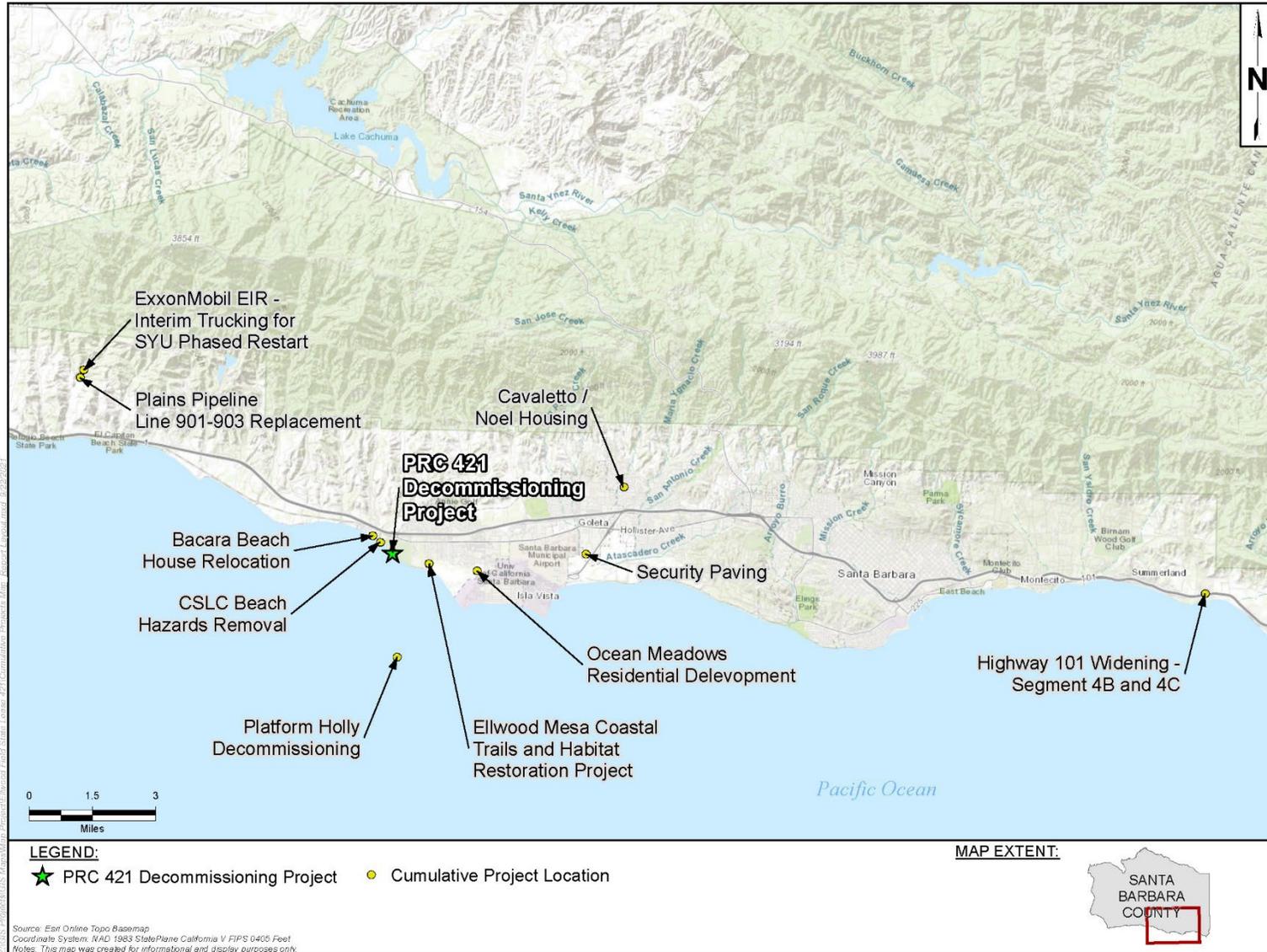
8 **Plains Pipeline Line 901-903 Replacement (081-220-014).** This project would replace  
9 the existing, and currently emptied, purged, and idled, 123.4-mile pipeline system  
10 known as Lines 901 and 903. Completion of an EIR/Environmental Impact Statement  
11 for the proposed project is pending and is expected to be released to the public in the  
12 fall-winter of 2021.

13 **ExxonMobil EIR – Interim Trucking for SYU Phased Restart (081-220-014).** This  
14 project would initiate the phased restart of the existing ExxonMobil Santa Ynez Unit  
15 (SYU) facilities by trucking limited crude oil production to receiver sites in Santa Maria  
16 and Maricopa, as a temporary solution to transport crude oil to a refinery destination  
17 until a pipeline alternative becomes available. A revision to the previously released Final  
18 Supplemental EIR is currently in progress, however the Project was recommended for  
19 denial by the Santa Barbara County Planning Commission in September 2021. A  
20 second Planning Commission Hearing is scheduled for November 2021 to consider the  
21 Findings for Denial. The Planning Commission’s final recommendations will be  
22 presented to the Board of Supervisors in a subsequent hearing.

23 **Caveletto/Noel Housing (069-100-006, -051, -054, -057).** Development of a residential  
24 community totaling 134 new homes in the Inner Village location. The project is currently  
25 under construction.

26 **Ocean Meadows Residential Development (073-090-072).** This project proposes to  
27 develop a residential community comprised of single-family homes and condominiums  
28 located in the Goleta area of unincorporated Santa Barbara County, California, adjacent  
29 to the University of California, Santa Barbara (UCSB). The project would include 32  
30 single family homes and six residential condominiums. The MND was completed in July  
31 2020 and the application is in process with the county of Santa Barbara.

Figure 3-1. Cumulative Projects Map



## 4.0 ENVIRONMENTAL IMPACT ANALYSIS

1 Pursuant to State CEQA Guidelines section 15060, the CSLC staff conducted a  
 2 preliminary review of the proposed PRC 421 Decommissioning Project (Project) and  
 3 determined that there is a potential for significant impacts resulting from the proposed  
 4 Project. A preliminary list of environmental issues to be discussed in the Environmental  
 5 Impact Report (EIR) is provided in Table 4-1 below. Based on initial internal scoping,  
 6 the Project is not anticipated to impact the following environmental factors identified in  
 7 State CEQA Guidelines Appendix G (Environmental Checklist Form).

- Agricultural and Forestry Resources
- Mineral Resources
- Wildfire
- Energy
- Population and Housing

8 However, the following resource areas have been included within the discussion  
 9 provided in Sections 4.1 through 4.15 below.

- 4.1 - Aesthetics
- 4.2 - Air Quality
- 4.3 - Biological Resources
- 4.4 - Cultural Resources
- 4.5 - Cultural Resources – Tribal
- 4.6 - Geology, Soils, and Paleontological Resources
- 4.7 - Greenhouse Gas Emissions
- 4.8 - Hazards and Hazardous Materials
- 4.9 - Hydrology and Water Quality
- 4.10 - Land Use and Planning
- 4.11 - Noise
- 4.12 - Public Services
- 4.13 - Recreation
- 4.14 - Transportation and Traffic
- 4.15 - Utilities and Service Systems

10 The analysis included within each section contains a breakdown of potential impacts  
 11 related to Components 1 and 2 of the Project individually, however, the Project as whole  
 12 is also discussed.

**Table 4-1. Anticipated Project Impacts Table**

Environmental Topic	Anticipated Project Impacts	Analyzed in Section
Aesthetics	The analysis examines Project impacts resulting from visual impacts from several representative viewpoints. The removal of the oil and gas piers and wells/caissons is anticipated to have a beneficial impact in the immediate area.	Section 4.1
Agricultural and Forestry	There are no agricultural or forestry resources within or near the Project area.	Excluded from Further Analysis Based on

Environmental Topic	Anticipated Project Impacts	Analyzed in Section
Resources		Initial Internal Scoping
Air Quality	The analysis will examine emissions of criteria air pollutants and dust generated from decommissioning activities.	Section 4.2
Biological Resources	The analysis will examine potential decommissioning impacts (e.g., permanent loss or temporary disturbance to vegetation and wildlife habitat). The analysis will also examine proposed Project activities on federally or State-listed species or other sensitive species; conflicts with any local policies on biological resources; and any conflicts with local, regional, or State habitat conservation plans.	Section 4.3
Cultural Resources	The analysis will examine Project impacts to historic and architectural resources due to ground disturbance during decommissioning.	Section 4.4
Cultural Resources – Tribal	In accordance with Assembly Bill 52 and CEQA requirements, the analysis will address the presence of and impacts to tribal cultural resources in consultation with Native American Tribes.	Section 4.5
Energy	The proposed Project does not anticipate the potential for wasteful, inefficient, or unnecessary consumption of energy resources.	Excluded from Further Analysis Based on Initial Internal Scoping
Geology and Soils	The analysis will examine potential decommissioning impacts primarily associated with the potential for soil erosion.	Section 4.6
Greenhouse Gas Emissions	The analysis will examine Project emissions of greenhouse gases resulting from decommissioning activities.	Section 4.7

Environmental Topic	Anticipated Project Impacts	Analyzed in Section
Hazards and Hazardous Materials	The analysis will examine Project hazards and hazardous materials resulting from decommissioning activities (e.g., waste management and potential for accidental release of a hazardous material).	Section 4.8
Hydrology and Water Quality	The analysis will examine potential decommissioning-related impacts to drainage and flooding conditions, erosion and sedimentation inducement, and marine water quality.	Section 4.9
Land Use and Planning	The analysis will examine Project impacts with respect to the City’s General Plan/Coastal Land Use Plan policies.	Section 4.10
Mineral Resources	There are no known mineral resources on the site, and it is anticipated the Project would not affect access to nearby resources.	Excluded from Further Analysis Based on Initial Internal Scoping
Noise	The analysis will examine Project impacts to ambient noise levels resulting from decommissioning activities.	Section 4.11
Population and Housing	The Project is temporary and would not require a change in the number of employees and would require only short-term demolition activities. The Project would neither induce substantial population growth in the area nor displace any people or housing units.	Excluded from Further Analysis Based on Initial Internal Scoping
Public Services	The Project is temporary and would not likely result in substantial demand for law enforcement, fire protection, and other public services.	Section 4.12
Recreation	The analysis will examine Project impacts to recreational activities and beach access during decommissioning activities.	Section 4.13
Transportation and Traffic	The analysis will examine Project decommissioning impacts to transportation and public access to roads and highways.	Section 4.14
Utilities and	The Project is temporary and would not	Section 4.15

Environmental Topic	Anticipated Project Impacts	Analyzed in Section
Service Systems	result in additional demand for water, wastewater treatment, or solid waste disposal services in excess of current capacities.	
Wildfire	The Project area is in the incorporated community of Goleta and is not located in a high fire hazard severity zone as identified by CalFire.	Excluded from Further Analysis Based on Initial Internal Scoping

## 1 4.1 AESTHETICS

2 This section describes existing public views and the visual character of onshore and  
3 offshore environments in the Project vicinity. The section also identifies applicable  
4 significance criteria and assesses the Project's potential impacts to aesthetics and their  
5 significance.

### 6 4.1.1 Methodology

#### 7 4.1.1.1 Visual Sensitivity

8 Visual sensitivity is defined as the public attitudes about specific views, or interrelated  
9 views, and is a key factor in assessing how important a visual impact may be and  
10 whether or not it represents a significant impact. The importance of the affected  
11 landscape is inferred from the following indicators of sensitivity (High, Medium, and Low  
12 Sensitivity).

- 13 • High Sensitivity suggests that some part of the public would react strongly to a  
14 threat to visual quality. Concern is expected to be great because the affected  
15 views are unique, rare, or otherwise special to the region or locale. A highly  
16 concerned public is assumed to be more aware of any level of adverse change  
17 and less tolerant than a public that has little concern. A small modification of the  
18 existing landscape may be visually distracting to a highly sensitive public and  
19 represents a substantial reduction in visual quality. Indicators of high visual  
20 sensitivity include:
  - 21 ○ Views of and from areas the aesthetic values of which are protected in  
22 laws, public regulations and policies, and public planning documents
  - 23 ○ Views of and from designated areas of aesthetic, recreational, cultural, or  
24 scientific interest, including national, State, county, and community parks,  
25 reserves, memorials, scenic roads, trails, interpretive sites of scientific  
26 value, scenic overlooks, recreation areas, and historic structures, sites,  
27 and districts
  - 28 ○ Views of and from areas or sites of cultural/religious importance to Native  
29 Americans
  - 30 ○ Views from national- or State-designated scenic highways or roads, or  
31 designated scenic highways or roads of regional importance
  - 32 ○ Views from resort areas
  - 33 ○ Views from urban residential subdivisions
  - 34 ○ Views from segments of travel routes, such as roads, rail lines, pedestrian  
35 and equestrian trails, and bicycle paths near designated areas of

- 1 aesthetic, recreational, cultural, or scientific interest leading directly to  
2 them. Views seen while approaching an area of interest may be closely  
3 related to the appreciation of the aesthetic, cultural, scientific, or  
4 recreational significance of that destination
- 5 • Moderate Sensitivity suggests that the public would probably voice some concern  
6 over substantial visual impacts. Often the affected views are secondary in  
7 importance or are similar to others commonly available to the public. Noticeably  
8 adverse changes would probably be tolerated if the essential character of the  
9 views remains dominant. Indicators of moderate visual sensitivity include:
- 10 ○ Views from segments of travel routes near highly sensitive use areas of  
11 interest, serving as a secondary access route to those areas
- 12 ○ Views from rural residential areas and segments of roads near them which  
13 serve as their primary access route
- 14 ○ Views of and from undesignated but protected or popularly used or  
15 appreciated areas of aesthetic, recreational, cultural, or scientific  
16 significance at the local, county, or State level
- 17 ○ Views from highways or roads locally designated as scenic routes and of  
18 importance only to the local population, or informally designated as such  
19 in literature, road maps, and road atlases
- 20 ○ Views from travel routes, such as roads, trails, bicycle paths, and  
21 equestrian trails leading directly to protected or popularly used  
22 undesignated areas important for their aesthetic, recreational, cultural, or  
23 scientific interest
- 24 ○ Views of and from religious facilities and cemeteries
- 25 • Low Sensitivity is considered to prevail where the public is expected to have little  
26 or no concern about changes in the landscape. This may be because the  
27 affected views are not “public” (inaccessible to the public) or because there is no  
28 indication that the affected views are valued by the public. For instance, little  
29 public concern for aesthetics is assumed to pertain to views from industrial,  
30 commercial, and purely agricultural areas, with some exceptions (e.g., some  
31 agricultural areas are prized for their open space value, and views of such are  
32 highly sensitive). Visual sensitivity is considered low for views from all sites,  
33 areas, and travel routes not identified as moderate or high in sensitivity.  
34 Indicators of low visual sensitivity include:
- 35 ○ Views from travel routes serving as secondary access to moderately  
36 sensitive areas
- 37 ○ Views from farmsteads, or groupings of fewer than four residences; and

- 1           ○ Views from industrial research/development, commercial, and agricultural  
2           use areas

### 3 4.1.1.2 Visual Character

4 The visual character of a landscape is typically described in terms of its landforms,  
5 vegetation, water features, and the “built” features of the environment. The current  
6 visual quality of the physical environment is described as its existing visual condition,  
7 which is defined in terms of four Visual Modification Classes (VMC) outlined in Table  
8 4.1-2.

**Table 4.1-2. Visual Modification Class (VMC) Definitions**

VMC	Definition
1	<p><b>Not noticeable</b> Changes in the landscape are within the field of view but generally would be overlooked by all but the most concerned and interested viewers; they generally would not be noticed unless pointed out (inconspicuous because of such factors as distance, screening, low contrast with context, or other features in view, including the adverse impacts of past activities).</p>
2	<p><b>Noticeable, visually subordinate</b> Changes in the landscape would not be overlooked (noticeable to most without being pointed out); they may attract some attention but do not compete for it with other features in the field of view, including the adverse impacts of past activities. Such changes often are perceived as being in the background.</p>
3	<p><b>Distracting, visually co-dominant</b> Changes in the landscape compete for attention with other features in view, including the adverse impacts of past activities (attention is drawn to the change about as frequently as to other features in the landscape).</p>
4	<p><b>Visually dominant, demands attention</b> Changes in the landscape are the focus of attention and tend to become the subject of the view; such changes often cause a lasting impression on the affected landscape.</p>

Source: VMC definitions are adapted from the U.S. Bureau of Land Management Manual 8431 (1986)

### 9 4.1.2 Environmental Setting

10 The Project site can be seen from a number of public viewpoints including, but not  
11 limited to, Haskell’s Beach adjacent to the 421 piers/caissons, access roadway, rock  
12 revetment and wooden seawall; as well as the bluff tops from Ellwood Mesa extending  
13 east towards Coal Oil Point, and westward towards the Bacara Resort (Bacara Resort).  
14 The Project vicinity has been historically utilized in support of oil and gas operations and  
15 includes immediate views of the Ellwood Onshore Facility (EOF), 421-1 and 421-2 piers  
16 and caissons, and Sandpiper Golf Course onshore, as well as the former Bird Island

1 Pier Structure (replaced and now consisting of four bird roosting platforms), the Pacific  
2 Ocean, other platforms, and the Channel Islands offshore.

3 This area exists within an active stretch of beach that can be accessed by the public  
4 from a designated trail from the Bacara Resort parking area approximately 0.5 mile to  
5 the northwest and Ellwood Mesa Trail located approximately 0.5 mile to the southeast.  
6 Bell Canyon Creek is located adjacent to the western edge of the onshore portion of the  
7 Project site and the EOF. Bell Canyon Creek is an Environmentally Sensitive Habitat  
8 Area (ESHA) that is densely vegetated with native and non-native plant species. The  
9 Sandpiper Golf Course, a public golf course, is located on a bluff just north of and  
10 adjacent to the Project area, but at a higher elevation that makes the 421-1 and 421-2  
11 piers only partially visible to golfers. Although a dirt access roadway serving the EOF  
12 and piers exists, there are no public trails from the golf course to the beach. The beach  
13 provides the only public access to the Project site, which is located within an area of  
14 High to Moderate Sensitivity. The Project area is highly sensitive because of the  
15 recreational nature of the surrounding beach and proximity to the Bacara Resort.  
16 However, the natural environment has been intermixed with industrial development for  
17 over 90 years.

18 Representative photographs of the Project site are provided below. The primary Project  
19 site is located along Haskell's Beach (Figures 4.1-1 and 4.1-2) and contains the 421-1  
20 and 421-2 piers, wells, and caissons. The piers are accessed from the EOF through an  
21 easement within Sandpiper Golf Course that leads to the pier access roadway below  
22 the golf course along the bluff face (Figures 4.1-3 and 4.1-4). A rock and wooden  
23 seawall revetment are located along the access roadway and bluff face to stabilize this  
24 area and are a prominent contributing visual feature of the Project area (Figures 4.1-5  
25 and 4.1-6). The existing views at the Project site are considered VMC Class 3  
26 (Distracting) or visually co-dominant as existing PRC 421 facilities compete for attention  
27 with natural features in view.

### 28 **4.1.3 Regulatory Setting**

29 There are no federal regulations, authorities, or administering agencies that regulate  
30 aesthetic or visual resources that are specifically applicable to the Project. State laws,  
31 regulations, and policies regarding visual resources including California Coastal Act  
32 Chapter 3, Sections 30251 and 30253 are discussed in Appendix B and Section 4.10,  
33 *Land Use* (Table 4.10-1). Local laws, regulations, and policies are discussed below.

**Figure 4.1-1. 421-1 and 421-2 Piers and Caissons Looking East from Beach Level**



**Figure 4.1-2. 421-1 and 421-2 Piers and Caissons Looking West from Beach Level  
(Note: Bird Island Structure Offshore)**



**Figure 4.1-3. Access Road through Sandpiper Golf Course**



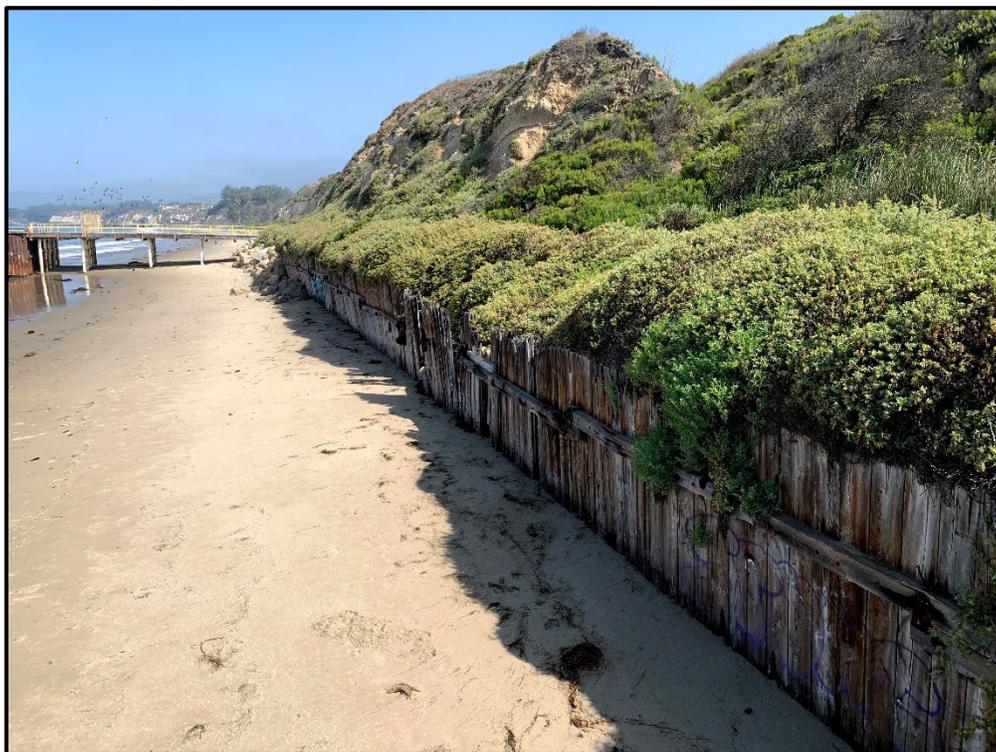
**Figure 4.1-4. Access Roadway Along Bluffs to Piers**



**Figure 4.1-5. Rock Revetment Looking West**



**Figure 4.1-6. Wooden Seawall Looking West**



1 4.1.3.1 City of Goleta General Plan/Coastal Land Use Plan – Visual and Historic  
2 Resources Element

3 The city of Goleta General Plan/Coastal Land Use Plan (GP/CLUP), Visual and Historic  
4 Resources Element (2006f) identifies the following policies that are applicable to the  
5 proposed Project:

- 6 • **Coastal Act Policy 30251** of the California Coastal Act is adopted as a policy of  
7 the city of Goleta GP/CLUP for those areas of Goleta within the Coastal Zone  
8 (including the Project site). Coastal Act Policy 30251 states: The scenic and  
9 visual qualities of coastal areas shall be considered and protected as a resource  
10 of public importance. Permitted development shall be sited and designed to  
11 protect views to and along the ocean and scenic coastal areas, to minimize the  
12 alteration of natural landforms, to be visually compatible with the character of  
13 surrounding areas, and, where feasible, to restore and enhance visual quality in  
14 visually degraded areas.
- 15 • New development in highly scenic areas such as those designated in the  
16 California Coastline Preservation and Recreation Plan prepared by the  
17 Department of Parks and Recreation and by local government shall be  
18 subordinate to the character of its setting
- 19 • **City Policy VH 1.1 (Scenic Resources)**: The City shall support the protection  
20 and preservation of the following scenic resources:
  - 21 ○ The open waters of the Pacific Ocean/Santa Barbara Channel, with the  
22 Channel Islands visible in the distance
  - 23 ○ Goleta’s Pacific shoreline, including beaches, dunes, lagoons, coastal  
24 bluffs, and open coastal mesas
  - 25 ○ Goleta and Devereux Sloughs
  - 26 ○ Creeks and the vegetation associated with their riparian corridors
  - 27 ○ Agricultural areas, including orchards, lands in vegetable or other crop  
28 production, and fallow agricultural lands
  - 29 ○ Lake Los Carneros and the surrounding woodlands
  - 30 ○ Prominent natural landforms, such as the foothills and the Santa Ynez  
31 Mountains
- 32 • **City Policy VH 1.2 (Scenic Resources Map)**: The Scenic Resources Map in  
33 Figure 6-1 identifies locations on public roads, trails, parks, open spaces, and  
34 beaches that serve as public vantage points for viewing scenic resources. Views  
35 from these locations shall be protected by minimizing any impairment that could  
36 result from new development

- 1       • **City Policy VH 1.5 (Protection of Open Space Views):** Views of open space,  
2 including agricultural lands, from public areas shall be protected. View protection  
3 associated with development should be accomplished first through site selection  
4 and then by use of design alternatives that enhance rather than obstruct or  
5 degrade such views. To minimize impacts to these scenic resources, the  
6 following development practices shall be used, where appropriate:
- 7           ○ Limitations on the height and size of structures
  - 8           ○ Clustering of building sites and structures
  - 9           ○ Shared vehicular access to minimize curb cuts
  - 10          ○ Downcast, fully shielded, full cut-off lighting of the minimum intensity  
11            needed for the purpose
  - 12          ○ Use of landscaping for screening purposes and/or minimizing view  
13            blockage as applicable
  - 14          ○ Selection of colors and materials that harmonize with the surrounding  
15            landscape

#### 16 **4.1.4 Significance Criteria**

17 Visual impacts are considered significant if one or a combination of the following apply:

- 18       • The project is inconsistent with or in violation of public policies, goals, plans,  
19        laws, regulations, or other directives concerning visual resources
- 20       • Routine operations and maintenance visually contrast with or degrade the  
21        character of the viewshed
- 22       • The project results in a perceptible reduction of visual quality, lasting for more  
23        than one year that is seen from moderately to highly sensitive viewing positions.  
24        A perceptible reduction of visual quality occurs when, for a highly sensitive view,  
25        the visual condition is lowered by at least one VMC; or for a moderately sensitive  
26        view, the condition is lowered by at least two VMCs
- 27       • Night lighting would result in glare conditions affecting nearby residences
- 28       • Because of the time factor involved in oil dispersion, visual impacts from spills  
29        are considered to be significant (i.e., a significant impact that remains significant  
30        after mitigation) if first response efforts would not contain or clean up the spill,  
31        resulting in residual impacts that would be visible to the general public on  
32        shoreline or water areas

1   **4.1.5    Impact Analysis and Mitigation**

2   The visual resources assessment focuses on identifying potentially significant impacts  
3   to public views in which the proposed Project would be most visible. Critical views are  
4   partly defined as those that are moderately to highly sensitive. The public is considered  
5   to have substantial concern over adverse changes in the quality of such views. Critical  
6   views are also defined as those public views that would be most affected by the subject  
7   action due to viewer proximity to the Project and the duration of the affected view. In this  
8   instance, critical views in the Project area are considered those from Haskell’s Beach as  
9   well as those from the Ellwood Mesa bluffs towards the Project site. A discussion of  
10  potential Project impacts of each Project component and recommended Mitigation  
11  Measures (MMs) are provided below.

12   Component 1

13   **Impact AES-1: Effects on Public Views from Decommissioning Activities**  
14   **(Component 1)**  
15   Decommissioning associated with Component 1 would have temporary impacts to  
16   public views for approximately 5 months (**Less than Significant with Mitigation**).

17   **Impact Discussion**

18   Public views of the Project site from Haskell’s Beach and adjacent bluff areas are  
19   currently enjoyed by recreational users at the beach, along the bluffs, and at the  
20   Sandpiper Golf Course. The Project site can also be seen from offshore boaters and  
21   other offshore recreational users. Public views would be temporarily degraded during  
22   Component 1 decommissioning activities from the presence of heavy construction  
23   equipment (e.g., excavators, crane) and stockpiles/bins of recovered materials placed in  
24   the staging area(s) prior to transport offsite. Additionally, lighting would be needed  
25   periodically to support work that may need to occur during nighttime low tide periods  
26   during caisson and pier removal activities (anticipated to require approximately 1-2  
27   portable construction light towers). Lighting utilized would only be what is necessary for  
28   safety purposes and would be directed at the Project site. However, these visual  
29   impacts are considered VMC Class 3 (see Table 4.1-2) on a local scale as Project-  
30   related equipment and materials would be a distracting, co-dominant visual feature.  
31   However, this impact would be temporary, lasting about 5 months.

32   Although the use of heavy equipment during decommissioning activities would introduce  
33   an unnatural industrial element to the existing beach environment, it is important to note  
34   that periodic PRC 421 maintenance activities have also involved equipment working on  
35   or adjacent to the beach. Additionally, impacts on public views are considered less than  
36   significant with mitigation following implementation of **MM AES-1a** through **MM AES-1c**.

1 **Mitigation Measures**

2 **MM AES-1a: Overnight Storage of Equipment.** Equipment utilized shall be  
3 returned to the staging areas at the end of each workday, both for public  
4 safety and aesthetic considerations.

5 **MM AES-1b: Material Removal at Construction Completion.** All materials,  
6 equipment, and debris shall be removed from the site upon completion of  
7 each Project component.

8 **MM AES-1c: Minimize Night Lighting.** When required, lighting shall use the  
9 minimum number of fixtures and intensity needed for decommissioning  
10 activities. Fixtures shall be focused on work areas and fully shielded to  
11 minimize visibility from public viewing areas, wildlife habitats, migration  
12 routes, and other sensitive receptors.

13 **Impact AES-2: Visual Improvements due to Removal of Component 1**  
14 **Infrastructure (421-1 and 421-2 Pier and Wells/Caissons)**

15 Removal of the 421-1 and 421-2 piers, wells, and caissons would restore this segment  
16 of Haskell's Beach to a more natural appearance (**Beneficial**).

17 **Impact Discussion**

18 Decommissioning and removal of the 421-1 and 421-2 piers and caissons (Component  
19 1) would substantially improve the quality of public views and restore the visual  
20 character of the beach to a more natural condition. However, Component 1 would also  
21 include removal of a small, isolated area of coastal wetland vegetation (0.003 acres)  
22 located within the 421-2 caisson. Following completion of Component 1, the former pier  
23 and caisson areas would return to an open space beach area. All equipment and the  
24 temporary beach access ramp would be removed from the work area. A permanent  
25 benefit to public views would result.

26 **Mitigation Measures**

27 None required.

28 Component 2

29 **Impact AES-3: Effects on Public Views from Decommissioning Activities**  
30 **(Component 2)**

31 Decommissioning associated with Component 2 would have temporary impacts to the  
32 public views for approximately 3 months (**Less than Significant with Mitigation**).

1 **Impact Discussion**

2 Decommissioning of Component 2 would result in similar aesthetic impacts (VMC Class  
3 3) as Component 1 to critical views of the Project site from the presence of heavy  
4 construction equipment. This visual impact would occur for about 3 months during  
5 daylight hours only. Although the use of heavy equipment during decommissioning  
6 activities would introduce an unnatural industrial element to the existing beach  
7 environment, it is important to note that periodic PRC 421 maintenance activities have  
8 also involved equipment working on or adjacent to the beach. Impacts on public views  
9 are considered less than significant following implementation of **MM AES-1a** and **MM**  
10 **AES-1b**.

11 Decommissioning associated with Component 2 would include removal of the existing  
12 rock revetment, wooden seawall, pier abutments, two Project-related pipelines back to  
13 the 12<sup>th</sup> tee, and access roadway from the (then) former 421-1 and 421-2 piers back to  
14 the 12<sup>th</sup> tee. This component would also return a portion of the beach and bluff toe back  
15 to natural conditions and improve visual quality. However, Component 2 would also  
16 include removal of some existing vegetation located along the southern perimeter of the  
17 access roadway. In addition, Component 2 would result in the disturbance and  
18 temporary loss of coastal wetlands within or adjacent to the access roadway. Removal  
19 of the rock revetment protecting the access roadway and subsequent modification of the  
20 bank (shoreline) and removal of road base would result in the permanent loss of  
21 wetlands along the access roadway. Refer to Section 4.3.4, *Biological Resources* for  
22 further discussion. However, with the inclusion of **MM BIO-5a** and **MM BIO-5b** (refer to  
23 Impact BIO-8: *Loss of Coastal Wetlands (Component 2)*), the impacts to wetlands  
24 associated with visual quality would be less than significant with mitigation.

25 **Mitigation Measures**

26 **MM AES-1a: Overnight Storage of Equipment**

27 **MM AES-1b: Material Removal at Construction Completion**

28 **MM BIO-5a: Coastal Wetlands Mitigation** (see Section 4.3.4, *Biological*  
29 *Resources*)

30 **MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2** (see Section  
31 4.3.4, *Biological Resources*)

## 1 4.1.6 Cumulative Impacts Analysis

### 2 Components 1 and 2

#### 3 **Impact AES-4: Potential for Cumulative Aesthetic Impacts to Public Views**

4 Decommissioning activities would contribute to cumulative impacts if adjacent projects  
5 were conducted at the same time (**Less than Significant with Mitigation**).

6 The proposed Project may incrementally contribute to cumulative aesthetics impacts  
7 associated with other projects that affect public views of and from Haskell's Beach.  
8 These other projects are anticipated to be limited to the Beach Hazards Removal  
9 Project and Bacara Beach House Relocation Project. The Beach Hazards Removal  
10 Project (managed by CSLC) would also require the short-term use of construction  
11 equipment to remove remnant oil and gas facilities; however, no hazard removal  
12 activities are currently scheduled within the Project area during the proposed  
13 decommissioning timeframe. In any case, both projects are intended to remove remnant  
14 oil and gas facilities from the area, which would be a long-term benefit to the visual  
15 quality and character of this stretch of beach.

16 The Bacara Beach House Relocation Project is located adjacent to the alternative  
17 Project access point from the Bacara Resort fire road access. If this project were to  
18 occur at the same time as the proposed decommissioning activities, it would also  
19 require the short-term use of construction equipment for demolition and construction  
20 activities. The simultaneous use of equipment for both projects would result in  
21 cumulative impacts to public views from Haskell's Beach. However, with implementation  
22 of **MMs AES-1a-c**, the Project's incremental contribution to cumulative impacts would  
23 not be considerable.

## 24 4.1.7 Summary of Impacts and Proposed Mitigation Measures

**Table 4.1-3. Summary of Aesthetic Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact AES-1:</b> Effects on Public Views from Decommissioning Activities (Component 1)	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM AES-1b:</b> Material Removal at Construction Completion <b>MM AES-1c:</b> Minimize Night Lighting
<b>Impact AES-2:</b> Visual Improvements due to Removal of Component 1 Infrastructure (421-1 and 421-2 Pier and Wells/Caissons)	None required.

Impact	Mitigation Measures
<p><b>Impact AES-3:</b> Effects on Public Views from Decommissioning Activities (Component 2)</p>	<p><b>MM AES-1a:</b> Overnight Storage of Equipment  <b>MM AES-1b:</b> Material Removal at Construction Completion  <b>MM BIO-5a:</b> Coastal Wetlands Mitigation  <b>MM BIO-5b:</b> Retain Coastal Wetlands Adjacent to Pier 421-2</p>
<p><b>Impact AES-4:</b> Potential for Cumulative Aesthetic Impacts to Public Views (Components 1 and 2)</p>	<p><b>MM AES-1a:</b> Overnight Storage of Equipment  <b>MM AES-1b:</b> Material Removal at Construction Completion  <b>MM AES-1c:</b> Minimize Night Lighting</p>

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## 1 4.2 AIR QUALITY

### 2 4.2.1 Environmental Setting

#### 3 4.2.1.1 Climatological Setting

4 The Project area is characterized by cool winters and moderate summers tempered by  
5 cooling sea breezes. Summer, spring, and fall weather is generally a result of the  
6 movement and intensity of the semi-permanent high-pressure area located several  
7 hundred miles to the west. Winter weather is generally a result of the size and location  
8 of low-pressure weather systems originating in the North Pacific Ocean.

9 The Project site is located in the city of Goleta, Santa Barbara County. The nearest  
10 rainfall monitoring station is located at Dos Pueblos Ranch, approximately 2.8 miles  
11 west of PRC 421-1. At this station, the average monthly maximum precipitation is 4.11  
12 inches in January, and the average monthly minimum is 0.04 inches in July, with an  
13 average annual precipitation of 18.40 inches. Temperature data from the Santa Barbara  
14 Airport indicate the maximum average monthly temperature is 74.9 degrees Fahrenheit  
15 in August and September, and the minimum average monthly temperature is 64.0  
16 degrees Fahrenheit in January. Air quality in Santa Barbara County is directly related to  
17 emissions and regional topographic and meteorological factors.

#### 18 4.2.1.2 Criteria Pollutants

19 Criteria air pollutants are those contaminants for which state and federal ambient air  
20 quality standards have been established for the protection of public health and welfare.  
21 Criteria pollutants include ozone (O<sub>3</sub>) carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>),  
22 sulfur dioxide (SO<sub>2</sub>), particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>) and  
23 particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>).

#### 24 4.2.1.3 Regulatory Overview

25 Air pollution control is administered on three governmental levels. The U.S.  
26 Environmental Protection Agency (USEPA) has jurisdiction under the Clean Air Act, the  
27 California Air Resources Board (CARB) has jurisdiction under the California Health and  
28 Safety Code and the California Clean Air Act, and local districts (Santa Barbara County  
29 Air Pollution Control District [SBCAPCD]) share responsibility with CARB for ensuring  
30 that all state and federal ambient air quality standards are attained.

31 California is divided geographically into air basins for the purpose of managing the air  
32 resources of the State on a regional basis. An air basin generally has similar  
33 meteorological and geographic conditions throughout. The Project site is situated in the  
34 South-Central Coast Air Basin, which encompasses the counties of Ventura, Santa  
35 Barbara, and San Luis Obispo. The USEPA, CARB, and the local air districts classify an

1 area as attainment, unclassified, or nonattainment depending on whether or not the  
2 monitored ambient air quality data show compliance, insufficient data available, or non-  
3 compliance with the ambient air quality standards, respectively.

#### 4 4.2.1.4 Operating Permits

5 The EOF and PRC 421 facilities are considered part of the South Ellwood Field Source  
6 by the SBCAPCD. The EOF currently operates under Permit to Operate No. 7904-R11  
7 and Part 70 Operating Permit No. 7904-06 issued by the SBCAPCD which were last  
8 updated in May 2018. Since the PRC 421 wells and associated pipelines ceased  
9 production, they are not addressed in these permits.

#### 10 4.2.1.5 Air Quality Planning

##### 11 Federal Attainment Planning

12 The federal government first adopted the Clean Air Act (CAA) in 1963 to improve air  
13 quality and protect citizens' health and welfare, which required implementation of the  
14 national ambient air quality standards. These standards are revised and changed when  
15 scientific evidence indicates a need. The CAA also requires each state to prepare an air  
16 quality control plan referred to as a State Implementation Plan (SIP). The CAA  
17 Amendments of 1990 added requirements for states with non-attainment areas to revise  
18 their SIPs to incorporate additional control measures to reduce air pollution. The SIP is  
19 modified periodically to reflect the latest emissions inventories, planning documents,  
20 and rules and regulations of the air basins as reported by their jurisdictional agencies.  
21 Local air quality districts are responsible for preparing the portion of the SIP applicable  
22 within their boundaries; adoption of control regulations for stationary sources; and  
23 implementation of indirect source and transportation control measures.

24 The USEPA has been charged with implementing federal air quality programs, which  
25 includes the review and approval of all SIPs to determine conformation to the mandates  
26 of the CAA and its amendments, and to determine whether implementation of the SIPs  
27 will achieve air quality goals. If the USEPA determines that a SIP is inadequate, a  
28 Federal Implementation Plan that imposes additional control measures may be  
29 prepared for the non-attainment area. Failure to submit an approvable SIP or to  
30 implement the plan within the mandated time frame may result in application of  
31 sanctions to transportation funding and stationary air pollution sources within the air  
32 basin.

33 In 2001 a Clean Air Plan was prepared by the SBCAPCD to address the requirements  
34 of the CAA to demonstrate how Santa Barbara County would maintain attainment of the  
35 1997 federal 1-hour ozone standard (0.08 ppm); however, the federal 1-hour ozone  
36 standard was revoked in 2005, and an 8-hour ozone standard was implemented. Santa

1 Barbara County was found to be in attainment of the 8-hour ozone standard and a 2007  
2 Clean Air Plan was prepared to demonstrate maintenance of this standard.

### 3 State Attainment Planning

4 CARB establishes area designations for 10 pollutants: ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>,  
5 SO<sub>2</sub>, sulfates, lead, hydrogen sulfide and visibility reducing particles. Areas are  
6 designated as attainment, non-attainment, nonattainment-transitional or unclassified for  
7 each State standard based on air quality data for the most recent three calendar years.  
8 In April 2017, Santa Barbara County's designation for ozone under the California Clean  
9 Air Act changed from nonattainment to nonattainment-transitional. This change in  
10 designation occurred because Santa Barbara County continued to have three or fewer  
11 exceedances of the ozone standard per calendar year. In response to this change in  
12 designation, the SBCAPCD was required to examine whether additional control  
13 measures were necessary to accomplish expeditious attainment or to maintain the State  
14 standard.

15 Along with the implementation of Statewide measures, the SBCAPCD's control  
16 measure strategy has successfully improved the County's air quality as indicated by the  
17 declining number of State 1-hour and 8-hour ozone exceedances that have occurred in  
18 Santa Barbara County since 1990. One-hour ozone standard exceedances have  
19 decreased from a high of 37 days in 1990 and 1991 to zero days in 2005, 2010, 2012,  
20 2013, 2015, and 2016. The number of 8-hour ozone exceedance days range from a  
21 high of 97 days during 1991 to zero days in 2018. These significant improvements in air  
22 quality have occurred despite a 20 percent increase in County-wide population.

23 The 2019 Ozone Plan (2019 Plan) was the ninth triennial update to the initial State Air  
24 Quality Attainment Plan adopted by the SBCAPCD Board of Directors in 1991 (other  
25 updates were done in 1994, 1998, 2001, 2004, 2007, 2010, 2013, and 2016). Each of  
26 the plan updates have implemented an "every feasible measure" strategy to ensure  
27 continued progress toward attainment of the state ozone standards. Since 1992, Santa  
28 Barbara County has adopted or amended more than 25 control measures aimed at  
29 reducing emissions from stationary sources of air pollution. These measures have  
30 substantially reduced ozone precursor pollutants, which includes NO<sub>x</sub> and reactive  
31 organic compounds (ROC).

32 On February 25, 2021, CARB held a public hearing to  
33 consider changing Santa Barbara County's designation from non-attainment-  
34 transitional to nonattainment for the State ozone standards. This change was based on  
35 two high ozone concentration values recorded in 2019. Although the SBCAPCD  
36 argued that contends these two values are anomalies and not indicative of the County's  
37 air quality and attainment of the State ozone standards, the County's attainment  
38 designation was changed to non-attainment for the State ozone standard on September

1 ~~27, 2021. The change in ozone designation is expected to be finalized by the end of~~  
 2 ~~2021.~~

3 4.2.1.6 Air Quality Monitoring

4 The ambient air quality of Santa Barbara County is monitored by a network of 18  
 5 stations. The nearest air quality monitoring station to the Project site is the Goleta-  
 6 Fairview station. As shown in Table 4.2-1, state or federal 8-hour ozone standards were  
 7 exceeded on only one day at this station from 2018 through 2020. Concentrations of  
 8 PM<sub>10</sub> and PM<sub>2.5</sub> monitored at the Goleta-Fairview station periodically exceed the state  
 9 standards and exceeded federal standards for PM<sub>2.5</sub> in 2018 and 2020.

**Table 4.2-1. Summary of Ambient Air Pollutant Data Collected at the Goleta-Fairview Monitoring Station**

Air Pollutant/Parameter	Standard	2018	2019	2020
<b>Ozone (parts per million)</b>				
Maximum 1-hour concentration monitored	-	0.077	0.072	0.084
Number of days exceeding CAAQS	0.09	0	0	0
Maximum 8-hour concentration monitored	-	0.056	0.062	0.068
Number of days exceeding 8-hour ozone NAAQS and CAAQS	0.070	0	0	0
<b>PM<sub>10</sub> (micrograms/cubic meter)</b>				
Maximum 24-hour average sample (California sampler)	-	71.7	63.3	85.8
Number of samples exceeding CAAQS	50	4	2	11
Number of samples exceeding NAAQS	150	0	0	0
<b>PM<sub>2.5</sub> (micrograms/cubic meter)</b>				
Maximum 24-hour sample	-	35.6	26.3	61.2
Number of samples exceeding NAAQS	35	1	0	6

Data obtained from the CARB website ([www.arb.ca.gov/adam/topfour/topfour1.php](http://www.arb.ca.gov/adam/topfour/topfour1.php))  
 PM samples are collected every 6 days

#### 1 4.2.1.7 Sensitive Receptors

2 Some land uses are considered more sensitive to air pollution than others due to  
3 population groups or activities involved. Sensitive population groups include children,  
4 the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory  
5 diseases. Residential areas are also considered to be sensitive to air pollution because  
6 residents (including children and the elderly) tend to be at home for extended periods of  
7 time, resulting in sustained exposure to any pollutants present.

8 Recreational land uses may be considered moderately sensitive to air pollution.  
9 Although exposure periods are generally short, exercise places a high demand on  
10 respiratory functions, which can be impaired by air pollution. In addition, noticeable air  
11 pollution can detract from the enjoyment of recreation. Industrial and commercial areas  
12 are considered the least sensitive to air pollution. Exposure periods are relatively short  
13 and intermittent, as the majority of the workers tend to stay indoors most of the time. In  
14 addition, the working population is generally the healthiest segment of the public.

15 The nearest residential land uses occur north of Hollister Avenue approximately 0.4 mile  
16 north-northeast of PRC 421-1, and on Island Oak Lane approximately 0.4 mile east of  
17 PRC 421-2.

### 18 **4.2.2 Regulatory Setting**

19 The air quality of the region (Santa Barbara County portion of the South-Central Coast  
20 Air Basin) is governed by a variety of federal, state, and local laws and regulations.  
21 Federal and state laws that may be relevant to the Project, including California Coastal  
22 Act Chapter 3, Section 30253, are identified in Appendix B and Section 4.10, *Land Use*  
23 (Table 4.10-1). Local laws, regulations, and policies are discussed below.

#### 24 4.2.2.1 Local Authority

25 The SBCAPCD is the local agency that has primary responsibility for regulating  
26 stationary sources of air pollution located within Santa Barbara County. To this end, the  
27 SBCAPCD implements air quality programs required by state and federal mandates,  
28 develops and enforces local rules and regulations based on air pollution laws, and  
29 educates businesses and residents about their role in protecting air quality. The  
30 SBCAPCD is also responsible for managing and permitting existing, new, and modified  
31 stationary sources of air pollutant emissions within the County.

#### 32 4.2.2.2 Applicable Regulatory Requirements

33 The Portable Equipment Registration Program (PERP) establishes a uniform State-wide  
34 program to regulate portable engines and portable engine-driven equipment units. The  
35 term “portable” is defined as not residing at a location for more than 12 consecutive  
36 months. Once registered in the PERP, engines and equipment units may operate

1 throughout California without the need to obtain individual permits from local air districts.  
2 To be eligible for the PERP, an engine must be certified to the current emission tier  
3 (non-road, on-highway, or marine). The PERP does not apply to self-propelled  
4 equipment (e.g., trucks, tractors, or any vehicle that converts its own energy supply into  
5 motive power used for propulsion) but would apply to any stationary construction  
6 equipment used for proposed decommissioning activities, such as air compressors or  
7 generators.

8 SBCAPCD rules and regulations applicable to activities to be conducted under the  
9 proposed Project ~~include are limited to potential nuisances (typically dust and odors):~~

- 10 • **Rule 302 (Visible Emissions):** This Rule prohibits visible emissions (smoke)  
11 which may include exhaust emissions from construction equipment.
- 12 • **Rule 303 (Nuisance):** A person shall not discharge from any source whatsoever  
13 such quantities of air contaminants or other material in violation of Section 41700  
14 of the Health and Safety Code which cause injury, detriment, nuisance or  
15 annoyance to any considerable number of persons or to the public or which  
16 endanger the comfort, repose, health or safety or any such persons or the public  
17 or which cause or have a natural tendency to cause injury or damage to business  
18 or property.
- 19 • **Rule 345 (Control of Fugitive Dust from Construction and Demolition**  
20 **Equipment):** This Rule includes standards to prevent visible dust beyond the  
21 property line, minimize dust generation during hauling of materials, minimize  
22 track-out/carry-out of dust from construction sites to roadways, and minimize  
23 visible dust during demolition activities.

#### 24 4.2.2.3 City of Goleta GP/CLUP

25 The city of Goleta GP/CLUP has established policies relating to protecting air quality in  
26 the Conservation Element (2006). Policies applicable to the proposed Project are limited  
27 to Policy CE 12.3 which requires control of emissions during grading and construction,  
28 including:

- 29 • Watering active construction areas to reduce windborne emissions
- 30 • Covering trucks hauling soil, sand, and other loose materials
- 31 • Paving or applying nontoxic solid stabilizers on unpaved access roads and  
32 temporary parking areas
- 33 • Hydroseeding inactive construction areas
- 34 • Enclosing or covering open material stockpiles
- 35 • Revegetating graded areas immediately upon completion of work

### 1 **4.2.3 Significance Criteria**

2 The city of Goleta typically utilizes significance thresholds developed by the SBCAPCD,  
3 as documented in Scope and Content of Air Quality Sections in Environmental  
4 Documents (updated 2017) including the following long term (operational) and short  
5 term (construction) thresholds presented in Sections 4.2.3.1 and 4.2.3.2 below.

#### 6 4.2.3.1 Long term (Operational) Sources

7 Long term (operational) impacts would occur if a Project:

- 8 • Emits (from all sources, both stationary and mobile) greater than the daily trigger  
9 for offsets in the SBCAPCD New Source Review Rule (240 pounds per day for  
10 NO<sub>x</sub> or ROC; 80 pounds per day for PM<sub>10</sub>)
- 11 • Emits greater than 25 pounds per day of NO<sub>x</sub> or ROC (motor vehicle trips only)
- 12 • Causes or contributes to a violation of a state or federal air quality standard  
13 (except ozone)
- 14 • Exceeds the health risk public notification thresholds (10 excess cancer cases in  
15 a million, hazard index of 1.0 for non-cancer risk)
- 16 • Is inconsistent with adopted state and federal Air Quality Plans (2019 Ozone  
17 Plan)

#### 18 4.2.3.2 Short term (Construction) Sources

19 Air pollutant emissions generated by the proposed Project would be associated with  
20 short-term decommissioning activities. Therefore, the following threshold taken from  
21 SBCAPCD Rule 202 is appropriate:

- 22 • Construction emissions associated with a stationary source requiring a permit  
23 from SBCAPCD exceeding 25 tons of any pollutant (except carbon monoxide) in  
24 a 12-month period

### 25 **4.2.4 Impact Analysis and Mitigation**

26 Air pollutant emissions were estimated for each major Project phase to identify the peak  
27 12-month period for comparison to the SBCAPCD's Rule 202 threshold. In addition, air  
28 pollutant emissions estimates were prepared separately for Components 1 and 2, as  
29 those portions of the project will occur sequentially, not concurrently. Air pollutant  
30 emissions were estimated using two models developed by CARB: EMFAC<sup>11</sup> 2021 for  
31 on-road vehicles and OFFROAD 2017 for off-road construction equipment. OFFROAD  
32 2017 was used to develop emissions factors specific to the type and horsepower of

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<sup>11</sup> Emission FACtor (EMFAC), a model that estimates the official emissions inventories of onroad mobile sources in California (<https://arb.ca.gov/emfac/>)

1 heavy equipment likely to be used, location, and project start year (estimated 2022  
 2 equipment population within Santa Barbara County). EMFAC 2021 was used to develop  
 3 motor vehicle emissions factors specific to the location and project start year (Santa  
 4 Barbara County 2022).

5 Component 1

6 **Impact AQ-1: Decommissioning-related Air Pollutant Emissions (Component 1)**

7 Implementation of proposed Component 1 decommissioning activities would result in air  
 8 pollutant emissions that may affect air quality (**Less than Significant**).

9 **Impact Discussion**

10 Use of heavy equipment, trucks, and worker vehicles would generate air pollutant  
 11 emissions that may affect regional air quality. Table 4.2-2 provides a summary of  
 12 Component 1 air pollutant emissions for each major activity. Although estimated air  
 13 pollutant emissions would not exceed the SBCAPCD threshold, emissions reduction  
 14 mitigation measures are provided to be consistent with SBCAPCD policies provided in  
 15 Scope and Content of Air Quality Sections in Environmental Documents (updated  
 16 2017).

**Table 4.2-2. Component 1 Air Pollutant Emissions Summary (tons)**

Task	NO <sub>x</sub>	ROC	PM <sub>10</sub>	PM <sub>2.5</sub>	CO
Caisson Internal Materials Removal	0.61	0.05	0.02	0.02	0.34
Well Abandonment	0.02	<0.01	<0.01	<0.01	0.01
Caisson Removal	0.91	0.08	0.03	0.03	0.48
Pier Removal	0.20	0.02	0.01	0.01	0.10
Pipeline Abandonment	0.02	<0.01	<0.01	<0.01	0.04
Site Restoration	0.02	<0.01	<0.01	<0.01	0.01
<b>Total (Component 1)</b>	<b>1.78</b>	<b>0.16</b>	<b>0.06</b>	<b>0.05</b>	<b>0.99</b>
<i>SBCAPCD Rule 202 Threshold</i>	25	25	25	25	--

17 **Mitigation Measures**

18 Estimated emissions listed in Table 4.2-2 are based on heavy equipment (in terms of  
 19 the Santa Barbara County equipment population from the OFFROAD 2017 model) and  
 20 vehicles (in terms of the vehicle population in use in Santa Barbara County from the  
 21 EMFAC 2021 model) likely to be used to conduct proposed decommissioning activities,  
 22 and do not reflect implementation of specific measures identified by the SBCAPCD.

1           **MM AQ-1a: Fugitive Dust Control Measures.** The contractors used to conduct  
2           decommissioning activities shall implement the following measures when  
3           applicable and feasible.

- 4           ○ Water trucks or sprinkler systems shall be used to keep all areas of  
5           vehicle movement damp enough to prevent dust from leaving the site. At a  
6           minimum, this should include wetting down such areas in the late morning  
7           and after work is completed for the day. Increased watering frequency  
8           should be required whenever the wind speed exceeds 15 miles per hour.  
9           Reclaimed water should be used whenever possible.
- 10          ○ Minimize amount of disturbed area and reduce on-site vehicle speeds to  
11          15 miles per hour or less.
- 12          ○ If importation, exportation, and stockpiling of fill material is involved, soil  
13          stockpiled for more than 2 days shall be covered, kept moist, or treated  
14          with soil binders to prevent dust generation. Trucks transporting fill  
15          material to and from the site shall be tarped from the point of origin.
- 16          ○ Gravel pads shall be installed at all access points to prevent tracking of  
17          mud onto public roads.
- 18          ○ After clearing, grading, earth moving, or excavation is completed, treat the  
19          disturbed area by watering, or revegetating, or by spreading soil binders  
20          until the area is paved or otherwise developed so that dust generation will  
21          not occur.
- 22          ○ The contractor shall designate a person or persons to monitor the dust  
23          control program and to order increased watering, as necessary, to prevent  
24          transport of dust offsite. Their duties shall include holiday and weekend  
25          periods when work may not be in progress. The name and telephone  
26          number of such persons shall be provided to the Santa Barbara County  
27          Air Pollution Control District (SBCAPCD) prior to Project initiation.

28           **MM AQ-1b: Equipment Exhaust Emissions Reduction Measures.** The  
29           contractors used to conduct decommissioning activities shall implement the  
30           following measures when applicable and feasible.

- 31          ○ All portable diesel-powered construction equipment shall be registered  
32          with the State's portable equipment registration program OR shall obtain a  
33          SBCAPCD permit.
- 34          ○ Mobile construction equipment shall comply with the State Regulation for  
35          In-Use Off-Road Diesel Vehicles (Cal. Code of Regs., tit. 13, § 2449) to  
36          reduce NO<sub>x</sub>, diesel particulate matter, and other criteria pollutant  
37          emissions.

- 1           ○ On-road vehicles shall comply with the State Regulation for In-Use (On-  
2           Road) Heavy-Duty Diesel-Fueled Vehicles (Cal. Code of Regs., tit. 13, §  
3           2025), to reduce diesel particulate matter, NO<sub>x</sub>, and other criteria  
4           pollutants.
- 5           ○ Off-road and on-road diesel vehicles shall comply with California Code of  
6           Regulations, title 13, sections 2449(d)(3) and 2485, limiting engine idling  
7           time.
- 8           ○ Diesel equipment meeting the California Air Resources Board Tier 3 or  
9           higher emission standards for off-road heavy-duty diesel engines should  
10          be used to the maximum extent feasible.
- 11          ○ On-road heavy-duty equipment with model year 2010 engines or newer  
12          should be used to the maximum extent feasible.
- 13          ○ Diesel powered equipment should be replaced by electric equipment  
14          whenever feasible.
- 15          ○ Equipment/vehicles using alternative fuels, such as compressed natural  
16          gas, liquefied natural gas, propane, or biodiesel, should be used on-site  
17          where feasible.
- 18          ○ Catalytic converters shall be installed on gasoline-powered equipment, if  
19          feasible.
- 20          ○ All construction equipment shall be maintained in tune per the  
21          manufacturer's specifications.
- 22          ○ The engine size of construction equipment shall be the minimum practical  
23          size.
- 24          ○ The number of construction equipment operating simultaneously shall be  
25          minimized through efficient management practices to ensure that the  
26          smallest practical number is operating at any one time.
- 27          ○ Construction worker trips should be minimized by requiring carpooling and  
28          by providing for lunch onsite.

29   Although not required since Project-related emissions would not exceed the significance  
30   threshold, implementation of emissions reduction mitigation measures (**MM AQ-1a** and  
31   **MM AQ-1b**) recommended by the SBCAPCD would further reduce air pollutant  
32   emissions and may facilitate attainment of the State 8-hour ozone standard.

1 Component 22 **Impact AQ-2: Decommissioning-related Air Pollutant Emissions (Component 2)**

3 Implementation of proposed Component 2 decommissioning activities would result in air  
4 pollutant emissions that may affect air quality (**Less than Significant**).

5 **Impact Discussion**

6 Use of heavy equipment, trucks and worker vehicles would generate air pollutant  
7 emissions that may affect regional air quality. Table 4.2-3 provides a summary of  
8 Component 2 air pollutant emissions for each major activity. Although estimated air  
9 pollutant emissions would not exceed the SBCAPCD threshold, mitigation measures  
10 (**MM AQ-1a** and **MM AQ-1b**) are provided to be consistent with SBCAPCD policies  
11 provided in Scope and Content of Air Quality Sections in Environmental Documents  
12 (updated 2017).

**Table 4.2-3. Component 2 Air Pollutant Emissions Summary (tons)**

Task	NO <sub>x</sub>	ROC	PM <sub>10</sub>	PM <sub>2.5</sub>	CO
Pipeline Removal	0.02	<0.01	<0.01	<0.01	0.02
Rock Revetment and Access Roadway Removal	0.50	0.04	0.02	0.02	0.29
Wooden Seawall and Associated Structures Removal	0.13	0.03	0.01	0.01	0.97
Pier Abutment Removal	0.05	0.01	<0.01	<0.01	0.03
<b>Total (Component 2)</b>	<b>0.69</b>	<b>0.08</b>	<b>0.03</b>	<b>0.02</b>	<b>1.31</b>
<i>SBCAPCD Rule 202 Threshold</i>	25	25	25	25	--

13 In the unlikely event Component 2 is implemented in the same 12-month period as  
14 Component 1, the combined emissions would not exceed the 25 tons per year  
15 thresholds (total 2.47 tons NO<sub>x</sub> and 0.24 tons ROC) and are considered a less than  
16 significant impact.

17 **Mitigation Measures**

18 Estimated emissions listed in Table 4.2-3 are based on heavy equipment (in terms of  
19 the Santa Barbara County equipment population from the OFFROAD 2017 model) and  
20 vehicles (in terms of the vehicle population in use in Santa Barbara County from the  
21 EMFAC 2021 model) likely to be used to conduct proposed decommissioning activities,  
22 and do not reflect implementation of specific measures identified by the SBCAPCD. **MM**  
23 **AQ-1a** and **MM AQ-1b** are applicable to Component 2.

1 Although not required since Project-related emissions would not exceed the significance  
 2 threshold, implementation of emissions reduction mitigation measures **MM AQ-1a** and  
 3 **MM AQ-1b** recommended by the SBCAPCD would reduce air pollutant emissions and  
 4 may facilitate attainment of the State 8-hour ozone standard.

5 **4.2.5 Cumulative Impacts Analysis**

6 Components 1 and 2

7 **Impact AQ-3: Cumulative Air Quality Impacts**

8 The Project would incrementally contribute air pollutant emissions that may cumulatively  
 9 affect air quality (**Less than Significant**).

10 Each of the cumulative projects identified in Section 3.0 would generate short-term  
 11 construction air pollutant emissions that could affect regional air quality. Some of these  
 12 projects would generate long-term operational emissions. The proposed Project would  
 13 incrementally contribute to short-term cumulative impacts. However, Project-related  
 14 emissions would be short-term and not exceed significance thresholds. Impacts would  
 15 be further reduced by implementation of **MMs AQ-1a** and **AQ-1b**. Therefore, the Project  
 16 contribution would not be cumulatively considerable.

17 **4.2.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.2-4. Summary of Air Quality Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact AQ-1:</b> Decommissioning-related Air Pollutant Emissions (Component 1)	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures
<b>Impact AQ-2:</b> Decommissioning-related Air Pollutant Emissions (Component 2)	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures
<b>Impact AQ-3:</b> Cumulative Air Quality Impacts (Components 1 and 2)	<b>MM AQ-1a:</b> Fugitive Dust Control Measures <b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures

## 1 4.3 BIOLOGICAL RESOURCES

### 2 4.3.1 Environmental Setting

#### 3 4.3.1.1 Overview of the Project Site

4 For the purposes of assessing impacts to biological resources, the Project site is  
5 defined as the subject PRC 421 facilities and adjacent areas including the intertidal  
6 zone, affected portions within the Sandpiper Golf Course easements, the EOF, and the  
7 Bacara Resort fire road access (including along the beach). Most of this area has been  
8 disturbed by construction, maintenance, and decommissioning activities of the PRC 421  
9 facilities, construction and maintenance of the Sandpiper Golf Course, and recreational  
10 use of the open space area west of Bell Canyon Creek.

11 Native vegetation includes southern coastal bluff scrub along the PRC 421 access  
12 roadway and adjacent bluff, southern foredunes along the beach, coastal saltmarsh  
13 within the Bell Canyon Creek estuary, coastal scrub habitat within the open space area  
14 west of Bell Canyon Creek. Wildlife habitats are small and fragmented by development  
15 (Sandpiper Golf Course, Bacara Resort), major roadways (U.S. Highway 101, Hollister  
16 Avenue), and the Union Pacific Railroad tracks.

#### 17 4.3.1.2 Vegetation of the Project Site

18 The current vegetation classification system recommended by the California  
19 Department of Fish and Wildlife (CDFW) is the Manual of California Vegetation (Sawyer  
20 et al. 2008, available online at [vegetation.cnps.org/search](http://vegetation.cnps.org/search)). However, the vegetation  
21 types used in this system do not adequately describe vegetation of the Project site, in  
22 part due to the fragmented and disturbed nature of the affected vegetation. Therefore, a  
23 more generalized system (Preliminary Descriptions of the Terrestrial Natural  
24 Communities of California – Holland 1986) was used to classify vegetation of the  
25 Project site. A vegetation map of the Project site is provided in Figures 4.3-1 through  
26 4.3-3.

27 Southern Coastal Bluff Scrub. This plant community occurs on the seaward margin of  
28 the PRC 421 access roadway and adjacent coastal bluff. The dominant species are  
29 quail bush (*Atriplex lentiformis*), coastal golden-bush (*Isocoma menziesii*), coyote brush  
30 (*Baccharis pilularis*), and freeway iceplant (*Carpobrotus edulis*). Groundwater seepage  
31 areas along the toe of the bluff on the inland side of the PRC 421 access roadway  
32 support plant species characteristic of wetlands, including saltgrass (*Distichlis spicata*),  
33 rabbits-foot grass (*Polypogon monspeliensis*), heliotrope (*Heliotropium curassavicum*),  
34 and alkali heath (*Frankenia salina*).

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Figure 4.3-1. Vegetation Map (1 of 3)



Figure 4.3-2. Vegetation Map (2 of 3)



Figure 4.3-3. Vegetation Map (3 of 3)



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1 Cliff malacothrix (*Malacothrix saxatilis saxatilis*), a plant of limited distribution also  
2 occurs within this community at the Project site. This plant community is considered as  
3 an Environmentally Sensitive Habitat Area (ESHA) under the city of Goleta's General  
4 Plan/Coastal Land Use Plan and Section 30107.5 of the California Coastal Act (CCA).

5 Southern Coastal Salt Marsh. This plant community occurs along the seaward margin of  
6 the Bell Canyon Creek estuary and is dominated by saltgrass and fleshy jaumea  
7 (*Jaumea carnosa*), with patches of sea-coast bulrush (*Bolboschoenus robustus*) along  
8 the inland margin. This plant community is considered as ESHA under the city of  
9 Goleta's General Plan/Coastal Land Use Plan and Section 30107.5 of the CCA.

10 Southern Foredunes. This plant community occurs adjacent to the beach above the  
11 high tide line, west of the PRC 421 facilities. Dominant species are beach bur (*Ambrosia*  
12 *chamissonis*), sea rocket (*Cakile maritima*), and freeway iceplant. Alkali heath and  
13 sand-verbena (*Abronia umbellata*) also occur at low density, typically further from the  
14 high tide line. This plant community is considered as ESHA under the city of Goleta's  
15 General Plan/Coastal Land Use Plan and Section 30107.5 of the CCA.

16 Coastal Brackish Marsh. This plant community occurs within the Bell Canyon Creek  
17 estuary and is dominated by sea-coast bulrush, with California bulrush (*Schoenoplectus*  
18 *californicus*) becoming more common further inland. This plant community is considered  
19 as ESHA under the city of Goleta's General Plan/Coastal Land Use Plan and Section  
20 30107.5 of the CCA.

21 Cattail Marsh. This plant community occurs immediately north of the PRC 421 access  
22 roadway at Pier 421-2 and is dominated by broad-leaf cattail (*Typha latifolia*) and  
23 southern cattail (*Typha domingensis*). This freshwater marsh is supported by irrigation  
24 run-off from the Sandpiper Golf Course which is impounded by the access roadway and  
25 wooden seawall. This plant community is considered as ESHA under the city of Goleta's  
26 General Plan/Coastal Land Use Plan and Section 30107.5 of the CCA.

27 Coyote Brush Scrub. This plant community occurs in a somewhat level area  
28 immediately west of the Bell Canyon Creek estuary and on the coastal bluff further  
29 west. The dominant species is coyote brush; however, freeway iceplant, California  
30 sagebrush (*Artemisia californica*), and California bush-sunflower (*Encelia californica*)  
31 occur at verifying densities within this community. This plant community may be  
32 considered as ESHA under the city of Goleta's General Plan/Coastal Land Use Plan  
33 and Section 30107.5 of the CCA due to its coastal bluff location.

34 California Sagebrush Scrub. This plant community occurs on the coastal bluff between  
35 the Bacara Resort fire road access and Bell Canyon Creek. The dominant species is  
36 California sagebrush; however, coyote brush and California bush-sunflower occur at  
37 verifying densities within this community. This plant community is considered as ESHA

1 under the city of Goleta's General Plan/Coastal Land Use Plan and Section 30107.5 of  
2 the CCA.

3 Willow Riparian Forest. This plant community occurs along Bell Canyon Creek  
4 upstream of the estuary and is dominated by arroyo willow (*Salix lasiolepis*). However,  
5 coast live oak (*Quercus agrifolia*) becomes a dominant component further upstream  
6 closer to Hollister Avenue. Other species observed in this community along the EOF  
7 western boundary include California rose (*Rosa californica*), California blackberry  
8 (*Rubus ursinus*), and virgin's bower (*Clematis ligusticifolia*). This plant community is  
9 considered as ESHA under the city of Goleta's General Plan/Coastal Land Use Plan  
10 and Section 30107.5 of the CCA.

11 Eucalyptus Groves. This classification is used to describe windrows of blue gum trees  
12 (*Eucalyptus globulus*) planted along the east side of the EOF and west of Bell Canyon  
13 Creek.

14 Cypress Grove. This classification is used to describe a patch of Monterey cypress  
15 trees (*Hesperocyparis macrocarpa*) planted on the bluff just east of the Bacara Resort  
16 fire road access turnaround.

17 Myoporum Stands. This classification is used to describe stands of myoporum  
18 (*Myoporum laetum*). Other species present may include giant reed (*Arundo donax*) and  
19 castor bean (*Ricinus communis*).

20 Mixed Weedy Areas. This classification is used to describe areas periodically disturbed  
21 by storm flows and high tides that are dominated by a mixture of species, including  
22 freeway iceplant, saltgrass, white sweet clover (*Melilotus albus*), beach bur, and New  
23 Zealand spinach (*Tetragonia tetragoniodes*).

#### 24 4.3.1.3 Flora of the Project Site

25 A total of 87 vascular plant species were recorded within or adjacent to the Project site  
26 during the August 2, 2021 biological survey and August 23, 2021, wetland delineation.  
27 Of these 87 species, only 40 (46 percent) are native to the region. Of the 47 non-native  
28 plant species recorded, 28 are considered invasive by the California Invasive Species  
29 Council, with five species rated as highly invasive, eleven species rated as moderately  
30 invasive, and 12 species rated as having limited invasiveness.

#### 31 4.3.1.4 Freshwater/Estuarine Fish

32 Bell Canyon Creek is known to support tidewater goby (USFWS 2017) and may support  
33 other species such as partially armored three-spined stickleback (*Gasterosteus*  
34 *aculeatus microcephalus*). Unidentified larval fish were observed in the Bell Canyon  
35 Creek estuary during the August 2, 2021 biological survey.

#### 1 4.3.1.5 Amphibians and Reptiles

2 Bell Canyon Creek is known to support California red-legged frog (*Rana draytonii*)  
3 (USFWS 2017). This Creek and the cattail marsh near Pier 421-2 may support other  
4 species such as Baja California treefrog (*Pseudacris hypochondriaca*) and western toad  
5 (*Anaxyrus boreas*). However, the breeding pool habitat within the cattail marsh is limited  
6 to a very small area by the dense cattails. Amphibians and reptiles observed during the  
7 August 2, 2021, biological survey of the Project site was limited to western fence lizard  
8 (*Sceloporus occidentalis*), observed foraging in the dunes and adjacent scrub.

#### 9 4.3.1.6 Birds

10 Haskell's Beach is located just west of PRC 421 and is a local birding hotspot. EBird.org  
11 has recorded 169 bird species observed from Haskell's Beach by local birders. Four  
12 bird roosting/nesting structures (known as Bird Island) were installed offshore in 2005,  
13 approximately 800 feet southwest of Pier 421-1 to replace habitat removed as part of  
14 decommissioning of the remnant PRC 421 pierhead structure. These bird  
15 roosting/nesting structures support primarily Brandt's cormorant with 114 nests and 224  
16 individuals reported in 2010 (Lehman 2019). Birds observed during the August 2, 2021  
17 biological survey of the Project site and August 29, 2021 bat survey included great blue  
18 heron (*Ardea herodias*), black phoebe (*Sayornis nigricans*), snowy egret (*Egretta thula*),  
19 house finch (*Carpodacus mexicanus*), hooded oriole (*Icterus cucullatus*), Brandt's  
20 cormorant (*Phalacrocorax penicillatus*, approximately 150 on Bird Island), western gull  
21 (*Larus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*, offshore of Pier  
22 421-1), rock pigeon (*Columba livia*, likely nesting at Pier 421-2), cliff swallow  
23 (*Petrochelidon pyrrhonota*, nesting at Pier 421-1), song sparrow (*Melospiza melodia*),  
24 rough-winged swallow (*Stelgidopteryx serripennis*), brown pelican (*Pelecanus*  
25 *occidentalis*, resting on beach and flying overhead), willet (*Tringa semipalmata*), mallard  
26 (*Anas platyrhynchos*), common raven (*Corvus corax*), California towhee (*Melospiza*  
27 *crissalis*), killdeer (*Charadrius vociferus*), great horned owl (*Bubo virginianus*), and  
28 Allen's hummingbird (*Selasphorus sasin*).

#### 29 4.3.1.7 Terrestrial Mammals

30 Habitat for terrestrial mammals in the Project area is limited by the adjacent marine  
31 waters and surrounding development (Sandpiper Golf Course, EOF, Bacara Resort).  
32 However, the Bell Canyon Creek riparian corridor and estuary, and open space areas  
33 west of the creek provide suitable habitat for common mammals of the region.  
34 Mammals observed during the August 2, 2021, biological survey of the Project site were  
35 limited to California ground squirrel (*Spermophilus beecheyi*) and pocket gopher  
36 (*Thomomys bottae*), observed at the Sandpiper Golf Course.

37 A bat survey was conducted on the evening of July 29, 2021, which included visual  
38 observation and ultrasonic acoustic recordings at both caissons. Approximately 39 bats

1 were observed leaving crevices formed by the concrete caisson walls and deteriorated  
2 sheet pile covering at dusk at the 421-2 caisson. Processing of the ultrasonic recordings  
3 to identify characteristic calls of each bat species identified 210 calls from big brown  
4 bats (*Eptesicus fuscus*), five from Mexican free-tailed bats (*Tadarida brasiliensis*), and  
5 two from California myotis (*Myotis californicus*). The two latter species were likely  
6 flyovers from the nearby vicinity near the golf course and other habitat areas as they  
7 were the last calls recorded. It is more likely that the only species using the caisson as a  
8 roost is the big brown bat. The 421-2 caisson is considered a day roost since bats were  
9 present prior to dusk and were observed leaving to forage. In addition, about 12 striped  
10 skunks (*Mephitis mephitis*) were observed foraging along the beach during the bat  
11 survey.

#### 12 4.3.1.8 Wildlife Movement Corridors

13 Wildlife migration corridors are generally defined as connections between habitat  
14 patches that allow for physical and genetic exchange between otherwise isolated animal  
15 populations. Migration corridors may be local such as between foraging and nesting or  
16 denning areas, or they may be regional in nature. Migration corridors are not  
17 unidirectional access routes; however, reference is usually made to source and receiver  
18 areas in discussions of wildlife movement networks. "Habitat linkages" are migration  
19 corridors that contain contiguous strips of native vegetation between source and  
20 receiver areas. Habitat linkages provide cover and forage sufficient for temporary  
21 habitation by a variety of ground-dwelling animal species. Wildlife migration corridors  
22 are essential to the regional ecology of an area as they provide avenues of genetic  
23 exchange and allow animals to access alternative territories as fluctuating dispersal  
24 pressures dictate.

25 Regional wildlife movement in the vicinity of the Project site is anticipated to occur  
26 between the coastal terrace and foothill areas. Although U.S. Highway 101 forms a  
27 major barrier to these movements, the Bell Canyon Creek culvert under this roadway  
28 and cover provided by riparian vegetation allows for some regional wildlife movement.  
29 Local wildlife movements may occur along the coast south of U.S. Highway 101, likely  
30 between Santa Barbara Shores Park and the Naples area. Such movement is  
31 hampered by golf course operations and may occur mostly at night. The Project site  
32 does not provide suitable habitat or cover or connect two habitat areas. Therefore,  
33 meaningful wildlife movement (benefiting population persistence and expansion)  
34 through the site is not anticipated.

#### 35 4.3.1.9 Sensitive Terrestrial Communities

36 Sensitive natural communities may include those that are considered ESHA by the city  
37 of Goleta and Section 30107.5 of the CCA, rare by the California Department of Fish  
38 and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) or considered  
39 sensitive by other trustee agencies or the scientific community. For the purposes of this

1 EIR, southern coastal bluff scrub, southern coastal salt marsh, southern foredunes,  
2 coastal brackish marsh, cattail marsh, California sagebrush scrub, and willow riparian  
3 forest are considered sensitive natural communities.

#### 4 4.3.1.10 Environmentally Sensitive Habitat Areas

5 Sections 30230, 30231, 30233, and 30240 of the Coastal Act of 1976 require protection  
6 of marine resources and estuaries. The city of Goleta has mapped ESHA in the Project  
7 area as part of their General Plan/Coastal Land Use Plan. Designated ESHA within or  
8 adjacent to the Project site according to the city, and in accordance with Section  
9 30107.5 of the CCA, includes:

- 10 • Beach and shoreline (beach supporting PRC 421 piers and caissons)
- 11 • Sage scrub/dune/bluff scrub (bluff above the PRC 421 access roadway, coastal  
12 scrub and foredunes adjacent to and west of the Bell Canyon Creek estuary)
- 13 • Riparian/marsh/vernal pool (Bell Canyon Creek)
- 14 • Monarch butterfly and raptor roosting habitat (eucalyptus stands west of Bell  
15 Canyon Creek)

#### 16 4.3.1.11 Regulated Waters and Wetlands

17 The term wetland is used to describe a particular landscape characterized by inundation  
18 or saturation with water for a sufficient duration to result in the alteration of physical,  
19 chemical, and biological elements relative to the surrounding landscape. Wetland areas  
20 are characterized by prevalence of vegetation typically adapted for life in saturated soil  
21 conditions. Wetlands provide habitats that are essential to the survival of many  
22 threatened or endangered species as well as other wetland dependent species.  
23 Wetlands also have value to the public for flood retention, storm abatement, aquifer  
24 recharge, water quality improvement, and for aesthetic qualities. Wetlands also play a  
25 role in the maintenance of air and water quality and contribute to the stability of global  
26 levels of available nitrogen, atmospheric sulfur, carbon dioxide, and methane. Wetlands  
27 are rapidly declining within California and efforts are being made to maintain and  
28 preserve remaining wetlands within the State.

29 Regulatory agencies with jurisdiction over wetlands include the U.S. Army Corps of  
30 Engineers (USACE) with authority to enforce two federal regulations involving wetland  
31 preservation; the Clean Water Act (Section 404), which regulates the disposal of dredge  
32 and fill materials in waters of the U.S., and the Rivers and Harbors Act of 1899 (Section  
33 10), which regulates diking, filling, and placement of structures in navigable waterways.  
34 State regulatory agencies with jurisdiction over wetlands include the State Water  
35 Resources Control Board that enforces compliance with the Federal Clean Water Act  
36 (Section 401) regulating water quality; the California Coastal Commission (CCC), which  
37 regulates development within the coastal zone as stipulated in the California Coastal

1 Act (Sections 30230, 30231, 30233, and 30240 apply to preservation and protection of  
2 wetlands); and the CDFW, which asserts jurisdiction over waters and wetlands with  
3 actions that involve alterations to streams or lakes by issuing Streambed Alteration  
4 Agreements under Section 1602 of the California Fish and Game Code.

5 Definitions. In the Clean Water Act regulations (33 CFR 328.3.a, effective June 22,  
6 2020), the term “waters of the U.S.” is defined as follows:

- 7 • The territorial seas, and waters which are currently used, or were used in the  
8 past, or may be susceptible to use in interstate or foreign commerce, including  
9 waters which are subject to the ebb and flow of the tide
- 10 • Tributaries
- 11 • Lakes and ponds, and impoundments of jurisdictional waters
- 12 • Adjacent wetlands

13 Under USACE and USEPA regulations, wetlands are defined as:

14 *“those areas that are inundated or saturated by surface or groundwater at*  
15 *a frequency and duration sufficient to support, and that under normal*  
16 *circumstances do support, a prevalence of vegetation typically adapted for*  
17 *life in saturated soil conditions. Wetlands generally include swamps,*  
18 *marshes, bogs, and similar areas.”*

19 In tidal waters (such as in the PRC 421 lease area) the landward limits of USACE  
20 jurisdiction extends to the high tide line. In non-tidal waters, the lateral extent of USACE  
21 jurisdiction is determined by the ordinary high-water mark (OHWM) and extends to the  
22 limit of adjacent wetlands (33 CFR 328.4). The OHWM is defined as the: “...line on the  
23 shore established by the fluctuations of water and indicated by physical characteristics  
24 such as clear, natural line impressed on the bank, shelving, changes in the character of  
25 soil, destruction of terrestrial vegetation, the presence of litter and debris, or other  
26 appropriate means that consider the characteristics of the surrounding areas.” (33 CFR  
27 328.c.7).

28 The U.S. Fish and Wildlife Service (USFWS), CDFW, and the city of Goleta define  
29 wetlands as:

30 *“...lands transitional between terrestrial and aquatic systems where the*  
31 *water table is usually at or near the surface or the land is covered by*  
32 *shallow water. For the purposes of this classification, wetlands must have*  
33 *one or more of the following attributes: 1) at least periodically, the land*  
34 *supports predominantly hydrophytes; 2) the substrate is predominantly*  
35 *undrained hydric soil; and 3) the substrate is non-soil and is saturated with*

1           *water or covered by shallow water at some time during the growing*  
 2           *season each year.”*

3   The CCC’s regulations establish a “one parameter definition” that only requires  
 4   evidence of a single parameter to establish coastal wetland conditions:

5           *Wetland shall be defined as land where the water table is at, near, or*  
 6           *above the land surface long enough to promote the formation of hydric*  
 7           *soils or to support the growth of hydrophytes and shall also include those*  
 8           *types of wetlands where vegetation is lacking and soil is poorly developed*  
 9           *or absent as a result of frequent and drastic fluctuations of surface water*  
 10          *levels, wave action, water flow, turbidity or high concentrations of salts or*  
 11          *other substances in the substrate. Such wetlands can be recognized by*  
 12          *the presence of surface water or saturated substrate at some time during*  
 13          *each year and their location within, or adjacent to, vegetated wetlands or*  
 14          *deep-water habitats. (Cal. Code Regs., tit. 14, § 13577).*

15   The CCC’s regulations provide general decision rules for establishing the upland  
 16   boundary of coastal wetlands:

- 17          • The boundary between land with predominantly hydrophytic cover and land with  
 18          predominantly mesophytic or xerophytic cover<sup>12</sup>
- 19          • The boundary between soil that is predominantly hydric and soil that is  
 20          predominantly nonhydric
- 21          • In the case of wetlands without vegetation or soils, the boundary between land  
 22          that is flooded or saturated at some time during years of normal precipitation, and  
 23          land that is not (Cal. Code Regs., tit. 14, § 13577)

24   A coastal wetlands delineation was completed for the Project on August 23, 2021, using  
 25   methodology provided in the *Arid West Supplement to the Corps Wetland Delineation*  
 26   *Manual*. Areas meeting the coastal wetlands definition (sum of all areas exhibiting  
 27   dominance by hydrophytic vegetation, indicators of wetland hydrology, and hydric soils)  
 28   are mapped on Figures 4.3-4 and 4.3-5, and the area of each wetland polygon is  
 29   quantified in Table 4.3-1. A total of 0.24 acre of coastal wetlands were found within or  
 30   adjacent to PRC 421 facilities.

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<sup>12</sup> Hydrophytic cover = vegetation adapted to saturated soils; Mesophytic cover = vegetation adapted to moderate soil moisture; Xerophytic cover = vegetation adapted to low soil moisture

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Figure 4.3-4. Coastal Wetlands Map (1 of 2)



Figure 4.3-5. Coastal Wetlands Map (2 of 2)



**Table 4.3-1. Coastal Wetlands Delineation Results**

<b>Wetland No.</b>	<b>Location</b>	<b>Area (acres)</b>
W-1	Adjacent to access roadway at the EOF back gate	0.005
W-2	North of Pier 421-2	0.117
W-3	421-2 caisson fill	0.003
W-4	Access roadway near Pier 421-2	0.037
W-5	Access roadway, bluff toe	0.007
W-6	Access roadway, near rock revetment	0.002
W-7	Access roadway, bluff toe	0.004
W-8	Access roadway, bluff toe	0.006
W-9	Access roadway	0.003
W-10	Access roadway, bluff toe	0.026
W-11	Access roadway, near rock revetment	0.002
W-12	Access roadway, near rock revetment	0.006
W-13	Access roadway, bluff toe	0.001
W-14	Access roadway, bluff toe	0.004
W-15	Access roadway, near rock revetment	0.002
W-16	Rock revetment	0.002
W-17	Access roadway, bluff toe	0.003
W-18	Beach near access ramp	0.007
<b>Total</b>		<b>0.237</b>

#### 1 4.3.1.12 Special-Status Plant Species

2 Special-status plant species are either listed as endangered or threatened under the  
3 Federal or California Endangered Species Acts, rare under the California Native Plant  
4 Protection Act, Sections 30107.5 and 30240 of the CCA, or considered to be rare (but  
5 not formally listed) by resource agencies, professional organizations (California Native  
6 Plant Society [CNPS]), and the scientific community. For the purposes of this Project,  
7 special-status plant species are defined below.

- 8 • Plants listed or proposed for listing as threatened or endangered under the  
9 Federal Endangered Species Act (50 CFR 17.12 for listed plants and various  
10 notices in the Federal Register for proposed species)

- 1 • Plants that are candidates for possible future listing as threatened or endangered
- 2 under the Federal Endangered Species Act (Federal Register November 16,
- 3 2020)
- 4 • Plants that meet the definitions of rare or endangered species under CEQA
- 5 (State CEQA Guidelines, § 15380)
- 6 • Plants considered by the CNPS to be "rare, threatened, or endangered" in
- 7 California (Lists 1B and 2)
- 8 • Plants listed by the CNPS as plants about which we need more information and
- 9 plants of limited distribution (Lists 3 and 4)
- 10 • Plants listed or proposed for listing by the State of California as threatened or
- 11 endangered under the California Endangered Species Act (Cal. Code Regs., tit.
- 12 14, § 670.5)
- 13 • Plants listed under the California Native Plant Protection Act (Fish & G. Code, §
- 14 1900 et seq.)
- 15 • Plants considered sensitive or unique by the scientific community or occurring at
- 16 the limits of its natural range
- 17 • Plants listed as "Rare Plants of Santa Barbara County" by the Santa Barbara
- 18 Botanic Garden (updated 2012)

19 The literature search and field surveys conducted for this impact analysis indicates that  
 20 six special-status plant species have been reported within 3 miles of the Project site.  
 21 Table 4.3-2 identifies the current regulatory status and nearest known location of each  
 22 species, relative to the Project site. Only cliff malacothrix was observed during the  
 23 biological survey conducted for the Project; other species are considered absent from  
 24 the Project site.

**Table 4.3-2. Special-Status Plant Species Reported within Three Miles of the Project Site**

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Location	Flowering Period	Discussion
Red sand-verbena ( <i>Abronia maritima</i> )	List 4, SBBG	Deveraux Dunes (1964), about 1.8 miles southeast of Pier 421-2 (Consortium of California Herbaria 2021)	February to November	Foredune habitat present west of Bell Canyon Creek, but not observed during botanical survey
Southern tarplant ( <i>Centromadia parryi</i> ssp. <i>australis</i> )	List 1B, SBBG	Coal Oil Point Reserve (1997), 1.5 miles east of Pier 421-2 (CNDDDB 2021)	May to November	Suitable habitat is not present in Project vicinity

Common Name (Scientific Name)	Status	Nearest Known Location	Flowering Period	Discussion
Mesa horkelia ( <i>Horkelia cuneata</i> var. <i>puberula</i> )	List 1B, SBBG	Near Farren Road (1981), 1.9 miles northwest of Pier 421-1 (CNDDDB 2021)	February to July	Coastal scrub habitat is present west of Bell Canyon Creek, but not observed during botanical survey
Santa Barbara honeysuckle ( <i>Lonicera subspicata</i> var. <i>subspicata</i> )	List 1B	Along Cathedral Oaks Road (2015), 0.5 mile north of Pier 421-1 (CNDDDB 2021)	May to December	Suitable chaparral habitat is not present in Project vicinity
Cliff malacothrix ( <i>Malacothrix saxatilis</i> var. <i>saxatilis</i> )	List 4	Found on-site	March to September	Observed along the PRC 421 access roadway and adjacent bluff during the biological field survey
Black-flowered figwort ( <i>Scrophularia atrata</i> )	List 1B	Deveraux Dunes (1958), about 2 miles east-southeast of Pier 421-2 (CNDDDB 2021)	March to July	Suitable habitat is not present in Project vicinity

List 1B Plants rare, threatened, or endangered in California and elsewhere (CNPS)

List 4 Plants of limited distribution (CNPS)

SBBG Rare Plant (Santa Barbara Botanic Garden)

1 4.3.1.13 Special-Status Terrestrial Wildlife Species

2 For the purposes of this Project, special-status wildlife species are defined below.

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- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
  - Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register November 16, 2020).
  - Animals that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines, § 15380).
  - Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (Cal. Code Regs., tit. 14, § 670.5).

- 1 • Animal species of special concern to the CDFW (Shuford & Gardali (2008) for
  - 2 birds; Williams (1986) for mammals; Moyle et al. (2015) for fish; and Thomson et
  - 3 al. (2016) for amphibians and reptiles).
  - 4 • Animal species that are fully protected in California (Fish & G. Code, §§ 3511
  - 5 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
  - 6 • Marine mammals protected under the Marine Mammal Protection Act.
- 7 Literature research and field surveys conducted for this impact analysis indicates that
- 8 37 special-status wildlife species have been reported from within 3 miles of the Project
- 9 site. Information regarding regulatory status and known location of these species
- 10 relative to the Project site is provided in Table 4.3-3.

**Table 4.3-3. Special-Status Terrestrial Invertebrate, Fish, and Wildlife Species Reported within Three Miles of the Project Site**

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
<b>Invertebrates</b>			
Globose dune beetle ( <i>Coelus globosus</i> )	IUCN-V	Haskell’s Beach (1987), 0.4 mile northwest of the PRC 421 access roadway (CNDDDB 2021)	A small patch of suitable foredune habitat is present west of Bell Canyon Creek
Sandy beach tiger beetle ( <i>Cicindela hirticollis gravida</i> )	SA	Coal Oil Point (2003), 2.0 miles southeast of Pier 421-2 (CNDDDB 2021)	Suitable habitat does not occur in proximity to PRC 421
Crotch bumblebee ( <i>Bombus crotchii</i> )	SC	Santa Barbara Shores Park (2017), 0.6 mile southeast of Pier 421-2 (CNDDDB 2021)	Suitable habitat does not occur in proximity to PRC 421
Monarch butterfly ( <i>Danaus plexippus</i> )	FC	Bell Canyon (six observed in 2016), 0.2 mile northwest of the PRC 421 access roadway (Xerces Society 2020)	Species not observed in Bell Canyon since 2016 during annual Thanksgiving surveys

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
<b>Fish</b>			
Tidewater goby ( <i>Eucyclogobius newberryi</i> )	FE	Bell Canyon Creek (2011), 0.4 mile north of the PRC 421 access roadway (USFWS 2017)	Assumed present in Bell Canyon Creek and estuary
<b>Amphibians</b>			
California red- legged frog ( <i>Rana draytoni</i> )	FT, CSC	Bell Canyon Creek (2011), 0.4 mile north of Pier 421-1 (USFWS 2017)	Assumed present in Bell Canyon Creek upstream of the estuary
Coast Range newt ( <i>Taricha torosa</i> )	CSC	Ellwood Canyon (2011), 1.7 miles north-northeast of Pier 421-1 (CNDDDB 2021)	Suitable habitat does not occur in proximity to PRC 421
<b>Reptiles</b>			
Western pond turtle ( <i>Emys marmorata</i> )	CSC, IUCN-V	Deveraux Creek (2007), 1.7 miles east of Pier 421-2 (CNDDDB 2021)	May occur in Bell Canyon Creek upstream of the estuary
<b>Birds</b>			
Brown pelican ( <i>Pelecanus occidentalis</i> )	FP	Observed resting on beach at Project site during the biological field survey	Present on beach at PRC 421
Western snowy plover ( <i>Charadrius alexandrinus nivosus</i> )	FT, CSC	Breeds at Coal Oil Point, 2.2 miles southeast of Pier 421-2 (CNDDDB 2021), observed wintering at Haskell's Beach (2012), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	Potentially present during the non- breeding season on the beach at PRC 421

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
Common loon ( <i>Gavia immer</i> )	CSC (nesting)	Fairly common fall transient and winter visitor in the region (Lehman 2019), observed from Haskell's Beach (April 2019), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
California gull ( <i>Larus californicus</i> )	WL (nesting), BCC	Common transient and winter visitor in the region (Lehman 2019), observed from Haskell's Beach (July 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, not anticipated to be present at the Project site
Elegant tern ( <i>Sterna elegans</i> )	WL (nesting), BCC	Common summer and fall visitor in the region (Lehman 2019), observed from Haskell's Beach (October 2020), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Caspian tern ( <i>Sterna caspia</i> )	SA (nesting)	Fairly common transient and summer visitor in the region (Lehman 2019), observed from Haskell's Beach (April 2018), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
California least tern ( <i>Sternula antillarum browni</i> )	FE, SE, FP	Rare but regular transient, post-breeding visitor and recent irregular breeder in the region, reported to nest at Coal Oil Point in 2004 and 2007 (Lehman 2019)	May occur as a local transient, suitable foraging habitat is not present at the Project site

Common Name (Scientific Name)	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
Double-crested cormorant ( <i>Phalacrocorax auritus</i> )	WL (nesting)	Observed offshore of Pier 421-1 during biological field survey. The nearest nesting site is near Summerland (Lehman 2019)	Likely to forage nearby
Great blue heron ( <i>Ardea herodias</i> )	SA (nesting)	Fairly common to common permanent resident in the region (Lehman 2019), observed from Haskell's Beach (July 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021). Occasionally breeds at UCSB Campus Lagoon (CNDDDB 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Great egret ( <i>Ardea alba</i> )	SA (nesting)	Fairly common transient and winter visitor in the region (Lehman 2019), observed from Haskell's Beach (July 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021). Breeds at Goleta Beach (CNDDDB 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Snowy egret ( <i>Egretta thula</i> )	SA (nesting)	Common transient and winter visitor in the region (Lehman 2019), observed from Haskell's Beach (July 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	Observed foraging along the beach and in the Bell Canyon Creek estuary during the biological survey. Nesting habitat is not present at the Project site

Common Name (Scientific Name)	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
Black-crowned night heron ( <i>Nycticorax nycticorax</i> )	SA (nesting)	Common, but local permanent resident in the region (Lehman 2019), observed from Haskell's Beach (April 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
White-faced ibis ( <i>Plegadis chihi</i> )	WL (nesting)	Rare transient in the region (Lehman 2019), observed from Haskell's Beach (May 2016), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Brant ( <i>Branta bernicla</i> )	CSC (winter, staging)	Common to abundant spring transient in the region (Lehman 2019), observed from Haskell's Beach (January 2016), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Osprey ( <i>Pandion haliaetus</i> )	WL (nesting)	Rare fall/winter transient in the region (Lehman 2019), observed from Haskell's Beach (October 2020), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site

Common Name (Scientific Name)	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
White-tailed kite ( <i>Elanus leucurus</i> )	FP (nesting)	Uncommon resident in the region (Lehman 2019), observed from Haskell's Beach (2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org, 2021). Reported nesting at Coal Oil Point Reserve (2002), 1.5 miles east-southeast of Pier 421-2 (CNDDDB 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Ferruginous hawk ( <i>Buteo regalis</i> )	WL, BCC	Very rare fall transient and winter visitor in the region (Lehman 2019), reported from near Farren Road (November 1992), 0.9 mile northwest of the PRC 421 access roadway (CNDDDB 2021)	May occur as a local transient, could forage in woodland along Bell Canyon Creek
Cooper's hawk ( <i>Accipiter cooperi</i> )	WL (nesting)	Uncommon resident in the region, but becoming more common (Lehman 2019), observed from Haskell's Beach (June 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May forage and possibly breed in woodland along Bell Canyon Creek
Burrowing owl ( <i>Athene cunicularia</i> )	CSC, BCC	Rare transient and winter visitor in the region (Lehman 2019), reported wintering near Deveraux Slough (2001), 1.7 miles southeast of Pier 421-2 (CNDDDB 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Peregrine falcon ( <i>Falco peregrinus</i> )	FP (nesting)	Uncommon fall/winter visitor in the region, (Lehman 2019), observed from Haskell's Beach (July 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
Merlin ( <i>Falco columbarius</i> )	WL (wintering)	Very uncommon winter visitor in the region (Lehman 2019), observed from Haskell's Beach (December 2017), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Long-billed curlew ( <i>Numenius americanus</i> )	WL (nesting), BCC	Uncommon fall migrant in the region (Lehman 2019), observed from Haskell's Beach (January 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a fall transient on the beach at PRC 421
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	CSC (nesting)	Rare and irregular breeder in the Project area (Lehman 2019), observed from Haskell's Beach (October 2020), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
California horned lark ( <i>Eremophila alpestris actia</i> )	WL	Uncommon migrant in the region (Lehman 2019), observed from Haskell's Beach (February 2012), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Yellow warbler ( <i>Setophaga petechia brewsteri</i> )	CSC (nesting)	Uncommon to fairly common breeder in the region (Lehman 2019), observed from Haskell's Beach (May 2021), about 0.3 mile northwest of the PRC 421 access roadway (eBird.org 2021)	May forage and possibly breed in riparian woodland along Bell Canyon Creek

Common Name (Scientific Name)	Status	Nearest Known Occurrence to the Project Site	Potential to Occur at the Project Site
Southern California rufous-crowned sparrow ( <i>Aimophila ruficeps canescens</i> )	WL	Uncommon to locally fairly common resident in the region (Lehman 2019), reported from Ellwood Canyon (1992), 2.2 miles north of Pier 421-1 (CNDDDB 2021)	May occur as a local transient, suitable foraging habitat is not present at the Project site
Belding's savannah sparrow ( <i>Passerculus sandwichensis beldingi</i> )	SE	Very local, fairly common permanent resident in the region (Lehman 2019), reported breeding at Deveraux Slough (2010), 2.0 miles southeast of Pier 421-2 (Zembal et al. 2015)	Suitable habitat is not present at the Project site
<b>Mammals</b>			
Western red bat ( <i>Lasiurus blossevillii</i> )	CSC, WBWG-H	North Campus wetlands (2017), 2.0 miles east-southeast of Pier 421-2 (CNDDDB 2021)	Suitable habitat is not present at the Project site
Pallid bat ( <i>Antrozous pallidus</i> )	CSC, WBWG-H	North Campus wetlands (2017), 2.0 miles east-southeast of Pier 421-2 (CNDDDB 2021)	Suitable habitat is not present at the Project site

Status Codes

- BCC Birds of Conservation Concern (USFWS)
- CSC California Species of Special Concern (CDFW)
- FC Federal Candidate for listing (USFWS)
- FE Federal Endangered (USFWS)
- FT Federal Threatened (USFWS)
- FP Protected under the California Fish and Game Code (CDFW)
- IUCN-V International Union of the Conservation of Nature-Vulnerable
- SA Special Animal (CDFW)
- SC State Candidate for listing (CDFW)
- SE State Endangered (CDFW)
- WL Watch List (CDFW)
- WBWG-H Western Bat Working Group-high priority

1 4.3.1.14 Nearshore Marine Resources

- 2 Intertidal Resources. The intertidal zone within the Project area consists primarily of
- 3 sand with a mosaic of intermittent low- to medium-relief rocks and soft-bottom
- 4 sediments. The intertidal zone is a dynamic environment influenced in part by daily tidal

1 fluctuations (leading to high concentrations of sunlight, and periods of aerial exposure)  
2 and wave forces. Common upper intertidal invertebrates characteristic of sandy  
3 beaches include beach-hoppers (*Orchestoidea* sp.), predatory isopods (*Excirolana* sp.),  
4 polychaete worms (including the blood worm *Euzononus mucronata*), and beetles  
5 (including *Thinopinus pictus*). Middle intertidal invertebrates are characterized by sand  
6 crabs (*Emerita analoga*, *Lepidopa californica*), polychaetes (*Nephtys californica*), snails  
7 (including *Olivella biplicata*), and clams (including *Donax gouldi*).

8 Common invertebrates in the low intertidal zone are predominantly polychaetes and  
9 nemertean worms (Thompson et al. 1993). Common intertidal species found on  
10 exposed rocks and pier pilings include mussels (*Mytilus californianus*), barnacles  
11 (*Balanus* spp.), various species of red and brown turf algae, and bryozoans.

12 Fishes occurring in sandy intertidal areas typically include topsmelt (*Atherinops affinis*),  
13 shiner surfperch (*Cymatogaster aggregata*), northern anchovy (*Engraulis mordax*),  
14 diamond turbot (*Hypsopsetta guttalata*), Pacific staghorn sculpin (*Leptocottus armatus*),  
15 striped mullet (*Mugil cephalus*), California halibut (*Paralichthys californicus*), starry  
16 flounder (*Platichthys stellatus*), rubber-lip surfperch (*Rhachochilus vacca*), and round  
17 stingray (*Urolophus halleri*).

18 Fishes occurring in rocky intertidal areas typically include woolly sculpin (*Clinocottus*  
19 *analis*), reef finspot (*Paraclinus integripinnis*), rockpool blenny (*Parablennius*  
20 *parvicornis*), spotted kelpfish (*Gibbonsia elegans*), opaleye (*Girella nigricans*), and  
21 dwarf surfperch (*Micrometrus minimus*).

22 Subtidal Habitats and Resources. The offshore environment adjacent to the Project site  
23 consists of a gently sloping continental shelf, reaching about 130 feet of water depth at  
24 one mile from the shoreline. The continental shelf ends about 3 miles from the  
25 shoreline, where water depths increase rapidly to beyond 1,000 feet. The seafloor is  
26 predominately covered by sediment composed of sand and mud, with small  
27 sedimentary bedrock exposures (Dieter et al. 2014), including small exposures off the  
28 Sperling Preserve and Coal Oil Point.

29 As with the intertidal zone, the mixed sandy and rock reef habitat continues offshore  
30 along the subtidal Project area. Organisms typically found in sandy subtidal  
31 environments include but are not limited to tube worms (*Diopatra ornata*), sand dollars  
32 (*Dendraster excentricus*), and various species of crabs, sea stars, snails, and demersal  
33 fish. In subtidal areas off the southern California coast where hard/rocky substrate is  
34 available, giant kelp (*Macrocystis pyrifera*) communities (i.e., kelp forests) are often  
35 present. Kelp forests are an important part of the marine ecosystem in that they provide  
36 habitat structure and substrate surfaces for many epibiotic, benthic, and sessile  
37 organisms, and provide food, shelter, and nursery habitat for migratory and resident  
38 species of fish, marine mammals, and invertebrates. Kelp beds are located about 500

1 feet offshore of the Project site. Fish species that are likely to occur in these kelp beds  
2 include surfperches (*Embiotoca jacksoni*, *Rhacochilus vacca*), wrasses (*Oxyjulis*  
3 *californica*, *Halichoeres semicinctus*), and adult and young-of-year-rockfish (*Sebastes*  
4 spp.).

5 The most abundant fish observed in soft bottom habitat during underwater surveys off  
6 Ellwood was the speckled sanddab (*Citharichthys stigmaeus*). Other fish species  
7 observed in sandy subtidal areas off Ellwood included thornback ray (*Platyrrhinoideis*  
8 *triseriata*), California halibut, California lizardfish (*Synodus lucioceps*), pipefish  
9 (*Syngnathus* sp.), diamond turbot, and round stingray.

10 The most frequently observed fish species in rocky areas during underwater surveys off  
11 Ellwood was the kelp bass (*Paralabrax clathratus*). Other common fish species  
12 associated with shallow water hard substrate at Ellwood included blacksmith (*Chromis*  
13 *punctipinnis*), sheephead (*Pimelometopon pulchrum*), señorita (*Oxyjulis californica*), pile  
14 perch (*Rhacochilus vacca*), black perch (*Embiotoca jacksoni*), sand bass (*Paralabrax*  
15 *maculofasciatus*), lingcod (*Ophiodon elongatus*), cabezon (*Scorpaenichthys*  
16 *marmoratus*), sarcastic fringehead (*Neoclinus blanchardii*), and several species of  
17 rockfish (*Sebastes atrovirens*, *S. caurinus*, *S. chrysomelas*, and *S. rastrelliger*).

18 Fish species recovered during detonations to remove an abandoned pier from PRC 421  
19 in October 2005 were identified and counted. The most abundant fish species affected  
20 by explosives at PRC 421 were topsmelt and Pacific sardine (*Sardinops sagax*  
21 *caeruleus*). Other species collected included jack mackerel (*Tachurus symmetricus*),  
22 black surfperch, rainbow surfperch (*Hypsurus caryi*), shiner surfperch, white surfperch  
23 (*Phanerodon furcatus*), kelp surfperch (*Brachyistius frenatus*), striped surfperch  
24 (*Embiotoca lateralis*), rubberlip surfperch (*Rhacochilus toxotes*), halfmoon (*Medialuna*  
25 *californiensis*), sheephead, giant kelpfish (*Heterostichus rostratus*), pink surfperch, and  
26 several rockfishes (*Sebastes chrysomelas*, *S. rastrelliger*, *S. atrovirens*, *S. serranoides*,  
27 and *S. paucispinis*).

28 Special-Status Marine Species. Special-status marine species, as defined in Table 4.3-  
29 4, that may occur in nearshore waters in the Project area are limited to grunion and  
30 marine mammals (the 3 bird species listed in Table 4.3-4 are extremely unlikely to occur  
31 at the Project site). Since Project-related activities would be limited to intertidal areas,  
32 only common nearshore species (grunion, common dolphin, bottle-nose dolphin,  
33 California sea lion, and Pacific harbor seal) have the potential to occur in proximity to  
34 these activities.

**Table 4.3-4. Special-Status Marine Species  
Reported from Offshore the Goleta Area**

<b>Common Name (Scientific Name)</b>	<b>Status</b>	<b>Nearest Reported Occurrence to the Project Site</b>
<b>Fish</b>		
California grunion ( <i>Leuresthes tenuis</i> )	Spawning runs significantly declining (Fish and Game Commission 2019)	Known to spawn at Goleta Beach
<b>Birds</b>		
Scripp's murrelet ( <i>Synthliboramphus scrippsi</i> )	State Threatened	Nests on adjacent Channel Islands, common offshore late winter-early spring resident in the Santa Barbara region (Lehman 2019)
Ashy storm petrel ( <i>Oceanodroma homochroa</i> )	California Species of Special Concern	Nests on Santa Cruz and San Miguel islands, fairly common offshore spring-fall resident in the Santa Barbara region (Lehman 2019)
Black storm petrel ( <i>Oceanodroma melania</i> )	California Species of Special Concern	Fairly common to common offshore summer visitor in the Santa Barbara region (Lehman 2019)
<b>Marine Mammals</b>		
Long-beaked common dolphin ( <i>Delphinus capensis</i> )	MMPA	Common resident in the region, unlikely to occur in proximity to the Project site
Short-beaked common dolphin ( <i>Delphinus delphis</i> )	MMPA	Very common resident in the region, may occur in proximity to the Project site
Bottle-nose dolphin ( <i>Tursiops truncatus</i> )	MMPA	Common resident in the region, may occur in proximity to the Project site, observed near the Project site in 2004 during caisson wall repair (City of Goleta 2006)
Risso's dolphin ( <i>Grampus griseus</i> )	MMPA	Relatively common resident in the region, very unlikely to occur in proximity to the Project site
Northern right-whale dolphin ( <i>Lissodelphis borealis</i> )	MMPA	Seasonally common in the region, very unlikely to occur in proximity to the Project site

Common Name ( <i>Scientific Name</i> )	Status	Nearest Reported Occurrence to the Project Site
Pacific white-sided dolphin ( <i>Lagenorhynchus obliquidens</i> )	MMPA	Common resident in the region, very unlikely to occur in proximity to the Project site
Blue whale ( <i>Balaenoptera musculus</i> )	Federal Endangered, depleted (MMPA)	Uncommon in the region, very unlikely to occur in proximity to the Project site
Fin whale ( <i>Balaenoptera physalus</i> )	Federal Endangered, depleted (MMPA)	Rare in the region, very unlikely to occur in proximity to the Project site
Minke whale ( <i>Balaenoptera acutorostrata</i> )	MMPA	Relatively common in the region, very unlikely to occur in proximity to the Project site
Humpback whale ( <i>Megaptera novaeangliae</i> )	Federal Threatened (Mexico DPS), depleted (MMPA)	Uncommon in the region, very unlikely to occur in proximity to the Project site
California gray whale ( <i>Eschrichtius robustus</i> )	MMPA	Seasonally common in the region, very unlikely to occur in proximity to the Project site
California sea lion ( <i>Zalophus californianus</i> )	MMPA	Very common resident in the region, may occur in proximity to the Project site, observed near the Project site in 2004 during caisson wall repair (City of Goleta 2006)
Pacific harbor seal ( <i>Phoca vitulina richardsi</i> )	MMPA	Common resident in the region, may occur in proximity to the Project site, observed near the Project site in 2004 during caisson wall repair (City of Goleta 2006)
Northern fur seal ( <i>Callorhinus ursinus</i> )	MMPA	Uncommon resident in the region, very unlikely to occur in proximity to the Project site

MMPA: Protected under the Marine Mammal Protection Act  
DPS: Distinct Population Segments

1 **4.3.2 Regulatory Setting**

2 Biological resources in and around the Project area are governed by a variety of federal,  
3 state, and local laws and regulations. Quantitative guidelines, standards, limits, and

1 restrictions promulgated in the regulations form the basis for many of the criteria used to  
2 evaluate the significance of the Project's impacts to biological resources.

3 Federal and state laws that may be relevant to the Project, including the California and  
4 Federal Endangered Species Acts, as well California Coastal Act Chapter 3, Sections  
5 30230, 30231, 30232, 30233, and 30240 are discussed in Appendix B and Section  
6 4.10, *Land Use* (Table 4.10-1). Local laws, regulations, and policies are discussed  
7 below.

#### 8 4.3.2.1 City of Goleta GP/CLUP

9 The city of Goleta GP/CLUP has established policies relating to protecting biological  
10 resources in the Open Space and Conservation Elements. These policies focus on the  
11 preservation and protection of Goleta's environmental resources, including valuable  
12 habitat areas, to the maximum extent feasible, while allowing reasonable development  
13 in conformance with the provisions of the Land Use Element. Policies directly applicable  
14 to the proposed Project include:

- 15 • **Policy CE 1.6: Protection of ESHAs.** ESHAs shall be protected against  
16 significant disruption of habitat values, and only uses or development dependent  
17 on and compatible with maintaining such resources shall be allowed within  
18 ESHAs or their buffers. The following shall apply:
  - 19 ○ No development, except as otherwise allowed by this element, shall be  
20 allowed within ESHAs and/or ESHA buffers.
  - 21 ○ A setback or buffer separating all permitted development from an adjacent  
22 ESHA shall be required and shall have a minimum width as set forth in  
23 subsequent policies of this element. The purpose of such setbacks shall  
24 be to prevent any degradation of the ecological functions provided by the  
25 habitat area.
  - 26 ○ Public accessways and trails are considered resource-dependent uses  
27 and may be located within or adjacent to ESHAs. These uses shall be  
28 sited to avoid or minimize impacts on the resource to the maximum extent  
29 feasible. Measures such as signage, placement of boardwalks, and limited  
30 fencing or other barriers shall be implemented as necessary to protect  
31 ESHAs.
  - 32 ○ The following uses and development may be allowed in ESHAs or ESHA  
33 buffers only where there are no feasible, less environmentally damaging  
34 alternatives and will be subject to requirements for mitigation measures to  
35 avoid or lessen impacts to the maximum extent feasible: 1) public road  
36 crossings, 2) utility lines, 3) resource restoration and enhancement  
37 projects, 4) nature education, 5) biological research, and 6) Public Works

1 projects as identified in the Capital Improvement Plan, only where there  
 2 are no feasible, less environmentally damaging alternatives.

- 3 ○ If the provisions herein would result in any legal parcel created prior to the  
 4 date of this plan being made unusable in its entirety for any purpose  
 5 allowed by the land use plan, exceptions to the foregoing may be made to  
 6 allow a reasonable economic use of the parcel. Alternatively, the City may  
 7 establish a program to allow transfer of development rights for such  
 8 parcels to receiving parcels that have areas suitable for and are  
 9 designated on the Land Use Plan map for the appropriate type of use and  
 10 development.

- 11 • **Policy CE 2.2: Streamside Protection Areas (including Bell Canyon Creek**  
 12 **adjacent to the EOF).** A streamside protection area (SPA) is hereby established  
 13 along both sides of the creeks identified in Figure 4-1. The purpose of the  
 14 designation shall be to preserve the SPA in a natural state in order to protect the  
 15 associated riparian habitats and ecosystems. The SPA shall include the creek  
 16 channel, wetlands and/or riparian vegetation related to the creek hydrology, and  
 17 an adjacent upland buffer area. The width of the SPA upland buffer shall be as  
 18 follows:

- 19 ○ The SPA upland buffer shall be 100 feet outward on both sides of the  
 20 creek, measured from the top of the bank or the outer limit of wetlands  
 21 and/or riparian vegetation, whichever is greater. The City may consider  
 22 increasing or decreasing the width of the SPA upland buffer on a case-by-  
 23 case basis at the time of environmental review. The City may allow  
 24 portions of a SPA upland buffer to be less than 100 feet wide, but not less  
 25 than 25 feet wide, based on a site-specific assessment if (1) there is no  
 26 feasible alternative siting for development that will avoid the SPA upland  
 27 buffer; and (2) the project's impacts will not have significant adverse  
 28 effects on streamside vegetation or the biotic quality of the stream.

- 29 ○ If the provisions above would result in any legal parcel created prior to the  
 30 date of this plan being made unusable in its entirety for any purpose  
 31 allowed by the land- use plan, exceptions to the foregoing may be made to  
 32 allow a reasonable economic use of the parcel, subject to approval of a  
 33 conditional use permit.

- 34 • **Policy CE 3.4: Protection of Wetlands in the Coastal Zone.** The biological  
 35 productivity and the quality of wetlands shall be protected and, where feasible,  
 36 restored in accordance with the federal and state regulations and policies that  
 37 apply to wetlands within the Coastal Zone. Only uses permitted by the regulating  
 38 agencies shall be allowed within wetlands. The filling, diking, or dredging of open  
 39 coastal waters, wetlands, estuaries, and lakes is prohibited unless it can be  
 40 demonstrated that:

- 1           ○ There is no feasible, environmentally less damaging alternative to wetland  
2           fill.
- 3           ○ The extent of the fill is the least amount necessary to allow development  
4           of the permitted use.
- 5           ○ Mitigation measures have been provided to minimize adverse  
6           environmental effects.
- 7           ○ The purposes of the fill are limited to: incidental public services, such as  
8           burying cables or pipes; restoration of wetlands; and nature study,  
9           education, or similar resource-dependent activities.
- 10          ○ A wetland buffer of a sufficient size to ensure the biological integrity and  
11          preservation of the wetland shall be required. Generally, the required  
12          buffer shall be 100 feet, but in no case shall wetland buffers be less than  
13          50 feet. The buffer size should take into consideration the type and size of  
14          the development, the sensitivity of the wetland resources to detrimental  
15          edge effects of the development to the resources, natural features such as  
16          topography, the functions and values of the wetland, and the need for  
17          upland transitional habitat. A 100-foot minimum buffer area shall not be  
18          reduced when it serves the functions and values of slowing and absorbing  
19          flood waters for flood and erosion control, sediment filtration, water  
20          purification, and ground water recharge. The buffer area shall serve as  
21          transitional habitat with native vegetation and shall provide physical  
22          barriers to human intrusion.
- 23          • **Policy CE 5.3: Protection of Coastal Bluff Scrub, Coastal Sage Scrub, and**  
24          **Chaparral ESHA.** In addition to the provisions of Policy CE 1, the following  
25          standards shall apply:
  - 26               ○ For purposes of this policy, coastal bluff scrub is defined as scrub habitat  
27               occurring on exposed coastal bluffs. Example species in bluff scrub  
28               habitat include Brewer’s saltbush (*Atriplex lentiformis*), lemonade berry  
29               (*Rhus integrifolia*), seashore blight (*Suaeda californica*), seacliff  
30               buckwheat (*Eriogonum parvifolium*), California sagebrush (*Artemisia*  
31               *californica*), and coyote bush (*Baccharis pilularis*). Coastal sage scrub is  
32               defined as a drought-tolerant, Mediterranean habitat characterized by soft-  
33               leaved, shallow-rooted subshrubs such as California sagebrush, coyote  
34               bush, and California encelia (*Encelia californica*). The area must have  
35               both the compositional and structural characteristics of coastal bluff scrub,  
36               coastal sage scrub, or chaparral habitat as described in Preliminary  
37               Descriptions of Terrestrial Natural Communities of California or other  
38               classification system recognized by the California Department of Fish and  
39               Game.

- 1           ○ To the maximum extent feasible, development shall avoid impacts to
- 2           coastal bluff scrub, coastal sage scrub, or chaparral habitat that is part of
- 3           a wildlife movement corridor and the impact would preclude animal
- 4           movement or isolate ESHAs previously connected by the corridor such as
- 5           (1) disrupting associated bird and animal movement patterns and seed
- 6           dispersal, and/or (2) increasing erosion and sedimentation impacts to
- 7           nearby creeks or drainages.
  
- 8           ○ Impacts to coastal bluff scrub, coastal sage scrub, and chaparral ESHAs
- 9           shall be minimized by providing at least a 25-foot buffer restored with
- 10          native species around the perimeter of the ESHA, unless the activity is
- 11          allowed under other CE subpolicies and mitigation is applied per CE 1.7.
  
- 12          ○ Removal of nonnative and invasive exotic species shall be allowed;
- 13          revegetation shall be with plants or seeds collected within the same
- 14          watershed whenever feasible.
  
- 15          ● **Policy CE 6.2: Protection of Marine ESHAs.** The following protections shall
- 16          apply to marine ESHAs:
  - 17           ○ Marine ESHAs shall be protected against significant disruption of habitat
  - 18           values, and only uses dependent on such resources, such as fishing,
  - 19           whale watching, ocean kayaking, and similar recreational activities, should
  - 20           be allowed within the offshore area.
  
  - 21           ○ All existing oil and gas production facilities, including platform Holly and
  - 22           the piers at State Lease 421, shall be decommissioned immediately upon
  - 23           termination of production activities. All facilities and debris shall be
  - 24           completely removed and the sites restored to their prior natural condition
  - 25           as part of the decommissioning activities. No new oil and gas leases or
  - 26           facilities shall be allowed within state waters offshore from Goleta.
  
  - 27           ○ Permitted uses or developments shall be compatible with marine and
  - 28           beach ESHAs.
  
  - 29           ○ Any development on beach or ocean bluff areas adjacent to marine and
  - 30           beach habitats shall be sited and designed to prevent impacts that could
  - 31           significantly degrade the marine ESHAs. All uses shall be compatible with
  - 32           the maintenance of the biological productivity of such areas. Grading and
  - 33           landform alteration shall be limited to minimize impacts from erosion and
  - 34           sedimentation on marine resources.
  
  - 35           ○ Marine mammal habitats, including haul-out areas, shall not be altered or
  - 36           disturbed by development of recreational facilities or activities, or any
  - 37           other new land uses and development.
  
  - 38           ○ Near-shore shallow fish habitats and shore fishing areas shall be
  - 39           preserved and, where appropriate and feasible, enhanced.

- 1           ○ Activities by the California Department of Fish and Game; Central Coast  
2           Regional Water Quality Control Board; State Lands Commission; and  
3           Division of Oil, Gas and Geothermal Resources to increase monitoring to  
4           assess the conditions of near-shore species, water quality, and kelp beds,  
5           and/or to rehabilitate areas that have been degraded by human activities,  
6           such as oil and gas production facilities, shall be encouraged and allowed.
- 7           ● **Policy CE 7.3: Protection of Beach Areas.** Access to beach areas by  
8           motorized vehicles, including off-road vehicles, shall be prohibited, except for  
9           beach maintenance and emergency response vehicles of public agencies.  
10          Emergency services shall not include routine vehicular patrolling by private  
11          security forces. Any beach grooming activities shall employ hand-grooming  
12          methods, and mechanical beach grooming equipment and methods shall be  
13          prohibited. All vehicular uses on beach areas shall avoid ESHAs to the maximum  
14          extent feasible.

#### 15   **4.3.3    Significance Criteria**

16   Impacts to biological resources would be considered significant if the Project results in:

- 17          ● The potential for any part of the population of a threatened, endangered, or  
18          candidate species to be directly affected or if its habitat is lost or disturbed
- 19          ● Any “take” of a Federal- or State-listed endangered, threatened, regulated, fully  
20          protected, or sensitive species
- 21          ● Prolonged disturbance to, or destruction of, the habitat (or its functional habitat  
22          value) of a species that is recognized as biologically or economically significant in  
23          local, state, or federal policies, statutes, or regulations
- 24          ● A net loss in the functional habitat value of any ESHA, including but not limited to  
25          salt, freshwater, or brackish marsh; marine mammal haul-out or breeding area;  
26          eelgrass; river mouth; coastal lagoon or estuary; seabird rookery; or Area of  
27          Special Biological Significance
- 28          ● Permanent change in the community composition or ecosystem relationships  
29          among species that are recognized for scientific, recreational ecological, or  
30          commercial importance
- 31          ● Permanent alteration or destruction of habitat that precludes reestablishment of  
32          native biological populations
- 33          ● Potential for the movement or migration of fish or wildlife to be impeded
- 34          ● A substantial loss in the population or habitat of any native fish, wildlife, or  
35          vegetation or if there is an overall loss of biological diversity. Substantial is  
36          defined as any change that could be detected over natural variability

- A substantial adverse effect on a Marine Protected Area, including but not limited to take of living marine resources within an MPA or loss or destruction of the functioning of an MPA

#### 4.3.4 Impact Analysis and Mitigation

Potential Project-related impacts to biological resources are evaluated below. Table 4.3-7 provides a summary of such impacts and recommended MMs to address these impacts.

#### Component 1

##### **Impact BIO-1: Disturbance of Nesting Birds**

Proposed removal of Pier 421-1 would result in the loss of cliff swallow nests (**Less than Significant with Mitigation**).

#### **Impact Discussion**

Cliff swallow nests under Pier 421-1 and proposed pier removal during the breeding season would result in take of these migratory birds protected under the Federal Migratory Bird Act and Section 3513 of the California Fish and Game Code. Implementation of **MM BIO-1** would avoid take of cliff swallows nesting on Pier 421-1. After implementation of **MM BIO-1**, impacts to cliff swallow nests from decommissioning activities would be mitigated to a less than significant level.

#### **Mitigation Measures**

**MM BIO-1: Avoidance of Active Cliff Swallow Nests.** A cliff swallow protection plan shall be developed prior to Project implementation. The plan shall specify how protection of the species will be implemented, including methods, timing, and monitoring requirements. Requirements shall include, but not be limited to:

- Inactive cliff swallow nests shall be removed during the non-breeding season (August 16<sup>th</sup> through February 14<sup>th</sup>) prior to the initiation of pier and caisson removal.
- Bird exclusion netting shall be installed on the underside of Pier 421-1 to prevent nesting prior to the initiation of pier and caisson removal. The netting shall remain in place, maintained, and not removed more than 24 hours before the initiation of removal of Pier 421-1.

1 **Impact BIO-2: Loss of a Bat Roost**

2 Proposed removal of the 421-2 caisson would result in the loss of a daytime bat roost  
3 **(Less than Significant with Mitigation).**

4 **Impact Discussion**

5 Crevices on the 421-2 caisson formed by sheet pile over concrete, support a daytime  
6 bat roost. Removal of the caissons would result in the loss of this bat roost. Three bat  
7 species (big brown bat, Mexican free-tailed, and California bat) were identified through  
8 analysis of ultrasonic bat calls. Based on the number of bat calls identified, big brown  
9 bat is likely to be the only bat species using the 421-2 caisson as a roost. All three bat  
10 species are common in the region, occur throughout the western United States, and are  
11 not vulnerable to extirpation (NatureServe ranking of S4 or S5<sup>13</sup>) and have either not  
12 been associated with White Nose Syndrome<sup>14</sup> or have exhibited evidence of resistance  
13 to the fungus (Lemieux et al 2020). Although bats roosting within the 421-2 caisson are  
14 anticipated to have other alternative roosting sites within the vicinity and will move to  
15 these alternative natural roost sites when vibration and noise associated with caisson  
16 removal begins, the removal of this roosting site will result in short term impacts to these  
17 animals. Implementation of **MM BIO-2** will avoid daytime disturbance to the roosting site  
18 during caisson operations. Therefore, a less than significant impact will occur following  
19 implementation of this mitigation measure.

20 **Mitigation Measures**

21 **MM BIO-2: Transitional Bat Habitat.** A bat preclusion plan shall be prepared  
22 and implemented prior to and during the 421-2 caisson demolition activities.  
23 The plan shall include confirmation surveys of either seasonal or ongoing  
24 bat use of the structure and recommendations regarding the timing for  
25 installation of preclusion netting at the caisson roost.

26 **Impact BIO-3: Temporary Effects of Potential Hydrocarbon Discharge**

27 Potential for Project-related discharge of hydrocarbons from contaminated soil or  
28 structures into marine waters may adversely affect marine organisms **(Less than**  
29 **Significant with Mitigation).**

---

<sup>13</sup> NatureServe is a ranking system to facilitate assessment of a species' rarity. Each species is assigned both a global (G) and state (S) rank on a scale of 1 to 5. The global ranks are assigned through a collaborative process involving both NatureServe and individual Natural Heritage Program scientists. An S4 ranking is noted as: Apparently secure – uncommon but not rare. An S5 ranking is noted as: Secure – common, widespread, and abundant in the nation or state.

<sup>14</sup> White nose syndrome is a fungal disease killing bats in North America. White nose syndrome causes high death rates and fast population declines in the species affected by it.

## 1 Impact Discussion

2 Testing of fill material within the caissons to be removed indicates this material contains  
3 concentrations of total petroleum hydrocarbons from below detection up to 69,120  
4 mg/kg (6.9 percent by weight). These hydrocarbons are weathered with expected low  
5 levels of soluble aromatic compounds. The Project includes numerous safeguards to  
6 avoid or minimize any contact of this fill material with marine waters, including:

- 7 • Removal of the caisson walls in increments
- 8 • Shoring of the caisson walls as needed to prevent premature collapse
- 9 • Pressure-washing of the interior caisson walls to remove any hydrocarbon  
10 residue, with immediate recovery of wash water
- 11 • Use of hydraulic excavation (hydro-ex) to remove the fill material as a slurry by  
12 vacuum into a self-contained bin

13 Potential impacts to marine organisms (lethal or sublethal effects, habitat alteration)  
14 associated with inadvertent spillage of contaminated fill material are likely to be minimal  
15 due to the weathered nature of the material and relatively small volume of any possible  
16 spillage. However, the potential exists that free oil occurs within the caisson and if  
17 released to the marine environment may have lethal or sublethal effects on marine birds  
18 through oiling of plumage. Implementation of **MM HAZ-1c** would minimize the effects of  
19 an unexpected release of free oil to the marine environment by minimizing the amount  
20 and dispersion of any oil released and cleaning up the beach and any oiled birds.  
21 Implementation of **MM HAZ-1c** would reduce potential impacts associated with an oil  
22 spill to a less than significant level.

## 23 Mitigation Measures

24 See **MM HAZ-1c** (Section 4.8, *Hazards and Hazardous Materials*), which requires  
25 implementation of the existing Facility OSCP.

### 26 Impact BIO-4: Loss of Coastal Wetlands (Component 1)

27 Removal of the 421-2 caisson would result in the loss of coastal wetlands (**Less than**  
28 **Significant**).

## 29 Impact Discussion

30 The coastal wetland delineation conducted for the Project identified a 0.003 acre coastal  
31 wetland on the surface of the 421-2 caisson structure. Removal of the 421-2 caisson  
32 (Component 1) would result in the loss of the coastal wetland. However, this is a very  
33 small and isolated area. Additionally, removal of the caissons would restore the beach  
34 to natural conditions and result in the removal of approximately 0.10 acre of fill below

1 the MHTL within tidelands (Cal. Code Regs., tit. 14, § 13577, subd. (d)). This area of fill  
2 removal is more than 30 times the area of the coastal wetland on the 421-2 caisson. A  
3 less than significant impact would result.

#### 4 **Mitigation Measures**

5 None required.

#### 6 Components 1 and 2

7 <b>Impact BIO-5: Disturbance of Terrestrial and Aquatic Special-Status Wildlife</b> 8 <b>Species</b>
---

9 Project-related activities would result in conflicts with special-status wildlife species 10 <b>(Less than Significant with Mitigation).</b>
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#### 11 **Impact Discussion**

12 Globose dune beetle may occur in the foredunes west of the Bell Canyon Creek  
13 estuary, adjacent to the Bacara Resort fire road access route. Heavy equipment using  
14 the beach to access Project facilities may trample foredune habitat for this species and  
15 result in some mortality. However, the impact to globose dune beetle is considered less  
16 than significant with mitigation.

17 The endangered tidewater goby occurs in the Bell Canyon Creek estuary which is  
18 located adjacent to the Bacara Resort fire road access route. Heavy equipment using  
19 the beach to access Project facilities may cross the estuary mouth and potentially result  
20 in mortality of tidewater goby (depending upon seasonal rainfall conditions that result in  
21 the outflow of the estuary mouth to the Pacific Ocean). The impact to tidewater goby is  
22 considered less than significant with mitigation.

23 The threatened California red-legged frog (CRLF) occurs in Bell Canyon Creek primarily  
24 upstream of U.S. Highway 101. This species is not anticipated to occur near the  
25 alternative beach access route due to high salinity levels in the estuary but could occur  
26 adjacent to the proposed staging area at the EOF. The proposed Project would not  
27 result in any disturbance or loss of CRLF habitat but use of the staging area could result  
28 in injury or mortality of any CRLF dispersing from Bell Canyon Creek (possibly to the  
29 pond at the Sandpiper Golf Course). Although the Project includes temporary fencing  
30 along Bell Canyon Creek adjacent to the EOF staging area (see Section 2.3.1.1), this  
31 fencing may be inadequate to contain dispersing CRLF. Overall, impacts to CRLF are  
32 considered less than significant with mitigation.

33 Brown pelican and double-crested cormorant may roost on the beach and on PRC 421  
34 facilities (piers, caissons, rock revetment) and may be present during proposed  
35 decommissioning activities. Project-related activities would preclude or restrict roosting

1 for about six months (mostly weekdays only). No impacts to breeding habitat or  
2 breeding activity would occur. These birds have numerous other areas available for  
3 roosting including Bird Island and beaches west of PRC 421. Therefore, Project-related  
4 impacts to roosting habitat would not substantially affect survival or reproduction of the  
5 local brown pelican and double-crested cormorant populations and are considered less  
6 than significant.

7 Noise generated by caisson removal may adversely affect double-crested cormorant  
8 and Brandt's cormorant roosting and/or nesting at Bird Island offshore. Noise modeling  
9 using the FHWA Roadway Construction Model indicates peak day noise (assuming  
10 simultaneous removal of both caissons) would be 58.9 dBA Leq at the nearest Bird  
11 Island roosting structure. This noise level is relatively low and similar in magnitude to  
12 surf-related noise. Double-crested cormorant is tolerant of high noise levels and human  
13 activity when breeding, as indicated by the large nesting population (799 active nests  
14 counted in 1999) on the Richmond-San Rafael Bridge over San Francisco Bay. Due to  
15 the distance (at least 800 feet) and temporary nature of Project-related noise  
16 generation, impacts to cormorants at Bird Island are considered less than significant.

17 Western snowy plover, snowy egret, and long-billed curlew are known to forage on  
18 beaches in the Project area, and Project-related activities would preclude post-breeding  
19 foraging for one fall/winter season. However, on specific days, decommissioning  
20 activities would be focused on a small portion of beach (about 500 feet). Due to the  
21 availability of many miles of beaches in the Project area, the Project-related temporary  
22 loss of foraging opportunities would not substantially affect survival or reproduction of  
23 the local western snowy plover, snowy egret, and long-billed curlew populations.  
24 However, heavy equipment activity on the beach has the potential to result in mortality  
25 of the threatened snowy plover which is a considered a potentially significant impact.

26 Cooper's hawk and yellow warbler may forage and possibly breed in woodland habitat  
27 along Bell Canyon Creek in the Project area. Wintering ferruginous hawks may also  
28 forage in these woodlands. The proposed Project would not result in loss of this habitat,  
29 and proposed fencing at the EOF staging area would prevent substantial disturbance of  
30 foraging and breeding activities. Impacts to Cooper's hawk, yellow warbler, and  
31 ferruginous hawk are considered less than significant.

## 32 **Mitigation Measures**

### 33 **MM BIO-3a: Avoidance of Estuarine Waters/Tidewater Goby Relocation.**

34 Use of the alternative beach access route shall be scheduled during periods  
35 when the estuary mouth is closed (not outflowing to the Pacific Ocean). If  
36 this is not feasible, fish netting (0.25 inch mesh size) shall be installed  
37 across the estuary mouth immediately upstream of the beach access route  
38 to isolate the estuary from the beach. A qualified biologist approved by the

1 USFWS to handle tidewater goby shall use seines and dip nets to capture  
2 and relocate tidewater gobies from the beach area to upstream of the fish  
3 nets. Fish nets shall be removed by the biologist within 24 hours following  
4 termination of use of the alternative beach access route.

5 **MM BIO-3b: CRLF Fencing at the EOF.** CRLF exclusion fencing (48 inch Ertec  
6 e-Fence, or equivalent) shall be installed along the entire western boundary  
7 of the EOF, adjacent to the margin of the riparian vegetation prior to use of  
8 the proposed staging area at this location. The bottom of the exclusion  
9 fencing shall be secured to the ground by trenching or other means to  
10 prevent CRLF from crawling under the fence. The CRLF exclusion fencing  
11 shall remain in place and maintained during all Project-related use of the  
12 EOF staging area.

13 **MM BIO-3c: Environmental Awareness Training.** A CSLC-approved biological  
14 monitor(s) shall conduct environmental awareness training for all Project  
15 personnel to familiarize workers with surrounding common and special-  
16 status species and their habitats, applicable regulatory requirements, and  
17 measures that must be implemented to avoid or minimize potential impacts  
18 to biological resources.

19 **MM BIO-3d: Biological Pre-activity Surveys and Monitoring.** A CSLC-  
20 approved biological monitor shall survey the work areas and access routes  
21 for sensitive species or other wildlife that may be present no more than 24  
22 hours prior to the commencement of Project activities. In addition, the  
23 biological monitor shall provide daily biological clearance prior to the start of  
24 work and shall always be on-site during Project operations. If at any time  
25 during Project any wildlife species are observed within the Project area,  
26 work around the animal's immediate area shall be stopped until the animal  
27 leaves on its own volition or work shall be redirected to an area within the  
28 Project site that would not impact these species. Work shall resume once  
29 the animal is clear of the work area. In the unlikely event special-status  
30 species are injured or killed by Project-related activities, the biological  
31 monitor shall stop work and notify CSLC and consult with the appropriate  
32 agencies to resolve the impact prior to re-starting work in the area.

33 **MM BIO-3e: Delineation of Work Limits.** Prior to the start of the Project, the  
34 Project work areas and access routes shall be clearly flagged to ensure  
35 heavy equipment and vehicles stay within the permitted disturbance areas  
36 and avoid native vegetation along the access route. Designated equipment  
37 staging and fueling areas shall also be delineated at this time.

1 Implementation of **MMs BIO-3a** and **3b** would avoid or minimize impacts to tidewater  
 2 goby associated with use of the alternative beach access route and avoid impacts to  
 3 CRLF associated with use of the proposed staging area at the EOF. Implementation of  
 4 **MMs BIO-3c** through **3e** would avoid or minimize impacts to snowy plover and other  
 5 wildlife that may occur in proximity to decommissioning work areas.

6 After implementation of **MMs BIO-3a** through **3e**, impacts to tidewater goby, CRLF,  
 7 globose dune beetle, snowy plover, and other wildlife species from decommissioning  
 8 activities would be mitigated to a less than significant level.

9 **Impact BIO-6: Disturbance of Intertidal ESHA**

10 Project-related activities would result in the loss or disturbance of species using  
 11 intertidal areas including invertebrates and fish (**Less than Significant**).

12 Operation of heavy equipment on the beach to remove caissons, piers, rock revetment,  
 13 and the wooden seawall and recontour the access roadway beach face would result in  
 14 some mortality of beach macroinvertebrates through sand compaction. The intertidal  
 15 area directly affected by heavy equipment activity would be up to about 1 acre (30-foot-  
 16 wide intertidal area along the access roadway), but the majority of the work would be  
 17 focused in a small area (PRC 421-1 and 421-2 caissons) and impacts would occur over  
 18 several months as work progresses along the beach face. Some movement back into  
 19 affected areas would occur by beach macroinvertebrates as work moves to a new area.  
 20 Natural reproduction in the spring would replace any macroinvertebrates lost to the  
 21 Project. Overall, impacts would be temporary, limited in magnitude, and the Project  
 22 would not substantially affect local populations of beach macroinvertebrates.

23 Excavation of intertidal areas associated with removal of caissons and piers and  
 24 potential spillage of soil contained within the caissons would increase suspended solids  
 25 and turbidity of surrounding ocean waters. This may temporarily reduce light penetration  
 26 and primary productivity in the water column, and may clog gills and feeding apparatus  
 27 of fish, planktonic larvae, and filter-feeding organisms. Increased turbidity may also  
 28 reduce foraging success for fish species, as prey is more difficult to find. Potential  
 29 ocean water quality impacts associated with excavation and other disturbance of beach  
 30 sediments are considered less than significant because:

- 31 • Intertidal areas are naturally turbid and any Project-related increase would be  
 32 minor
- 33 • The area potentially affected by increased suspended solids and turbidity would  
 34 be very small as compared to surrounding ocean waters (a few hundred feet  
 35 surrounding each caisson)
- 36 • Impacts would be temporary, limited to mostly daytime hours for a few months at  
 37 each caisson/pier

- 1 • Fish are known to avoid turbid water such that Project-related impacts to fish  
2 associated with increases in suspended solids and turbidity would be minimal

### 3 **Mitigation Measures**

4 None required.

### 5 **Impact BIO-7: Disturbance of Marine Special-Status Species**

6 Proposed decommissioning activities in intertidal areas may adversely affect grunion  
7 and marine mammals (**Less than Significant with Mitigation**).

### 8 **Impact Discussion**

9 The California grunion may spawn on the beach in the vicinity of the caissons and other  
10 proposed work areas. This species spawns on sandy beaches at night during the spring  
11 and summer, typically on four consecutive nights beginning on the full and new moon,  
12 after high tides. Spawning occurs from March through August, and occasionally in  
13 February and September, with peak spawning in late March to early June. Following  
14 successful spawning, the grunion eggs hatch in about 10 days, during the next high  
15 tide. Large spawning runs still occur, but smaller grunion runs are much more common  
16 than in past. Spawning on shore has declined significantly across much of the habitat  
17 range in the past 15 years (California Fish and Game Commission 2019). Project-  
18 related equipment activity on the beach may adversely affect grunion spawning and  
19 spawning and is considered a less than significant impact with mitigation.

20 Common marine mammals, potentially including common dolphin, bottle-nose dolphin,  
21 harbor seal, and California sea lion may occur in proximity to Project-related  
22 decommissioning activities in intertidal areas. However, these species are not  
23 anticipated to approach the beach or haul-out on the beach in proximity to Project-  
24 related activities. Marine mammal monitoring conducted as part of PRC 421-1 caisson  
25 wall repair in 2004 noted that marine mammals did not come within 500 feet of these  
26 activities (City of Goleta 2006). Since the Project is not anticipated to substantially affect  
27 their behavior or foraging opportunities, impacts to marine mammals are considered  
28 less than significant. Implementation of **MM BIO-4** would avoid or minimize impacts to  
29 spawning grunion associated with decommissioning activities on the beach. After  
30 implementation of **MM BIO-4**, impacts to grunion from decommissioning activities would  
31 be mitigated to a less than significant level.

### 32 **Mitigation Measures**

33 **MM BIO-4: Grunion Spawning Avoidance.** A grunion protection plan shall be  
34 developed prior to Project implementation. The plan shall specify how  
35 protection of the species will be implemented, including methods, timing,

1 and monitoring requirements. Requirements shall include, but not be limited  
2 to:

- 3 • Project activities that involve equipment activity on the beach shall be  
4 scheduled to avoid grunion spawning season (March through August) if  
5 possible, given other scheduling constraints (winter storm waves, etc.).
- 6 • If avoiding spawning season is not feasible, a qualified biologist shall  
7 conduct an initial presence/absence survey during grunion runs (open  
8 and closed season runs) as predicted by the CDFW to document that  
9 grunion have not used the site.
- 10 • If the initial presence/absence survey determines that grunion are  
11 spawning at the Project site; a focused survey shall be conducted  
12 immediately following the spawning event. During the focused survey,  
13 trenching shall be conducted at 3 to 6 foot spacing to determine if  
14 grunion spawning was successful and eggs were deposited within the  
15 intertidal work area. The trenches shall be excavated approximately 10  
16 inches wide and 3 to 6 inches deep. The trenches shall be located  
17 perpendicular to the high-water mark and extend from the highest high  
18 tide mark to approximate mean low water. Excavations shall continue  
19 until grunion eggs are found or until all trenches are sampled. If grunion  
20 eggs are found during focused surveys at the Project site, intertidal work  
21 activities in that location shall cease for 10 days to allow for hatching of  
22 the eggs during the next high-tide cycle.
- 23 • Subsequent presence/absence monitoring shall continue during the next  
24 spawning period to determine if grunion continue to spawn at the Project  
25 site.

26 Component 2

27 **Impact BIO-8: Loss of Coastal Wetlands (Component 2)**

28 Removal of the rock revetment and wooden seawall and abandonment of the access  
29 roadway would result in the loss of coastal wetlands (**Less than Significant with**  
30 **Mitigation**).

31 **Impact Discussion**

32 The coastal wetland delineation conducted for the Project identified 0.105 acre of  
33 coastal wetlands within or adjacent to the access roadway or rock revetment. In  
34 addition, 0.117 acre of coastal wetlands (Wetland W-2, see Figure 4.3-5) occur within  
35 an erosional feature located immediately north of Pier 421-2. Component 2 (proposed

1 removal of the two pipelines) would result in the disturbance and temporary loss of  
2 coastal wetlands within or adjacent to the access roadway (Wetlands W-4 through W-  
3 17). In addition, removal of the rock revetment protecting the access roadway and  
4 subsequent modification of the bank (shoreline) and removal of road base would result  
5 in the permanent loss of these wetlands along the access roadway.

6 Continued seepage of golf course irrigation water may provide sufficient soil moisture to  
7 allow wetland plant species to colonize the post-Project bluff toe. However, natural re-  
8 establishment of these wetland species may be prevented or substantially delayed by  
9 the lack of soil. In any case, a temporal loss of coastal wetlands would occur. This  
10 impact would be less than significant with mitigation.

11 Removal of the rock revetment and wooden seawall and abandonment of the access  
12 roadway would compromise the existing artificial impoundment of irrigation run-off from  
13 the golf course near Pier 421-2 and result in the loss or substantial reduction in the area  
14 of coastal wetlands located immediately north of Pier 421-2 due to a major reduction in  
15 soil moisture sustaining this wetland. This impact would be less than significant with  
16 mitigation.

## 17 **Mitigation Measures**

18 **MM BIO-5a: Coastal Wetlands Mitigation.** A coastal wetlands mitigation plan  
19 shall be developed prior to Project implementation. The Plan shall specify  
20 how mitigation will be implemented, including site location description,  
21 wetland creation or enhancement methods, plant palette, propagule  
22 sources, irrigation methods (if needed), maintenance activities, success  
23 criteria, and monitoring requirements. Requirements shall include, but not  
24 be limited to:

- 25 • Coastal wetlands removed from the access roadway as part of  
26 Component 2 shall be replaced at a minimum 3:1 ratio (at least 0.32  
27 acres) through a combination of wetland replacement and off-site  
28 wetlands creation or enhancement.
- 29 • Coastal wetlands replacement shall be included in the coastal bluff  
30 scrub replanting area (see **MM BIO-6a**) within the abandoned access  
31 roadway, and the remaining wetlands creation/enhancement needed to  
32 meet the 3:1 ratio shall be conducted off-site.

33 **MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2.** A coastal  
34 wetlands retention plan shall be developed prior to Project implementation.  
35 The Plan shall specify how retention will be implemented, including  
36 materials, methods, and integration into the overall decommissioning  
37 schedule. The rock and road base fill material comprising the access

1 roadway north of Pier 421-2 shall be left in place, or other suitable material  
2 placed as needed, to maintain the impoundment of golf course irrigation  
3 run-off which supports the existing wetlands at this location.

4 **Impact BIO-9: Loss of Terrestrial ESHA/Sensitive Natural Communities**

5 Decommissioning activities would result in the loss of coastal bluff scrub and may result  
6 in trampling of southern foredunes considered ESHA by the City and CCC (**Less than**  
7 **Significant with Mitigation**).

8 **Impact Discussion**

9 Removal of the rock revetment, wooden seawall, and sloping the seaward face of the  
10 access roadway (Component 2) would result in the loss of approximately 0.3 acres of  
11 coastal bluff scrub from the access roadway seaward margin. This impact would be less  
12 than significant with mitigation.

13 Southern foredunes occur adjacent to the Bacara Resort fire road access route. Heavy  
14 equipment and vehicles using this access route may trample this sensitive habitat. The  
15 potential impact to southern foredunes is considered less than significant with  
16 mitigation. Implementation of **MMs BIO-6a** and **6b** would offset impacts to coastal bluff  
17 scrub through on-site replacement and avoid impacts to southern foredunes through  
18 biological monitoring. After implementation of **MMs BIO-6a** and **6b**, impacts to coastal  
19 bluff scrub and southern foredunes from decommissioning activities would be mitigated  
20 to a less than significant level.

21 **Mitigation Measures**

22 **MM BIO-6a: Coastal Bluff Scrub Replacement.** A coastal bluff scrub  
23 replacement plan shall be developed prior to Project implementation. The  
24 Plan shall specify how replacement will be implemented, including soil  
25 augmentation, planting site preparation, planting methods, plant palette,  
26 propagule sources, irrigation methods (if needed), maintenance activities,  
27 success criteria, and monitoring requirements. Coastal bluff scrub removed  
28 along the seaward margin of the access roadway shall be replaced at a  
29 minimum 2:1 ratio (at least 0.6 acre) through soil augmentation and  
30 replanting the remaining surface of the abandoned access roadway with  
31 quail bush, coastal golden-bush, and other native species characteristic of  
32 the bluffs.

33 **MM BIO-6b: Southern Foredunes Avoidance.** A CSLC-approved biological  
34 monitor shall be present when heavy equipment or vehicles transit the  
35 alternative beach access route and communicate with equipment/vehicle  
36 operators to ensure southern foredunes are avoided.

1 **Impact BIO-10: Loss of Special-Status Plant Species**

2 Removal of the rock revetment and wooden seawall and abandonment of the access  
3 roadway would result in the loss of cliff malacothrix (**Less than Significant**).

4 **Impact Discussion**

5 Removal of the rock revetment and wooden seawall and abandonment of the access  
6 roadway would result in the loss of approximately ten cliff malacothrix plants on the  
7 access roadway seaward margin. This species is considered a plant of limited  
8 distribution by CNPS (not rare or declining) and is not considered a rare plant by the  
9 Santa Barbara Botanic Garden. It is relatively common in the region (south coast west  
10 of Santa Barbara), and about 100 plants occur on the bluff above the access roadway.  
11 Cliff malacothrix is not considered rare or endangered under CEQA per State CEQA  
12 Guidelines Section 15380. Loss of 10 cliff malacothrix plants would not substantially  
13 affect the local population, and this impact is considered less than significant.

14 **Mitigation Measures**

15 None required.

16 **4.3.5 Cumulative Impacts Analysis**

17 Components 1 and 2

18 **Impact BIO-11: Cumulative Impacts to Biological Resources**

19 Project-related disturbance and habitat loss would incrementally contribute to  
20 cumulative impacts to biological resources (**Less than Significant with Mitigation**).

21 **Impact Discussion**

22 Cumulative projects identified in Section 3.0 that could occur at about the same time  
23 and affect the same biological resources as the proposed Project include CSLC Beach  
24 Hazards Removal, Ellwood Coastal Trails and Habitat Restoration Project, the Bacara  
25 Beach House Relocation, and the Ocean Meadows Residential Development. These  
26 projects would result in habitat removal and short-term habitat disturbance potentially  
27 affecting the same wildlife populations as the proposed Project. The proposed Project  
28 would incrementally contribute to these cumulative impacts. However, with the  
29 implementation of mitigation measures listed in Table 4.3-7, the Project contribution  
30 would not be considerable.

1 4.3.6 Summary of Impacts and Proposed Mitigation Measures

Table 4.3-7. Summary of Biological Resources Impacts and Mitigation Measures

Impact	Mitigation Measures
<b>Impact BIO-1:</b> Disturbance of Nesting Birds	<b>MM BIO-1:</b> Avoidance of Active Cliff Swallow Nests
<b>Impact BIO-2:</b> Loss of a Bat Roost	<b>MM BIO-2:</b> Transitional Bat Habitat
<b>Impact BIO-3:</b> Temporary Effects of Potential Hydrocarbon Discharge	<b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation
<b>Impact BIO-4:</b> Loss of Coastal Wetlands (Component 1)	None required.
<b>Impact BIO-5:</b> Disturbance of Terrestrial and Aquatic Special-Status Wildlife Species	<b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation <b>MM BIO-3b:</b> CRLF Fencing at the EOF <b>MM BIO-3c:</b> Environmental Awareness Training <b>MM BIO-3d:</b> Biological Pre-activity Surveys and Monitoring <b>MM BIO-3e:</b> Delineation of Work Limits
<b>Impact BIO-6:</b> Disturbance of Intertidal ESHA	None required.
<b>Impact BIO-7:</b> Disturbance of Marine Special-Status Species	<b>MM BIO-4:</b> Grunion Spawning Avoidance
<b>Impact BIO-8:</b> Loss of Coastal Wetlands (Component 2)	<b>MM BIO-5a:</b> Coastal Wetlands Mitigation <b>MM BIO-5b:</b> Retain Coastal Wetlands Adjacent to Pier 421-2
<b>Impact BIO-9:</b> Loss of Terrestrial ESHA/Sensitive Natural Communities	<b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement <b>MM BIO-6b:</b> Southern Foredunes Avoidance
<b>Impact BIO-10:</b> Loss of Special-Status Plant Species	None required.
<b>Impact BIO-11:</b> Cumulative Impacts to Biological Resources (Components 1 and 2)	<b>MM BIO-1:</b> Avoidance of Active Cliff Swallow Nests <b>MM BIO-2:</b> Transitional Bat Habitat <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation

Impact	Mitigation Measures
	<p><b>MM BIO-3b:</b> CRLF Fencing at the EOF</p> <p><b>MM BIO-3c:</b> Environmental Awareness Training</p> <p><b>MM BIO-3d:</b> Biological Pre-activity Surveys and Monitoring</p> <p><b>MM BIO-3e:</b> Delineation of Work Limits</p> <p><b>MM BIO-4:</b> Grunion Spawning Avoidance</p> <p><b>MM BIO-5a:</b> Coastal Wetlands Mitigation</p> <p><b>MM BIO-5b:</b> Retain Coastal Wetlands adjacent to Pier 421-2</p> <p><b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement</p> <p><b>MM BIO-6b:</b> Southern Foredunes Avoidance</p>

## 1 **4.4 CULTURAL RESOURCES**

2 This section identifies cultural resources in the Project area and vicinity, including PRC  
3 421 itself, and evaluates impacts to such resources that would potentially result from  
4 implementation of the Project.

### 5 **4.4.1 Environmental Setting**

#### 6 4.4.1.1 Precontact History of Santa Barbara County

7 For the purposes of this document, the chronological framework postulated by King  
8 (1990) and Arnold (1992) for the Santa Barbara Channel region is used to discuss the  
9 Paleo-Indian, Early Holocene, Early Period, Middle Period, Middle to Late Transition,  
10 and Late periods of cultural development in the larger Santa Barbara County region.  
11 This chronological framework is considered the most appropriate for the region because  
12 it can be tied to absolute dates through radiocarbon dating.

13 The Paleo-Indian Period (c. 25,000 – c. 9,950 Before Present (B.P.)) is the earliest  
14 known human occupation of the Santa Barbara area, with evidence of a developing  
15 maritime culture found mostly on the Channel Islands. At the end of this period, the sea  
16 level began to rise, which submerged and eroded many Paleo-Indian sites located on  
17 coastal terraces.

18 Appropriately named, the Millingstone Period (c. 9,950 – c. 5,450 B.P.) is defined by the  
19 predominance of hand stones and milling slabs in the archaeological record, suggesting  
20 a reliance on hard seeds and other plant foods. Faunal assemblages from various sites  
21 indicate early Chumash populations also consumed terrestrial and marine mammals,  
22 fish, and shellfish indicating increased mobility between coastal and inland camps  
23 (Jones et al. 1994).

24 Most archaeological sites dating to the Early Period (c. 5,450 – c. 2,550 B.P.) are  
25 recorded at or near the coast, or on the Channel Islands. This period is characterized by  
26 an abundance of manos, metates, and a variety of flaked stone tools. Bone gorges  
27 occur and shell beads appear in burials (Glassow et al. 2007). Residential bases are  
28 presumed to have been comprised of extended families during this period.

29 During the Middle Period (c. 2,550 – c. 950 B.P.), the technology and economy of  
30 Chumash society became markedly more complex. The artifact assemblage contains  
31 shellfish hooks and other fishing gear and contracting-stemmed projectile points.  
32 Subsistence practices emphasized fish and acorns, with a greater use of seasonal  
33 resources and the first attempts at food storage (King 1990). Continuation of trade  
34 relationships is evident in the increased number and diversity of obsidian items and  
35 beads associated with this period. Sites were occupied on an extensive basis, but not

1 as permanent settlements. These residential bases functioned in conjunction with short  
2 term, smaller occupations at specialized resource processing areas (Jones and  
3 Ferneau 2002).

4 Coastal settlement increases significantly during the Middle to Late Transition Period (c.  
5 950 - c. 700 B.P.). Sedentism is apparent, along with formal architecture, ceremonial  
6 structures, and traditional cemeteries. Cultural ornamentation and elaboration during  
7 this time implies a change in society, elevating attributes of achieved status and wealth.  
8 Regional exchange indicates a boost in socioeconomic and political complexity. Faunal  
9 remains reveal the exploitation of a diverse array of marine and terrestrial habitats and  
10 species.

11 During the Late Period (c. 700 – c. 181 B.P.), terrestrial resource production is thought  
12 to have decreased significantly, while socioeconomic complexity evolved. Shellfish  
13 remained the principal protein food. A ranked society with hereditary elite was  
14 established. Semi-subterranean sweat lodges are also common. Population growth and  
15 socioeconomic complexity transpires, along with environmental change (Glassow et al.  
16 2007).

#### 17 4.4.1.2 Regional and Local History

18 The historic record of the Santa Barbara Channel began with the arrival of four Spanish  
19 expeditions between the years of 1542 (Juan Rodriguez Cabrillo) and 1602 (Sebastian  
20 Vizcaino). Both Cabrillo and Vizcaino described their interactions with the Chumash as  
21 generally positive, friendly encounters. After these initial expeditions, which were  
22 essentially confined to the coast, a period of 167 years passed without any additional  
23 European arrivals. The first Spanish land expedition of Gaspar de Portola passed  
24 through Santa Barbara County and camped near present day Santa Barbara on August  
25 18, 1769.

26 Over the next three decades, the Spanish established 21 Franciscan missions and  
27 various military presidios and pueblos along El Camino Real between San Diego and  
28 Sonoma. The Spanish founded El Presidio Real de Santa Bárbara in 1782 and Mission  
29 Santa Bárbara was established in 1786. In 1821, Mexico declared independence from  
30 Spain; a year later, California became a Mexican Territory. After the secularization of  
31 the missions in 1834, lands were gradually transferred to private ownership via a  
32 system of land grants. California was recognized as a state in September 1850.

33 Oil exploration began in Santa Barbara County when significant discoveries of oil were  
34 successfully tapped in the Santa Maria Valley, 45 miles northwest of the current Project  
35 site, during the 1880s. During the 1890s, the first offshore oil drilling piers were built in  
36 the waters off Summerland, 17 miles east of the Project site. Other significant  
37 discoveries followed in the early 1900s at the Orcutt and Cat Canyon fields. Oil  
38 production in the Orcutt Hills hit an all-time high during World War I and then declined

1 temporarily until rising domestic automobile use in the 1920s necessitated more  
2 production. Even after the disastrous stock market collapse of 1929, foreign demand for  
3 U.S. oil in the 1930s spurred further oil development in Santa Barbara County.

4 The opening months of World War II had a number of important impacts on California  
5 history. Millions of newcomers came to the state to train and build ships and airplanes.  
6 Additionally, 69 days after the attack at Pearl Harbor, the Imperial Japanese Navy's  
7 submarine I-17, under the command of Commander Nishino Kozo attacked the coast of  
8 California north of Santa Barbara at the Barnsdall-Rio Grande Field at Ellwood (today's  
9 Sandpiper Golf Course) and began shelling the oil and gasoline tanks located there.  
10 Damage was limited but represented the first shelling of the North American mainland  
11 during the conflict (Ruhge 2016). Twenty-five and 50 year commemorative ceremonies  
12 were held at the Timber's Restaurant and the Sandpiper Golf Course. A bronze plaque  
13 was placed at the golf course in 1982, and the Goleta Historical Society placed a  
14 historic marker sign describing the attack at the beach below the Bacara Resort west of  
15 the golf course in 2002.

16 Following the peak of World War II oil demands, oil and gas production in Santa  
17 Barbara County declined. Beginning in the late 1950s, oil companies began to explore  
18 for oil in State tidelands. The first offshore drilling platform off the Santa Barbara County  
19 coast was installed in 1958 near Carpinteria. Eight other platforms and other facilities  
20 were installed in State tidelands off of Santa Barbara County between 1956 and 1966.  
21 On January 28, 1969, Union Oil's Platform A suffered a blowout in the Dos Cuadras  
22 field installation that lasted eight days. The resulting spill of 90,000 barrels of crude oil  
23 affected over 40 miles of coastline. Several environmental laws were passed at the  
24 federal and state levels following the incident, including the National Environmental  
25 Policy Act (NEPA) and California Environmental Quality Act (CEQA).

26 The Ellwood Oil Field was discovered in 1928. Figure 4.4-1 shows the historical  
27 development of the Ellwood coast. PRC 421 infrastructure was also built and  
28 commissioned in 1928, and piers 421-1 and 421-2 are historic-aged structures, though  
29 they are without historic or cultural significance to the community, State, or nation.  
30 Although they are the last remaining surf zone wells in California, they have been  
31 modified significantly since the 1930s and do not maintain historical integrity. Further,  
32 based on review of historical photographs, the piers were changed from the historic  
33 configuration sometime between 1979 and 1987; therefore making the structures at  
34 most 42 years old. Figure 4.4-2 shows the change in the historical configuration of the  
35 421 piers.

36 Component 1 of the Project decommissioning activities would completely remove the  
37 421-1 and 421-2 pier and caissons; however, as noted above, the historic configuration  
38 of the piers has been recently changed. Additionally, the integrity of these structures is  
39 poor as indicated by the significant corrosion present within the remaining structures

- 1 and the multiple repairs required over the years. Therefore, these structures are not
- 2 considered a historical resource or a unique archaeological resource.

**Figure 4.4-1. Historical Development of the Ellwood Coast**



Historic oblique photo (dated "1930's") showing the many oil pier structures at the time. (source: UCSB Collection)

**Figure 4.4-2. Reconfiguration of 421 Oil Piers**



**Pier Configuration in 1972**



**Pier Configuration in 2010**

Source: California Coastal Records Project (2021) Copyright © 2002-2022 Kenneth & Gabrielle Adelman, California Coastal Records Project, [www.californiacoastline.org](http://www.californiacoastline.org)

### 1 4.4.1.3 Records Search Results

2 On January 26, 2021, Kleinfelder/GANDA, ExxonMobil's consultant, requested a search  
3 of the California Historical Resources Information System (CHRIS) at the Central Coast  
4 Information Center (CCIC). The records search included a review of all recorded  
5 historic-era and prehistoric archaeological sites within a 0.25 mile radius of the Project  
6 area as well as a review of known cultural resource surveys and technical reports. The  
7 updated records search results were received on February 10, 2021.

8 The records search did not identify any previously recorded cultural resources within the  
9 Project area; however, one prehistoric-aged cultural resource, CA-SBA-71, is adjacent  
10 to the Alternative Staging Area/Access Point that is located entirely within the Bacara  
11 Resort fire road. The records search also identified 14 prehistoric-aged cultural  
12 resources within a 0.25 mile radius of the Project area. Finally, the records search found  
13 11 reports for previously conducted cultural studies within the Project area and 41  
14 reports of previously conducted cultural studies within the 0.25-mile search radius.  
15 These resources and studies are summarized in a memorandum prepared by  
16 Kleinfelder/GANDA (Appendix H). No historic-aged resources were listed within the  
17 search results.

### 18 4.4.2 Regulatory Setting

19 Federal and state laws and regulations pertaining to cultural resources and relevant to  
20 the Project including California Coastal Act Chapter 3, Section 30244 are discussed in  
21 Appendix B and Section 4.10, *Land Use* (Table 4.10-1). Local policies applicable to the  
22 Project with respect to cultural resources are listed below.

#### 23 4.4.2.1 City of Goleta

24 The city of Goleta's General Plan/Coastal Land Use Plan (GP/CLUP) (City of Goleta  
25 2006c) contains several policies in the Open Space and Visual and Historic Resources  
26 Elements pertaining to cultural resources. One of the main goals in the Open Space  
27 Element is to ensure the protection of areas associated with Native American culture,  
28 including burial sites, religious and ceremonial sites, archaeological or historical sites,  
29 and other cultural sites. The following policies within the GP/CLUP are applicable to the  
30 Project:

- 31 • **Policy OS 7.1(e):** To protect the places, features, and objects associated with  
32 Native American cemeteries, religious or ceremonial sites, archaeological or  
33 historical sites, or other cultural sites.
- 34 • **Policy OS 8:** Protection of Native American and Paleontological Resources -  
35 contains several measures by which to identify and protect prehistoric and  
36 historic cultural sites and resources from destruction or harmful alteration.

- 1       • **Policy VH 2.2: Preservation of Scenic Corridors.** The aesthetic qualities of  
2 scenic corridors shall be preserved through retention of the general character of  
3 significant natural features; views of the ocean, foothills, and mountainous areas;  
4 and open space associated with recreational and agricultural areas including  
5 orchards, prominent vegetation, and historic structures. If landscaping is used to  
6 add visual interest or for screening, care should be taken to prevent a wall-like  
7 appearance. Bridges, culverts, drainage ditches and other roadway ancillary  
8 elements should be appropriately designed; side slopes and earthen berms  
9 adjacent to roadways should be natural in appearance.
  
- 10       • **Policy 2.3: Development Projects Along Scenic Corridors.** [GP] Development  
11 adjacent to scenic corridors should not degrade or obstruct views of scenic  
12 areas. To ensure visual compatibility with the scenic qualities, the following  
13 practices shall be used, where appropriate:
  - 14           ○ g. Preserve historical structures or sites.
  
- 15       • **Policy VH 5: Historic Resources.** Includes the protection of Native American  
16 and Paleontological Resources, the objective of which is to identify, protect, and  
17 encourage preservation of significant architectural, historic, and prehistoric sites,  
18 structures, and properties that comprise Goleta’s heritage. Table 6.1 of the Visual  
19 and Historic Resources Element lists historic resources in Goleta, none of which  
20 are located at or near the Project site.
  
- 21       • **Policy VH 6: Historical and Cultural Landscapes.** Seeks to identify, preserve,  
22 protect, and enhance significant historic landscaping, gardens, and open spaces  
23 which contribute to the setting or context of Goleta.

#### 24   **4.4.3    Significance Criteria**

25   The State CEQA Guidelines section 15064.5 defines a significant cultural resource,  
26 either prehistoric or historic, as a “historical resource.” Public Resources Code section  
27 5020.1, subdivision (j) defines a historical resource as:

28       *“Historical resource” includes, but is not limited to, any object, building,*  
29       *structure, site, area, place, record, or manuscript which is historically or*  
30       *archaeologically significant, or is significant in the architectural, engineering,*  
31       *scientific, economic, agricultural, educational, social, political, military, or*  
32       *cultural annals of California.”*

33   A resource included in a local register of historical resources, as defined in Public  
34 Resources Code section 5020.1, subdivision (k) or identified as significant in an  
35 historical resource survey meeting the requirements of section 5024.1, subdivision (g),  
36 shall be presumed to be historically or culturally significant. Public agencies must treat  
37 any such resource as significant unless the preponderance of evidence demonstrates

1 that it is not historically or culturally significant. *Generally, a resource shall be*  
 2 *considered by the lead agency to be “historically significant” if the resource meets the*  
 3 *criteria for listing on the California Register of Historical Resources (Pub. Resources*  
 4 *Code, § 5024.1 and Cal. Code Regs. tit. 14, § 4852), including the following:*

- 5 (a) Is associated with events that have made a significant contribution to the broad  
 6 patterns of California’s history and cultural heritage
- 7 (b) associated with the lives of persons important in our past
- 8 (c) Embodies the distinctive characteristics of a type, period, region, or method of  
 9 construction, or represents the work of an important creative individual, or  
 10 possesses high artistic values
- 11 (d) yielded, or may be likely to yield, information important in prehistory or history

12 The fact that a resource is not listed in or determined to be eligible for listing in the  
 13 California Register of Historical Resources, not included in a local register of historical  
 14 resources (pursuant to Pub. Resources Code, § 5020.1, subd. (k)) or identified in an  
 15 historical resources survey (meeting the criteria in § 5024.1, subd. (g)) does not  
 16 preclude a lead agency from determining that the resource may be a historical resource  
 17 as defined in sections 5020.1, subdivision (j), or 5024.1.

18 The State CEQA Guidelines section 15064.5, subdivision (b) provides significance  
 19 threshold criteria for determining a substantial adverse change to the significance of a  
 20 cultural resource:

- 21 1. Substantial adverse change in the significance of an historical resource means  
 22 physical demolition, destruction, relocation, or alteration of the resource or its  
 23 immediate surroundings such that the significance of an historical resource would  
 24 be materially impaired.
- 25 2. The significance of an historical resource is materially impaired when a project:
  - 26 (a) Demolishes or materially alters in an adverse manner those physical  
 27 characteristics of an historical resource that convey its historical significance  
 28 and that justify its inclusion in, or eligibility for, inclusion in the California  
 29 Register of Historical Resources
  - 30 (b) Demolishes or materially alters in an adverse manner those physical  
 31 characteristics that account for its inclusion in a local register of historical  
 32 resources pursuant to section 5020.1, subdivision (k) of the Public  
 33 Resources Code or its identification in an historical resources survey  
 34 meeting the requirements of section 5024.1, subdivision (g) of the Public  
 35 Resources Code, unless the public agency reviewing the effects of the  
 36 project establishes by a preponderance of evidence that the resource is not  
 37 historically or culturally significant

- 1 (c) Demolishes or materially alters in an adverse manner those physical  
2 characteristics of a historical resource that convey its historical significance  
3 and that justify its eligibility for inclusion in the California Register of  
4 Historical Resources as determined by a lead agency for purposes of CEQA

#### 5 **4.4.4 Impact Analysis and Mitigation**

6 Impacts to cultural resources can occur by direct or indirect impacts. Direct impacts  
7 result from ground disturbances directly and indirectly caused by construction,  
8 decommissioning, operation, or maintenance. Indirect impacts result from increased  
9 access to archaeological sites, i.e., construction or facility employees participating in  
10 unauthorized artifact collecting. The proposed Project does not include any operational  
11 or maintenance activities. A discussion of potential impacts of each Project component  
12 during decommissioning activities and recommended MMs are provided below.

#### 13 Component 1

#### 14 **Impact CR-1: Potential Impacts to Previously Undiscovered Cultural Resources** 15 **During Project Implementation (Component 1)**

16 Although there is one known cultural resource *near* the Project site, no cultural  
17 resources are known to be present *within* the Project footprint, and Project activities  
18 would generally occur in previously disturbed areas and in areas where presence of  
19 cultural resources is not expected (**Less than Significant**).

#### 20 **Impact Discussion**

21 The potential for impacts to subsurface cultural resources is limited during Component 1  
22 due to the fact that Project activities are anticipated to occur in previously disturbed soils  
23 and artificial fill. Previous reviews of cultural resources in the area to be affected by the  
24 Project have not identified significant cultural resources (Santa Barbara County 2001;  
25 City of Goleta 2006d; Santa Barbara County 2011). There is one known, previously  
26 recorded cultural resource, CA-SBA-71, but it is located outside Project disturbance  
27 areas and will be avoided (see discussion under Impact CR-3). The access roadway  
28 leading to the piers, the production lines, and the PRC 421 pier area consist of relatively  
29 loose beach sand that is prone to erosion and scour (i.e., the removal of sand due to  
30 wave action along the oceanfront, sometimes to shale bedrock). Due to the open  
31 exposure, the oceanfront is generally not considered suitable for occupation by  
32 precontact indigenous peoples. Additionally, due to the movement of sand on a  
33 seasonal basis (i.e., sand is generally scoured off the beach during the winter months  
34 as a result of high surf activity but is generally deposited during the summer months of  
35 gentle surf), intact precontact cultural material is generally not found along the  
36 oceanfront. Therefore, there is no archaeological sensitivity within most of the Project  
37 site, and little to no potential for impacts.

1 **Mitigation Measures**

2 None required.

3 Component 2

4 **Impact CR-2: Potential Impacts to Previously Undiscovered Cultural Resources**  
 5 **During Project Implementation (Component 2)**

6 Although no cultural resources are known to be present within the Project site and  
 7 Project activities would generally occur in previously disturbed areas, excavations could  
 8 exceed previous depths and disturb previously undiscovered cultural resources in some  
 9 areas (**Less than Significant with Mitigation**).

10 **Impact Discussion**

11 There is a potential that Project-related ground disturbance would exceed previous  
 12 depths during Component 2 and affect heretofore undiscovered cultural resources, such  
 13 as along the access roadway or within the pier abutment areas. Potential impacts to  
 14 previously undiscovered cultural resources during Component 2 (pier abutment  
 15 removal, pipeline removal, and access roadway removal) would be mitigated to less  
 16 than significant with implementation of **MM CUL-1/TCR-1, MM CUL-2/TCR-2, MM CUL-**  
 17 **3/TCR-3, and MM CUL-4/TCR-4.**

18 **Mitigation Measures**

19 **MM CUL-1/TCR-1: Cultural Resources Monitoring.** A Cultural Resources  
 20 Monitoring Plan (Plan) shall be prepared prior to Component 2 ground  
 21 disturbing activities. The Plan shall include, but not be limited to, the  
 22 following measures:

- 23 • CSLC shall retain a qualified archaeologist and a representative of a  
 24 California Native American tribe that is culturally affiliated to the Project  
 25 site to monitor all ground disturbing activities during Component 2.
- 26 • CSLC shall provide a minimum 5 day notice to the archaeologist and  
 27 tribal monitor prior to all activities requiring monitoring.
- 28 • CSLC shall provide the archaeologist and tribal monitor safe and  
 29 reasonable access to the Project site.
- 30 • The Plan shall include guidance on identification of potential cultural  
 31 resources that may be encountered.

32 **MM CUL-2/TCR-2: Cultural Resources Sensitivity Training.** Prior to Project  
 33 implementation, a pre-construction cultural resources sensitivity training  
 34 shall be given by a qualified archaeologist and Native American  
 35 representative. The purpose of the training will be to educate onsite

1 construction personnel as to the sensitivity of archaeological resources in  
2 the area, and specifically avoidance of CA-SBA-71 when utilizing the  
3 Bacara Resort fire road access area. The training will also cover the  
4 requirements of the Plan identified in **MM CUL-1/TCR-1**, including the  
5 possibility of exposing cultural resources, guidance on recognizing such  
6 resources, and direction on procedures if a resource or potential resource is  
7 encountered. CSLC and the Project contractor will instruct all Project  
8 personnel that touching, collecting, or removing cultural materials from the  
9 property is strictly prohibited. Evidence of compliance with this MM shall be  
10 documented within pre-Project compliance documentation materials prior to  
11 Project implementation.

12 **MM CUL-3/TCR-3: Discovery of Previously Unknown Cultural or Tribal**  
13 **Resources.** In the event that potential cultural or tribal cultural resources  
14 are uncovered during Project implementation, all earth-disturbing work  
15 within 100 feet of the find shall be temporarily suspended or redirected until  
16 the approved archaeologist and tribal monitor have evaluated the nature  
17 and significance of the discovery. In the event that the discovered cultural  
18 or tribal cultural resource is potentially significant, CSLC and any local,  
19 state, or federal agency with approval or permitting authority over the  
20 Project that has requested/required notification shall be notified within 48  
21 hours. The location of any such finds must be kept confidential and  
22 measures shall be taken to secure the area from site disturbance and  
23 potential vandalism. Impacts to previously unknown significant cultural or  
24 tribal cultural resources shall be avoided through preservation in place if  
25 feasible. Damaging effects to tribal cultural resources shall be avoided or  
26 minimized following the measures identified in Public Resources Code  
27 section 21084.3, subdivision (b), if feasible, unless other equally or more  
28 effective measures are mutually agreed to in the treatment plan (described  
29 below) by the lead archaeologist and culturally affiliated tribal monitor.

30 A treatment plan, if needed to address a find, shall be developed by the  
31 archaeologist and, for tribal cultural resources, the culturally affiliated tribal  
32 monitor, and submitted to the appropriate tribal representatives and CSLC  
33 staff for review, input, and concurrence prior to implementation of the plan.  
34 Protection in place of tribal cultural resources shall be prioritized, if feasible;  
35 if the archaeologist or tribe determines that damaging effects on the cultural  
36 or tribal cultural resource can be avoided in place, then work in the area  
37 may resume provided the area of the find is clearly marked for no  
38 disturbance. If avoidance in place of tribal cultural resources is infeasible,  
39 the treatment plan shall include measures that place priority on Tribal self-  
40 determination over collection and curation, including the option to repatriate

1 (rebury) materials nearby at a location of their choosing, and to transfer  
2 possession/ownership to the culturally affiliated tribe.

3 Title to all archaeological sites, historic or cultural resources, and tribal  
4 cultural resources on or in the tide and submerged lands of California is  
5 vested in the State and under CSLC jurisdiction. The final disposition of  
6 archaeological, historical, and tribal cultural resources recovered on State  
7 lands under CSLC jurisdiction must be approved by the CSLC.

8 **MM CUL-4/TCR-4: Unanticipated Discovery of Human Remains.** If human  
9 remains are encountered, all provisions provided in California Health and  
10 Safety Code section 7050.5 and California Public Resources Code section  
11 5097.98 shall be followed. Work shall stop within 100 feet of the discovery,  
12 and both an archaeologist and CSLC staff must be contacted within 24  
13 hours. The archaeologist shall consult with the County Coroner. If human  
14 remains are of Native American origin, the County Coroner shall notify the  
15 Native American Heritage Commission within 24 hours of this  
16 determination, and a Most Likely Descendent shall be identified. No work is  
17 to proceed in the discovery area until consultation is complete and  
18 procedures to avoid or recover the remains have been implemented.

19 Components 1 and 2

20 **Impact CR-3: Potential for Damage to or Unauthorized Collection of CA-SBA-71**  
21 **During Implementation of Decommissioning Components 1 and 2**

22 Use of the Bacara Resort Alternative Staging Area/Access Point, which is adjacent to  
23 CA-SBA-71, would result in short-term increase in access to archaeological artifacts  
24 associated with CA-SBA-71 and the potential for unauthorized collection (**Less than**  
25 **Significant with Mitigation**).

26 **Impact Discussion**

27 One previously recorded cultural resource, CA-SBA-71, is adjacent to the Alternative  
28 Staging Area/Access Point that is located entirely within the Bacara Resort fire road  
29 access. Although the Alternative Staging Area/Access Point is paved and contains no  
30 exposed ground surface, Project personnel could encroach into the site boundaries or  
31 inadvertently damage the site. Such damage or unauthorized collection of artifacts  
32 would contribute to the destruction of site integrity. Potential impacts to CA-SBA-71  
33 would be avoided through installation and maintenance of protective fencing or flagging  
34 (**MM CUL-5/TCR-5**), and appropriate training of field staff prior to Project  
35 implementation (**MM CUL-2/TCR-2**). The on-site environmental compliance monitor will  
36 ensure enforcement of these measures throughout decommissioning activities. No  
37 significant impact would result following mitigation.

1 **Mitigation Measures**

2 **MM CUL-2/TCR-2: Cultural Resources Sensitivity Training**

3 **MM CUL-5/TCR-5: Cultural Resources Protective Fencing (CA-SBA-71).**

4 Prior to Project implementation, protective fencing or flagging clearly  
5 marking the area surrounding CA-SBA-71 for avoidance shall be installed;  
6 this fencing or flagging shall be maintained for the duration of the use of the  
7 Bacara Resort fire road access area, and no personnel, equipment, refuse,  
8 or other materials shall be allowed into the avoidance area at any time.

9 **4.4.5 Cumulative Impacts Analysis**

10 Components 1 and 2

11 **Impact CR-4: Cumulative Impacts to Cultural Resources**

12 Project-related ground disturbance may incrementally contribute to cumulative impacts  
13 to cultural resources (**Less than Significant with Mitigation**).

14 Prehistoric archaeological sites are non-renewable resources that have been destroyed  
15 at an alarming rate state-wide and locally. It has been estimated that more than 80  
16 percent of all sites in coastal Santa Barbara have been destroyed by coastal  
17 development. Therefore, the assessment of potential cumulative impacts on cultural  
18 resources within the proposed Project area considers these past activities resulting in  
19 loss of archaeological sites, along with other probable future projects in the vicinity.

20 Cumulative projects included within Tables 3-1 and 3-2 would involve ground  
21 disturbances that would potentially impact cultural resources in other archaeologically  
22 sensitive areas.

23 In many cases, site redesign or use of fill could minimize potentially significant, adverse  
24 impacts. Total avoidance of cultural resources would not be reasonably expected,  
25 however, and increased human activity in the vicinity of cultural resources would lead to  
26 greater exposure, potential for unauthorized artifact collection and inadvertent  
27 disturbance during construction. Therefore, cumulative impacts to archaeological  
28 resources caused by past, present, and future probable projects in the undeveloped  
29 coastal areas in the vicinity of the EOF and the decommissioned PRC 421 facilities are  
30 considered significant. The city of Goleta and Santa Barbara County both have policy  
31 considerations and standard mitigations for addressing the potential for ground  
32 disturbances that impact cultural resources, including requirements for surveys in  
33 archaeologically sensitive areas, field investigations to precisely delineate site  
34 boundaries, significance assessments, and, when required to mitigate significant  
35 resources, data recovery programs. The implementation of **MM CUL-1/TCR-1**, **MM**

1 **CUL-2/TCR-2, MM CUL-3/TCR-3, MM CUL-4/TCR-4, and MM CUL-5/TCR-5** would  
 2 ensure that the incremental contribution of the Project to cumulative impacts would not  
 3 be considerable.

4 **4.4.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.4-1. Summary of Cultural Resources Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact CR-1:</b> Potential Impacts to Previously Undiscovered Cultural Resources During Implementation of Decommissioning (Component 1)	None Required.
<b>Impact CR-2:</b> Potential Impacts to Previously Undiscovered Cultural Resources During Implementation of Decommissioning (Component 2)	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains
<b>Impact CR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)	<b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)
<b>Impact CR-4:</b> Cumulative Impacts to Cultural Resources (Components 1 and 2)	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)

1 **4.5 CULTURAL RESOURCES – TRIBAL**

2 **4.5.1 Environmental Setting**

3 The Project site is located within the ethnographic territory of the Coastal Chumash  
4 people, who inhabited an area that extended from Morro Bay to Malibu along the coast  
5 (Kroeber 1925). The Chumash have been divided into several geographic groups, each  
6 associated with a distinct language dialect (Hoover 1986). The Chumash living in Santa  
7 Barbara County formed the *Barbareño* dialect group of the Chumash language family.  
8 This group was named for their association with *Mission Santa Barbara*, founded  
9 December 4, 1786. The *Barbareño* dialect was spoken throughout the Santa Barbara  
10 Channel region. At the time of Spanish contact in A.D. 1542, the *Barbareño* population  
11 was concentrated most heavily near the mouths of canyons. Major *Barbareño* Chumash  
12 villages include *sukuw* at Rincon Point, *misopsno* at Carpinteria Creek, *helo* at  
13 Mescalitan Island – Goleta Slough, *syuxtun* at Burton Mound, and *mikiw* and *kuyamu* at  
14 Dos Pueblos (Grant 1978).

15 Historically, the Chumash were a non-agrarian culture and relied on hunting and  
16 gathering for their sustenance. Archaeological evidence indicates that the Chumash  
17 exploited marine food resources from the earliest occupation of the coast at least 9,000  
18 years ago (Greenwood 1972, 1978). Much of their subsistence was derived from  
19 pelagic fish, particularly during the late summer and early fall (Hoover 1986). Shellfish  
20 were also exploited, including mussel and abalone from rocky shores and cockle and  
21 clams from sandy beaches. Acorns were a food staple; they were ground into flour  
22 using stone mortars and pestles and then leached to remove tannic acid. In addition, a  
23 wide variety of seeds, including *chia* from various species of sage, was utilized. The  
24 Chumash harvested several plants for their roots, tubers, or greens (Hoover 1986).

25 In this area, as elsewhere in California, basketry served many of the functions that  
26 pottery did in other places. The Chumash used baskets for cooking, serving, storage,  
27 and transporting burdens. Some basket makers wove baskets so tightly that they could  
28 hold water while others waterproofed their baskets by lining them with pitch or  
29 asphaltum (Chartkoff and Chartkoff 1984).

30 The coastal Chumash practiced a regular seasonal round of population dispersal and  
31 aggregation in response to the location and seasonal availability of different food  
32 resources (Landberg 1965). In this way, large coastal villages would have been fully  
33 populated only in the late summer when pelagic fishing was at its peak. Through winter,  
34 the Chumash depended largely on stored food resources. During the spring and  
35 summer, the population dispersed through inland valleys to harvest wild plant resources  
36 (Landberg 1965).

1 The Chumash lived in large, hemispherical houses constructed by planting willows or  
2 other poles in a circle and bending and tying them together at the top. These structures  
3 were then covered with tule mats or thatch. Structures such as this housed 40 to 50  
4 individuals, or three-to-four-member family groups. Dance houses and sweathouses are  
5 also reported for the Chumash (Kroeber 1925). Archaeological evidence supports  
6 observations that twin or split villages, such as those of *kuyamu* and *mikiw*, existed on  
7 opposite sides of streams or other natural features, possibly reflecting the moiety  
8 system of native California (Greenwood 1978).

9 Chumash political organization was typified by small-scale chiefdoms (Hoover 1986).  
10 Chiefs were associated with villages or segments of larger villages. Higher status chiefs  
11 controlled entire regions containing several villages. The chiefly offices were normally  
12 inherited through the male line with a primogeniture rule, i.e., the custom of the firstborn  
13 inheriting the office, in effect (Hoover 1986). Chiefs had several bureaucratic assistants  
14 to help in political affairs and serve as messengers, orators, and ceremonial assistants.  
15 Several status positions were associated with specialized knowledge and rituals such  
16 as weather prophet, ritual poisoner, herbalist, etc. (Bean 1974).

#### 17 4.5.1.1 Tribal Coordination

18 Pursuant to Executive Orders B-10-11 and N-15-19 affirming that state policy requires  
19 and expects coordination with tribal governments in public decision making (Appendix  
20 B), the CSLC follows its 2016 Tribal Consultation Policy, which provides guidance and  
21 consistency for staff in its interactions with California Native American Tribes (CSLC  
22 2016). The Tribal Consultation Policy, which was developed in collaboration with tribes,  
23 other state agencies and departments, and the Governor's Tribal Advisor, recognizes  
24 that tribes have a connection to areas that may be affected by CSLC actions and "that  
25 these Tribes and their members have unique and valuable knowledge and practices for  
26 conserving and using these resources sustainably" (CSLC 2016).

27 Additionally, under AB 52 (Gatto), Chapter 532, Statutes of 2014, lead agencies must  
28 avoid damaging effects on tribal cultural resources, when feasible, whether consultation  
29 occurred or is required. The CSLC contacted the Native American Heritage Commission  
30 (NAHC), which maintains two databases to assist specialists in identifying cultural  
31 resources of concern to California, the Native Americans Sacred Lands File and Native  
32 American Contacts. A request was sent to the NAHC for a sacred lands file search of  
33 the Project area and a list of Native American representatives who may be able to  
34 provide information about resources of concern located within or adjacent to the Project  
35 area.

36 On September 23, 2019, the NAHC provided a letter and a list of nine tribal contacts  
37 from the following six tribes:

- 38 • Barbareño/Ventureño Band of Mission Indians

- 1 • Coastal Band of the Chumash Nation
- 2 • San Luis Obispo County Chumash Council
- 3 • Northern Chumash Tribal Council
- 4 • Chumash Council of Bakersfield
- 5 • Santa Ynez Band of Chumash Indians

6 The NAHC's reply also stated that no records were identified in the Sacred Lands File  
7 record search for the Project site.

8 On July 7, 2021, CSLC staff provided CEQA notice of the Project to all tribes on the  
9 NAHC list. On August 20, 2021, CSLC received a request for consultation on the  
10 Project from the Santa Ynez Band of Chumash Indians. CSLC staff provided the  
11 Cultural Resources and Tribal Cultural Resources sections of the EIR and the  
12 archeological report (Appendix H) to the Santa Ynez Band of Chumash Indians  
13 representatives to obtain any input from the Tribe. Staff also met with the  
14 representatives on October 15, 2021, to provide a Project overview and go over the  
15 mitigation measures and answer any questions on the Project or analysis in the EIR.  
16 Based on the consultation, the representatives agreed that a monitor be on-site during  
17 ground disturbing activities as required under **MM CUL-1/TCR-1** and requested that site  
18 CA-SBA-71 be protected from looting or inadvertent damage via avoidance fencing or  
19 flagging (**MM CUL-5/TCR-5**). In addition, the representatives requested that the CSLC  
20 acknowledge Chumash cultural use in the four Marine Protected Areas (MPAs) offshore  
21 the Project area, the significance of the marine environment between the Northern  
22 Channel Islands and the shore as a Traditional Cultural Landscape, and the cultural  
23 sensitivity of Goleta Slough. The representatives requested the CSLC ensure Project-  
24 related activities do not restrict Chumash use of the MPAs or further degrade the Goleta  
25 Slough village site.

#### 26 **4.5.2 Regulatory Setting**

27 Federal and state laws and regulations pertaining to tribal cultural resources and  
28 relevant to the Project including California Coastal Act Chapter 3, Section 30244 are  
29 discussed in Appendix B and Section 4.10, *Land Use* (Table 4.10-1). See Section 4.4.2,  
30 *Regulatory Setting*, for a listing of local cultural resources policies.

#### 31 **4.5.3 Significance Criteria**

32 Public Resources Code section 21084.2 states, "A project with an effect that may cause  
33 a substantial adverse change in the significance of a Tribal cultural resource is a project  
34 that may have a significant effect on the environment." Lead agencies are directed to  
35 avoid damaging effects to Tribal cultural resources, when feasible. If measures are not  
36 otherwise identified in consultation with affected tribes to mitigate a substantial adverse

1 change to a Tribal cultural resource, the examples of measures provided in Public  
2 Resources Code section 21084.3 may be considered, if feasible.

3 An impact to Tribal cultural resources would be significant if the project would cause a  
4 substantial adverse change in the significance of a Tribal cultural resource, defined in  
5 Public Resources Code section 21074 as either a site, feature, place, cultural landscape  
6 that is geographically defined in terms of the size and scope of the landscape, sacred  
7 place, or object with cultural value to a California Native American Tribe, and that is:

- 8 • Listed or eligible for listing in the California Register of Historical Resources, or in  
9 a local register of historical resources as defined in Public Resources Code  
10 section 5020.1 subdivision (k); or
- 11 • A resource determined by the lead agency, in its discretion and supported by  
12 substantial evidence, to be significant pursuant to criteria set forth in Public  
13 Resources Code section 5024.1, subdivision (c). In applying the criteria set forth  
14 in Public Resources Code section 5024.1, subdivision (c), the lead agency shall  
15 consider the significance of the resource to a California Native American tribe.

16 In making a finding that a resource is a Tribal cultural resource, the CSLC may  
17 consider, among other evidence, elder testimony, oral history, tribal archival information,  
18 testimony of an archaeologist or other expert certified by the tribe, official declarations  
19 or resolutions adopted by the tribe, formal statements by the tribe's historic preservation  
20 officer, or other historical notes and anthropological records (OPR 2017).

#### 21 **4.5.4 Impact Analysis and Mitigation**

22 Impacts to Tribal cultural resources can occur by direct or indirect impacts. Direct  
23 impacts result from ground disturbances directly and indirectly caused by construction,  
24 decommissioning, operation, or maintenance. Indirect impacts result from increased  
25 access to archaeological sites, i.e., construction or facility employees participating in  
26 unauthorized artifact collecting. A discussion of potential impacts of each Project  
27 component and recommended MMs are provided below.

#### 28 Component 1

#### 29 **Impact TCR-1: Substantial Adverse Change to Previously Undiscovered Tribal** 30 **Cultural Resources During Project Implementation (Component 1)**

31 Although there is one known cultural resource *near* the Project site, no Tribal cultural  
32 resources are known to be present *within* the Project footprint, and Project activities  
33 would generally occur in previously disturbed areas and in areas where presence of  
34 cultural resources is not expected (**Less than Significant**).

1 **Impact Discussion**

2 The potential for a substantial adverse change to subsurface Tribal cultural resources  
3 during Component 1 is limited due to the fact that Project activities are anticipated to  
4 occur in previously disturbed soils and artificial fill. Previous reviews of cultural  
5 resources in the area to be affected by the Project have not identified significant Tribal  
6 cultural resources (Santa Barbara County 2001; City of Goleta 2006d; Santa Barbara  
7 County 2011). In addition, during consultation with the Santa Ynez Band of Chumash  
8 Indians, representatives did not flag any Tribal cultural resources within the Project  
9 footprint beyond the resources previously identified in the archeological report  
10 (Appendix H). The representatives did, however, state that the Tribe considers the  
11 marine environment between the Northern Channel Islands and the shoreline to be a  
12 Traditional Cultural Landscape/Property, and that cultural use of the four nearby MPAs  
13 is authorized – both of these areas/uses are considered, therefore, to be tribal cultural  
14 resources. In addition, the representatives stated that the Goleta Slough area is a pre-  
15 contact village area that the Tribe is working to rehabilitate; therefore, Goleta Slough is  
16 also a tribal cultural resource. The access roadway leading to the piers, the two  
17 pipelines, and the PRC 421 pier area consist of relatively loose beach sand that is  
18 prone to erosion and scour (i.e., the removal of sand due to wave action along the  
19 oceanfront, sometimes to shale bedrock). Due to the open exposure, the oceanfront is  
20 generally not considered suitable for occupation by precontact Indigenous peoples.  
21 Additionally, due to the movement of sand on a seasonal basis (i.e., sand is generally  
22 scoured off the beach during the winter months as a result of high surf activity but is  
23 generally deposited during the summer months of gentle surf), intact precontact cultural  
24 material is generally not found along the oceanfront. Implementation of Component 1,  
25 as described, would not affect or impact the integrity or use of the MPAs, marine  
26 Traditional Cultural Landscape, or the Goleta Slough. Therefore, there is no  
27 archaeological sensitivity within most of the Project site, and little to no potential for  
28 impacts.

29 **Mitigation Measures**

30 None required.

31 Component 2

32 **Impact TCR-2: Substantial Adverse Change to Previously Undiscovered Tribal**  
33 **Cultural Resources During Project Implementation (Component 2)**

34 Although no Tribal cultural resources are known to be present within the Project site  
35 and Project activities would generally occur in previously disturbed areas, excavations

1 may cause a substantial adverse change to previously undiscovered Tribal cultural  
2 resources in some areas (**Less than Significant with Mitigation**).

### 3 **Impact Discussion**

4 During Component 2, there is a potential that Project-related ground disturbance would  
5 exceed previous depths and affect heretofore undiscovered Tribal cultural resources,  
6 such as along the access roadway and pier abutment areas. Implementation of  
7 Component 2, as described, would not affect or impact the integrity or use of the MPAs,  
8 marine Traditional Cultural Landscape, or the Goleta Slough. Potential impacts to  
9 previously undiscovered Tribal Cultural Resources during Component 2 (pier abutment  
10 removal and access roadway removal) would be mitigated to less than significant with  
11 implementation of **MM CUL-1/TCR-1, MM CUL-2/TCR-2, MM CUL-3/TCR-3, and MM**  
12 **CUL-4/TCR-4**.

### 13 **Mitigation Measures**

14 **MM CUL-1/TCR-1: Cultural Resources Monitoring** (see Section 4.4.4, *Cultural*  
15 *Resources*)

16 **MM CUL-2/TCR-2: Cultural Resources Sensitivity Training** (see Section  
17 4.4.4, *Cultural Resources*)

18 **MM CUL-3/TCR-3: Discovery of Previously Unknown Cultural or Tribal**  
19 **Resources** (see Section 4.4.4, *Cultural Resources*)

20 **MM CUL-4/TCR-4: Unanticipated Discovery of Human Remains** (see Section  
21 4.4.4, *Cultural Resources*)

### 22 Components 1 and 2

#### 23 **Impact TCR-3: Potential for Damage to or Unauthorized Collection of CA-SBA-71** 24 **During Implementation of Decommissioning Components 1 and 2**

25 Use of the Bacara Resort Alternative Staging Area/Access Point, which is adjacent to  
26 CA-SBA-71, would result in short-term increase in access to archaeological artifacts  
27 associated with CA-SBA-71 and the potential for unauthorized collection (**Less than**  
28 **Significant with Mitigation**).

### 29 **Impact Discussion**

30 One previously recorded cultural resource, CA-SBA-71, is adjacent to the Alternative  
31 Staging Area/Access Point that is located entirely within the Bacara Resort fire road  
32 access. Although the Alternative Staging Area/Access Point is paved and contains no  
33 exposed ground surface, it is possible for personnel to encroach into the site boundaries

1 or inadvertently damage the site. Such damage or unauthorized collection of artifacts  
2 would contribute to the destruction of site integrity. Potential impacts to CA-SBA-71  
3 would be avoided through installation and maintenance of protective fencing or flagging  
4 (**MM CUL-5/TCR-5**), and appropriate training of field staff prior to Project  
5 implementation (**MM CUL-2/TCR-2**). The on-site environmental compliance monitor will  
6 ensure enforcement of these measures throughout decommissioning activities. No  
7 significant impact would result following mitigation.

## 8 **Mitigation Measures**

9 **MM CUL-2/TCR-2: Cultural Resources Sensitivity Training** (see Section 4.4.4,  
10 *Cultural Resources*)

11 **MM CUL-5/TCR-5: Cultural Resources Protective Fencing (CA-SBA-71)** (see  
12 Section 4.4.4, *Cultural Resources*)

## 13 **4.5.5 Cumulative Impacts Analysis**

### 14 Components 1 and 2

#### 15 **Impact TCR-4: Cumulative Impacts to Tribal Cultural Resources**

16 Project-related ground disturbance may incrementally contribute to cumulative impacts  
17 to cultural resources (**Less than Significant with Mitigation**).

18 Tribal cultural resources are non-renewable resources that have been destroyed at an  
19 alarming rate state-wide and locally. It has been estimated that more than 80 percent of  
20 all sites in coastal Santa Barbara have been destroyed by coastal development.  
21 Therefore, the assessment of potential cumulative impact on Tribal cultural resources  
22 within the proposed Project area considers these past activities resulting in loss of Tribal  
23 cultural resources, along with other probable future project in the vicinity.

24 Cumulative projects included in Tables 3-1 through 3-2 would involve ground  
25 disturbances that would potentially impact Tribal cultural resources in culturally sensitive  
26 areas.

27 In many cases, site redesign or use of fill could minimize potentially significant, adverse  
28 impacts. Total avoidance of Tribal cultural resources would not be reasonably expected,  
29 however, and increased human activity in the vicinity of Tribal cultural resources would  
30 lead to greater exposure, potential for unauthorized artifact collection, and inadvertent  
31 disturbance during construction. Therefore, cumulative impacts to Tribal cultural  
32 resources caused by past, present, and future probable projects in the undeveloped  
33 coastal areas in the vicinity of the EOF and the decommissioned PRC 421 facilities are  
34 considered significant. The city of Goleta and Santa Barbara County both have policy  
35 considerations and standard mitigations for addressing the potential for ground

1 disturbances that impact Tribal cultural resources, including requirements for surveys in  
 2 culturally sensitive areas, field investigations to precisely delineate site boundaries,  
 3 significance assessments and, when required to mitigate significant resources, data  
 4 recovery programs. The implementation of **MM CUL-1/TCR-1**, **MM CUL-2/TCR-2**, **MM**  
 5 **CUL-3/TCR-3**, **MM CUL-4/TCR-4**, and **MM CUL-5/TCR-5** would ensure that cumulative  
 6 impacts on Tribal cultural resources would be reduced to less than significant.

7 **4.5.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.5-1. Summary of Tribal Cultural Resources Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact TCR-1:</b> Substantial Adverse Change to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 1)	None required.
<b>Impact TCR-2:</b> Substantial Adverse Change to Previously Undiscovered Tribal Cultural Resources During Implementation of Decommissioning (Component 2)	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains
<b>Impact TCR-3:</b> Potential for Unauthorized Collection of CA-SBA-71 During Implementation of Decommissioning (Components 1 and 2)	<b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)
<b>Impact TCR-4:</b> Cumulative Impacts to Tribal Cultural Resources (Components 1 and 2)	<b>MM CUL-1/TCR-1:</b> Cultural Resources Monitoring <b>MM CUL-2/TCR-2:</b> Cultural Resources Sensitivity Training <b>MM CUL-3/TCR-3:</b> Discovery of Previously Unknown Cultural or Tribal Resources <b>MM CUL-4/TCR-4:</b> Unanticipated Discovery of Human Remains <b>MM CUL-5/TCR-5:</b> Cultural Resources Protective Fencing (CA-SBA-71)

1 **4.6 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES**

2 This section discusses potential geological issues that may be associated with the  
3 Project. It includes the potential for structural instability of Project facilities during  
4 decommissioning and instability of the coastal bluff after decommissioning that could  
5 occur from: (1) seismic hazards including wave and tidal forces, earthquakes, faulting,  
6 surface rupture, ground shaking, liquefaction, subsidence, and tsunamis; (2) coastal  
7 processes including erosion, scour, coastal bluff instability, and landslides; and (3) sea  
8 level rise. This section outlines the environmental setting, regulatory setting,  
9 significance criteria, the potential for impacts to the remaining facilities from various  
10 geological events, and the significance of these impacts. Section 8.1, *Climate Change*  
11 *and Sea level Rise*, also discusses sea level rise in greater detail (Section 8.1.2) and  
12 provides a coastal impact assessment (Section 8.1.3).

13 **4.6.1 Environmental Setting**

14 The Project area comprises the immediate onshore and nearshore areas of the Ellwood  
15 coast that would be subject to potential geologic and structural hazards during  
16 implementation of the Project. This area includes the existing PRC 421 piers and  
17 caissons, the access roadway and pipeline route along the coastal bluff and through the  
18 golf course easement back to the tie-in at the Ellwood Onshore Facility (EOF), and the  
19 rock revetment and wooden seawall located at the toe of the existing bluff along this  
20 stretch of coastline.

21 4.6.1.1 Physiography

22 The PRC 421 piers are located beneath a coastal bluff that rises approximately 80 feet  
23 above mean sea level (msl). The existing access roadway intersects the bluff near its  
24 base (approximately 20 feet above msl) to the northwest of the piers near the EOF and  
25 traverses the bluff nearly 20 feet above msl in the direction of the piers to the southeast.  
26 To the northeast, a north-south trending canyon is incised into the bluff where Bell  
27 Canyon Creek discharges into the ocean. Another small east-west trending gully exists  
28 along the bluff above the access roadway and piers north of 421-2. Accumulations of  
29 beach sand deposits exist at the base of the bluff in the surf zone (USGS 2007).

30 The local physiography consists of a wave-cut platform with an associated sea cliff. The  
31 cliff marks the locations of older marine terraces that have been uplifted, and the beach  
32 marks the modern wave-cut platform. Bell Canyon Creek and runoff along the sea cliff  
33 have created eroded gullies and modified fault scarps.

1 4.6.1.2 Stratigraphy

2 The geologic strata exposed onshore in the Project vicinity include (USGS 2009)  
3 (Figure 4.6-1):

- 4 • Quaternary Beach Sand (Qs) – Unconsolidated marine and wind transported  
5 beach sand. This unit is exposed along the beach in the surf zone.
- 6 • Quaternary Alluvium (Qa) – Undifferentiated alluvial, stream channel, and  
7 floodplain deposits composed of silty sands to sandy gravels. This unit is  
8 exposed along Bell Canyon Creek and an unnamed incision near the golf course.
- 9 • Quaternary Beach Deposits (Qb) – Holocene beach deposits. This unit is located  
10 along the coastline in the Project vicinity.
- 11 • Quaternary Marine Terrace Deposits (Qt and Qt3a) – Marine terrace deposits  
12 composed of medial to near-shore marine sands and wind transported silts. The  
13 typical thickness of these deposits is less than 100 feet (City of Goleta 2004) but  
14 can range in thickness up to 300 feet in some areas of the coast. There are also  
15 several ancient shorelines that trend generally east west across the Project area  
16 which are the result of tectonic uplift in the region.
- 17 • Tertiary Monterey Formation (Tm) – Undifferentiated diatomaceous, calcareous,  
18 and silicious shale with minor sandstone and volcanic ash deposits. This unit is  
19 exposed along the coastal bluff beneath units Qt and Qt3a. The formation  
20 averages approximately 1,000 feet in thickness and is permeated with tar at  
21 many locations. Where exposed, the Monterey Formation is usually white and  
22 stained with limonite, and the weaker portions are easily eroded by both marine  
23 and non-marine processes including wave action, wind erosion, and erosion due  
24 to rainfall (City of Goleta 2004). The stratigraphy of the offshore area along the  
25 continental shelf generally consists of the Sisquoc Formation shale deposits  
26 overlying the Monterey Formation.

27 In addition to the units exposed at the surface, another unit, the Tertiary Vaqueros  
28 Formation (Tvq), exists in the subsurface beneath the study area. This unit consists of  
29 sandstone with siltstone and shale interbeds and is located approximately 3,000 feet  
30 below the ground surface (City of Goleta 2004). This rock unit contains the oil and gas  
31 reservoir historically produced at the EOF in the Project area.

32 4.6.1.3 Soils and Soil-Related Hazards

33 The soils in the Project vicinity consist of Goleta Loam (exposed at EOF and Bell  
34 Canyon Creek), Milpitas-Positas Fine Sandy Loams (exposed at EOF and Sandpiper  
35 Golf Course), and Diablo Clay (exposed southeast of the golf course). The Diablo series  
36 soils are well-drained, formed in soft shale and mudstone, with slight to moderate  
37 erosion hazards. Goleta Loam is formed on broad floodplains and the hazard of erosion

1 is slight. Milpitas series soils consist of moderately well-drained soils on terraces formed  
2 in mixed alluvial deposits. Runoff can be rapid in the Milpitas soils, and the erosion  
3 hazard potential is high (U.S. Department of Agriculture [USDA] 1981).

4 Surface soils in the Project area are generally found at the top of the coastal bluff,  
5 formed in the alluvium derived from sedimentary rock. The soils are generally fine sandy  
6 loams over dense, very low, permeable clay subsoil. The depth to the clay subsoil is  
7 approximately 30 inches. According to a map of compressible soils, none of the soils  
8 within the Project study area are compressible (County of Santa Barbara 2015).  
9 However, the city of Goleta (2004) indicated that some of the soil types present at the  
10 Project area (Diablo and Milpitas) could have high expansion potential whereas Santa  
11 Barbara County has classified the Project area as having a low to moderate potential of  
12 having problems associated with expansive soils<sup>15</sup> (County of Santa Barbara 2015).  
13 Both classifications are based on the fact that smectites (a clay mineral group) are  
14 present in the Project study area soils. The origin, type, and stability of fill soils used to  
15 construct the Project access roadway along the toe of the bluff are unknown.

#### 16 4.6.1.4 Faulting and Seismicity

17 The Project area is located in the Western Transverse Ranges, a seismically active  
18 region of Southern California. The North Branch of the More Ranch Fault trends roughly  
19 east-west to northwest-southeast less than 0.25 mile southeast of the Project site  
20 (Figure 4.6-1). The Santa Barbara County General Plan Safety Element classifies  
21 the More Ranch Fault Zone as active, which the California Geological Survey (CGS),  
22 formerly the California Division of Mines and Geology (CDMG), defines as those along  
23 which movement has occurred within the last 11,000 years. However, the More Ranch  
24 Fault Zone has not been zoned as active by the State of California (USGS 2021) or  
25 through the creation of an Alquist-Priolo special studies zone (City of Goleta 2004).

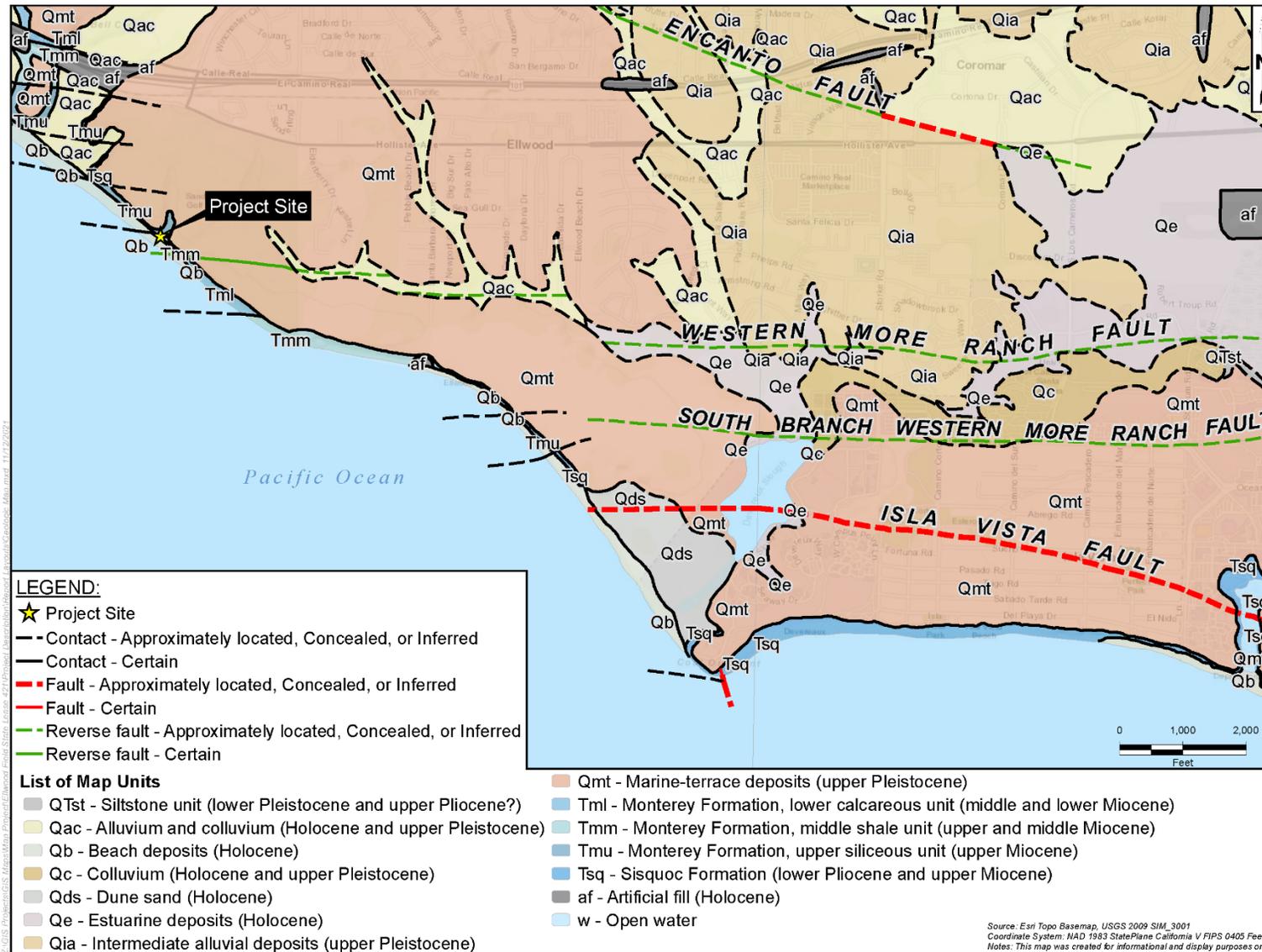
26 The reverse Lavigia Fault is also located beneath the Project area but is buried in  
27 the Project vicinity. This fault, in combination with the subsurface anticlinal structure, is  
28 believed to act as a trap for oil and gas in the Vaqueros Reservoir at depth and is  
29 classified as a potentially active fault (Keller and Gurrola 2000).

30 Movement along active and potentially active faults, either onshore or offshore near the  
31 Project area, including the San Andreas Fault, Santa Ynez/Santa Ynez River Fault  
32 Zone, More Ranch Fault Zone, Lavigia Fault, and several others could induce  
33 seismic shaking.

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<sup>15</sup> Expansive soils contain minerals such as smectite clays that are capable of absorbing water. When they absorb water, they increase in volume. The more water they absorb, the more their volume increases. Expansive soils will also shrink when they dry out. This shrinkage can remove support and result in damaging subsidence. Fissures in the soil can also develop (Geology.com 2021).

Figure 4.6-1. Geology of the Project Area



1 The Project location is classified in an area where shaking from earthquakes will occur 1  
2 to 2 times per century, and those events will exceed 20 percent of the force of gravity.  
3 At this level, significant damage to older buildings is expected to result (Southern  
4 California Earthquake Center [SCEC] 1995).

5 Additional geologic hazards associated with seismicity include surface rupture,  
6 liquefaction, subsidence, and tsunamis. These hazards are further discussed below.

#### 7 Surface Rupture and Other Types of Seismic Ground Failure

8 Surface ruptures comprise the displacement and cracking of the ground surface along a  
9 fault trace. Surface ruptures are visible instances of horizontal or vertical displacement,  
10 or a combination of the two, typically confined to a narrow zone along the fault.  
11 Developments near the More Ranch faults would have the most significant potential to  
12 be affected by surface rupture (City of Goleta 2004).

13 Differential settlement is a process whereby soils settle non-uniformly, potentially  
14 resulting in stress and damage to pipelines or other overlying structures. Such  
15 movement can occur in the absence of seismically induced ground failure, due to  
16 improper grading and soil compaction or discontinuity of naturally occurring soils;  
17 however, strong ground shaking often greatly exacerbates soil conditions already prone  
18 to differential settlement, resulting in distress to overlying structures. Elongated  
19 structures, such as pipelines, are especially prone to damage as a result of differential  
20 settlement.

21 Lateral spreading is a type of seismically induced ground failure that occurs when  
22 cracks and fissures form on an unsupported slope, resulting in lateral propagation and  
23 failure of slope material in a downslope direction. This type of failure is common in  
24 unconsolidated river or stream bank deposits, where lateral stream scour creates steep  
25 banks in unconsolidated silts and sands.

#### 26 Liquefaction

27 Liquefaction is a form of earthquake-induced ground failure that occurs primarily in  
28 relatively shallow, loose, granular, water-saturated soils. Liquefaction is defined as the  
29 transformation of a granular material from a solid state into a liquefied state as a  
30 consequence of increased pore pressure, which results in the loss of grain-to-  
31 grain contact. Unconsolidated silts, sands, and silty sands are most  
32 susceptible to liquefaction. While almost any saturated granular soil can develop  
33 increased pore water pressures when shaken, these excess pore water pressures can  
34 lead to liquefaction if the intensity and duration of earthquake shaking are great  
35 enough. During recent large earthquakes where liquefaction occurred, structures  
36 that appeared to be most vulnerable to liquefaction included buildings with

1 shallow foundations, railways, buried structures, retaining walls, port structures, utility  
2 poles, and towers.

3 Santa Barbara County identifies the Project study area as having moderate liquefaction  
4 hazard (County of Santa Barbara 2015). According to the city of Goleta, there is no  
5 historical evidence of structures being damaged by liquefaction in the city or  
6 adjacent unincorporated portions of Santa Barbara County (City of Goleta 2004).  
7 However, areas of beach sand could have a high liquefaction potential, due to  
8 unconsolidated sand layers below the water table at shallow depths. During ground  
9 shaking, loose saturated soils and beach sands can undergo liquefaction, and  
10 differential settlement of buildings and structures can occur. In addition, the types  
11 of soils used in construction of the Project access roadway are unknown. Portions  
12 of this access roadway appear to be saturated due to inflow from springs in the bluff  
13 which may increase the potential for liquefaction of these fill soils of unknown origin.

#### 14 Subsidence

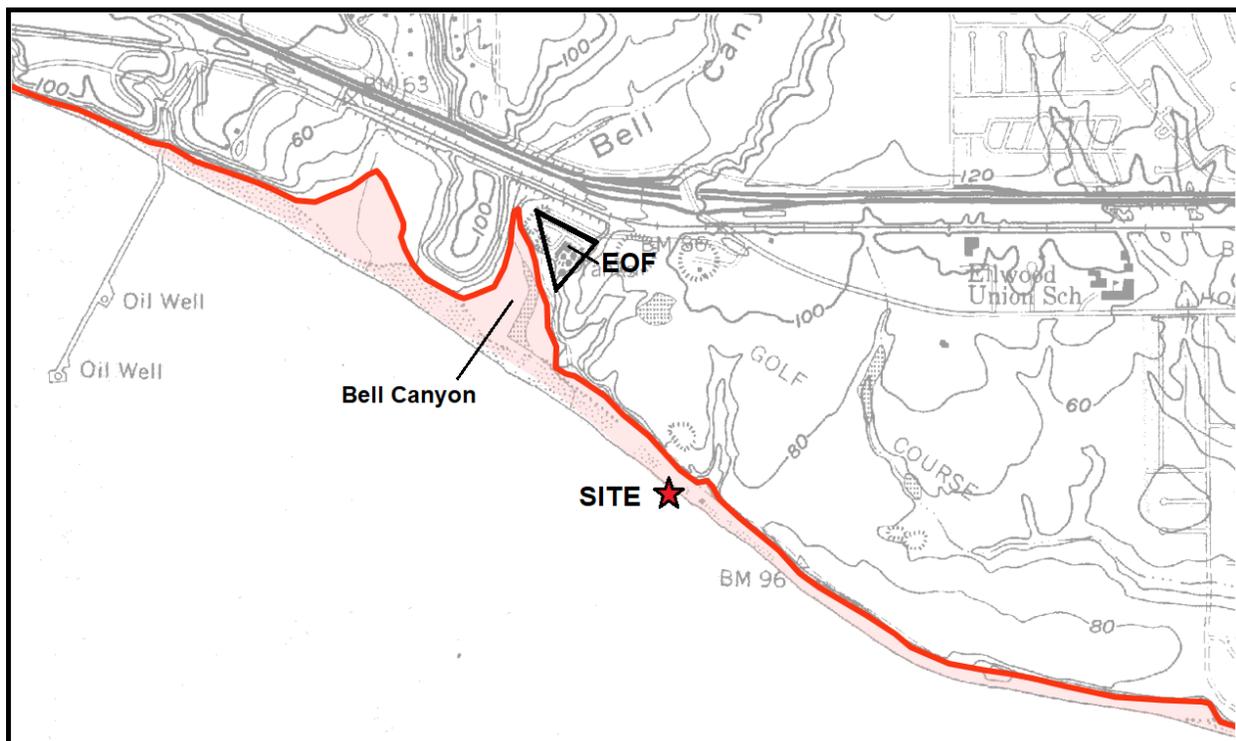
15 Subsidence is a type of ground failure, defined as settlement or compression of  
16 subsurface soils following the loss of interstitial materials such as water or gas.  
17 Subsidence can also result from wetting of collapsible soils, typically loose deposits  
18 of silt or sand. Subsidence can occur over a broad region or in localized areas and  
19 can occur gradually over time or as a sudden collapse. The loss of interstitial material  
20 can result from shaking of the soil mass during an earthquake, or it can result from  
21 other non-seismic factors such as the extraction of oil and gas reserves.  
22 Because the Vaqueros Reservoir is thought to naturally repressurize due to influx of  
23 groundwater into the reservoir rock, subsidence is not expected to occur in the study  
24 area as a result of the Project.

#### 25 Tsunamis

26 Tsunamis are large ocean waves generated by large-scale, short duration submarine  
27 earthquakes, volcanic activity, and submarine landslides. A seismic event on any  
28 moderate offshore fault could result in a tsunami in the Project vicinity. A major  
29 earthquake that occurred off the coast of Point Arguello in 1927 initiated a tsunami,  
30 which was recorded on tsunami gages as far away as Hawaii and reached heights of 6  
31 feet above msl along the coast. Another historical tsunami may have resulted from an  
32 1812 earthquake along a fault in the Santa Barbara Channel (Keller and Gurrola 2000).  
33 Tsunamis affecting the Project area can also be generated by distant earthquakes, such  
34 as the one that occurred in March 2011 in Japan. A significant tsunami in the area could  
35 generate waves as high as 40 feet above msl. Areas most susceptible to the effects of a  
36 tsunami would be along the oceanfront (Figure 4.6-2, California Emergency  
37 Management Agency 2009). The stream discharge area of Bell Canyon Creek and the  
38 beach area to the southeast of the Project site are designated as potential tsunami

- 1 runup areas (City of Goleta 2016). The runup area was calculated by the University of
- 2 Southern California using a tsunami model and potential earthquake sources. The
- 3 calculated runup area of Bell Canyon Creek includes the area adjacent to the western
- 4 boundary of the EOF and along the Project site shoreline (Figure 4.6-2).

**Figure 4.6-2. Tsunami Inundation Map for Project Area**



Source: California Emergency Management Agency (CEMA) 2009

#### 5 4.6.1.5 Coastal Processes

##### 6 Erosion and Scour

- 7 Erosion of exposed soils and rocks along the coastal bluff, and in gullies and creeks,
- 8 naturally occurs due to physical weathering and ongoing coastal processes. Active
- 9 erosion caused by water and wind action is evident along the sea cliff where outcrops
- 10 expose old filled channels and fault planes (Keller and Gurrola 2000). Scour can be
- 11 considered an aggressive form of water erosion where soil or sediment particles are
- 12 removed from gullies and creeks, and the sea cliff is exposed to wave action. Erosion
- 13 and scour, while ongoing and naturally occurring in a beach environment, can be
- 14 affected by human-induced changes including changes to topography, addition of
- 15 structures, roads, and artificial fill, or other disturbances to the existing natural setting. In
- 16 areas of increased erosion, deeper incision of gullies and creeks can occur, which
- 17 causes accumulation of sediments downstream where slopes are less steep, and
- 18 sediments can settle out of the water column. A net increase in removal of mass,

1 including soil, sediment (beach sand), and bedrock, can occur in areas of increased  
2 scour.

3 The Project is located within an active wave-cut platform along the coast of the Pacific  
4 Ocean. Historical wave-cut platforms and ancient shorelines exist at the top of the  
5 coastal bluff and are marked by emergent marine terraces. The sequence of marine  
6 terrace deposits records a geologic history of ongoing coastal erosion processes.  
7 Accumulation and removal of soil (or beach sand) are transient features, and in a wave-  
8 cut platform environment, there is an overall net removal of soil, rock, and beach sand.  
9 This area has been continually eroded and scoured through time as waves have cut into  
10 the existing soil and rock to form the wave-cut platform and coastal bluff. This process is  
11 expected to continue for the foreseeable future (on the order of thousands of years).

## 12 Beach Width and Sediment Transport

13 The southwest-facing shoreline of the beach in the Project area is subject to direct wave  
14 energy which causes off-shore migration of sediments. Sediment removal is greatest in  
15 the winter when wave action increases in response to tidal variation (see Section 4.9,  
16 *Hydrology and Water Quality*). Beach width ranges from approximately 115 feet to 300  
17 feet and is subject to seasonal variation and long-term weather patterns including El  
18 Niño and the Pacific Decadal Oscillation. A 65 year study of beach width (1938 to 2003)  
19 in the Project area found that beach width was the lowest during 1983 and 1998,  
20 following El Niño events (USGS 2009). The maximum beach width was observed in  
21 2001 and 2003. The seasonal change in beach width also exposes the pier structures  
22 and tops of the caissons to greater level of wave action during winter months.

23 According to the Coastal Impact Assessment prepared on behalf of the Project by NV5  
24 (Appendix I) the PRC 421 caissons may act as short sand-retention structures during  
25 high tides that prevent sand from moving southeast (down-current). However, because  
26 of the limited width (30 to 40 feet) of the caissons and the relative high sand levels  
27 onsite, this retention effect is expected to be minor. Additionally, a more recent  
28 assessment of beach conditions in intermittent summer and fall seasons from 1994 to  
29 2019 did not indicate any noticeable beach accretion or erosion trend. The beach and  
30 shoreline near PRC 421 were noted as relatively stable without a significant long-term  
31 retreat or advance trend (NV5 2021).

## 32 Historic Repairs at PRC 421 Due to Erosion/Weathering

33 Historically, Venoco made multiple repairs to PRC 421 structures, including to the  
34 existing access roadway between the two PRC 421 piers. In 2001, CCC issued  
35 Emergency Permit E-01-027-G, which included emergency repairs on the access road  
36 including: grading the road, adding 520 tons of float rock as a base layer where needed,  
37 adding 662 tons of gravel as road base, and placing approximately 645 tons of riprap  
38 within the gaps of the existing beachside rock revetment at the base of the road. The

1 purpose of these repairs was to provide safe passage for heavy equipment to the 421  
2 piers to repair a leak at one of the PRC 421 wells.

3 In September 2010, CSLC inspectors noted that significant new damage to Pier 421-2  
4 had occurred during the previous year, and the lower portion of the original caisson wall  
5 at the southwest corner was fully exposed to storms and ocean waves. Emergency  
6 permits for repair of the caisson wall were issued by the city of Goleta (10-120-EMP),  
7 California Coastal Commission (CCC) (E-10-013-G), and U.S. Army Corps of Engineers  
8 (USACE) (2010-959-JWM), and repairs were completed in July 2011.

9 In 2019, pursuant to emergency Coastal Development Permit (CDP) G-9-19-0009  
10 Venoco placed 200 tons of rock at eight sites within the rip-rap seawall where rock had  
11 been displaced because of unexpected and significant storm-induced scouring of the  
12 beach. These repairs were conducted to support transport of a drill rig and associated  
13 equipment necessary to plug wells 421-1 and 421-2. The repairs also consisted of  
14 brush clearance, placement of gravel and subdrains, and replacement of some rock to  
15 shore up the shore facing revetment.

#### 16 Coastal Bluff Instability, Slope Failure, and Landslides

17 Because the Project study area includes a coastal bluff, the potential exists for slope  
18 failure and landslides to occur during Project implementation. The stability of slopes is  
19 affected by a number of factors including gravity, rock and soil type, geologic structure,  
20 amount of water present, coastal processes, and amount of vegetation present. The  
21 Santa Barbara County Seismic and Safety Element (2015) and the city of Goleta  
22 General Plan/Coastal Land Use Plan (GP/CLUP) Safety Element (2006g) have  
23 classified the Project area as having a high potential for slope instability.

24 Failure of the earthen bank below the access roadway during the winter of 2000/2001  
25 exposed previously buried pipelines. During the road repair project, some of the  
26 pipelines were removed and the bank failure areas were backfilled. In addition, a French  
27 drain and wooden dam were installed to divert water flow around the perimeter of the  
28 Pier 421-2 approach area and to relieve hydraulic pressure on the access roadway. The  
29 diverted water is directed onto the beach, which helps prevent erosion of the earthen  
30 bank.

#### 31 Bluff Retreat

32 As noted above, soils formed on the terraces at the top of the bluff and along Bell  
33 Canyon Creek have the potential to erode.

34 As indicated within the city of Goleta General Plan, Safety Element (2006g), shoreline  
35 change studies have documented average, long-term rates of sea cliff (bluff) retreat of

1 0.45 to 0.62 foot per year for the Ellwood Mesa area, and rates of 0.3 to 1.3 feet per  
2 year for the cliffs along Isla Vista to the east of Goleta's coastline.

3 This data is supported within the Project area as summarized within a site-specific Bluff  
4 Retreat Study conducted by Padre Associates on behalf of the Project (Appendix G). As  
5 noted within the study, based on a review of several points at both the toe and the crest  
6 of the bluffs in the Project vicinity (comparing historical aerials, Light Detection and  
7 Ranging (LiDAR) data, and oblique historical aerials), the estimated retreat rates ranged  
8 from 10 to 63 centimeters per year (0.32 to 2.06 feet per year) at the bluff crest.  
9 Estimated retreat rates along the toe of the bluff range from 7 to 61 centimeters per year  
10 (0.2 to 2.00 feet per year) where the toe is not armored by rock revetment, and 0  
11 centimeters per year (0 feet per year) where the toe of the coastal bluff is armored by  
12 rock revetment (Padre 2021). Retreat rates in the Project site specifically were  
13 estimated to range from 10 to 22 centimeters per year (0.33 to 0.72 foot per year) at the  
14 bluff crest (excluding higher value areas directly influenced by existing landslide or  
15 wetlands). The estimated retreat rate in the Project area at the toe of the bluff is zero  
16 centimeters per year due to the existing rock revetment and wooden seawall  
17 armaments (Appendix G – Plate 5).

#### 18 4.6.1.6 Paleontological Resources

19 The Project area is situated on Pleistocene older alluvium deposits, consisting primarily  
20 of relatively unconsolidated silt, sand, and gravel. These alluvial deposits overlie the  
21 Miocene Sisquoc Formation, which is exposed in the coastal bluff northwest of the  
22 Project area and consists of silty, diatomaceous, clay shale (USGS 2009).

23 Paleontological resources are commonly found in sedimentary rock units. The  
24 boundaries of sedimentary rock units generally define the limits of paleontological  
25 sensitivity in a given region. Paleontological sites are normally discovered in cliffs,  
26 ledges, steep gullies, or along wave-cut terraces where vertical rock sections are  
27 exposed. Fossil material may also be exposed by a trench, ditch, or channel created by  
28 construction.

29 Paleontologists examine invertebrate fossil sites differently than vertebrate fossil sites.  
30 Invertebrate fossils in microscopic form such as diatoms, foraminifera, and radiolarians  
31 can be so prolific as to constitute major rock material in some areas. Invertebrate fossils  
32 are normally of marine origin and are widespread, abundant, fairly well preserved, and  
33 predictable as to fossil sites. Therefore, the same or similar fossils can be located at any  
34 number of sites throughout central California.

35 Vertebrate fossil sites are usually found in non-marine or continental deposits.  
36 Vertebrate fossils of continental material are usually rare, sporadic, and localized.  
37 Scattered vertebrate remains (mammoth, mastodon, horse, ground sloth, camel, and  
38 rodents) have been identified from the Pleistocene non-marine continental terrace

1 deposits on Vandenberg Space Force Base (formerly Vandenberg Air Force Base,  
2 located approximately 50 miles northwest of the Project site, USAF 2011), but these  
3 resources would not be expected in the Project area.

4 The invertebrate fossils that would be expected to exist within Project site geologic rock  
5 units are widespread and abundant in many areas throughout the Pacific Coastline  
6 including Santa Barbara County. The overwhelming bulk of invertebrate fossil material  
7 in these rocks is due to the deposition of sediment in marine basins. Very seldom are  
8 vertebrate marine fossils such as whale, porpoise, seal, or sea lion found in marine rock  
9 units such as the Miocene Monterey Formation and the Pliocene Sisquoc Formations  
10 located within the PRC 421 Project area and vicinity. Therefore, the sensitivity for  
11 encountering important paleontological resources within the PRC 421 Project area and  
12 vicinity is considered low (CSLC 2014).

### 13 **4.6.2 Regulatory Setting**

14 Federal and state laws, regulations, and policies that pertain to the Project including  
15 California Coastal Act Chapter 3, Section 30253 are discussed in Appendix B and  
16 Section 4.10, *Land Use* (Table 4.10-1) Local laws, regulations, and policies are  
17 summarized below.

#### 18 4.6.2.1 City of Goleta

19 Development in the city is subject to and must conform with the city's GP/CLUP and  
20 unified zoning code, both of which include regulations applicable to inland and coastal  
21 areas, and all applicable permits with the city for decommissioning of Project  
22 components would need to be obtained. Relevant policies pertaining to Geology, Soils,  
23 and Paleontological Resources are included below.

- 24 • **Policy SE 1.3: Site-Specific Hazards Studies.** Applications for new  
25 development shall consider exposure of the new development to coastal and  
26 other hazards. Where appropriate, an application for new development shall  
27 include a geologic/soils/geotechnical study and any other studies that identify  
28 geologic hazards affecting the proposed Project site and any necessary  
29 mitigation measures. The study report shall contain a statement certifying that  
30 the Project site is suitable for the proposed development and that the  
31 development will be safe from geologic hazards. The report shall be prepared  
32 and signed by a licensed certified engineering geologist or geotechnical engineer  
33 and shall be subject to review and acceptance by the City.
- 34 • **Policy SE 2.3: Prohibition of Shoreline Armoring for Bluff-Top**  
35 **Development.** The installation of coastal armoring to protect bluff-top  
36 development constructed after the effective date of Public Resources Code  
37 section 30235 shall be prohibited. Such prohibited armoring includes but is not  
38 limited to seawalls, revetments, and riprap. Should existing bluff-top buildings be

1 threatened by coastal bluff retreat, threatened structures shall be relocated or  
2 removed.

- 3 • **Policy SE 2.6: Prohibition of Structures on Bluff Faces.** No permanent  
4 structures shall be permitted on a bluff face, except for engineered public beach  
5 accessways. Such structures shall be designed and constructed to prevent any  
6 further erosion of the bluff face and to be visually compatible with the surrounding  
7 area.
- 8 • **Policy SE 3.1: Permanent Structures.** New permanent structures shall be  
9 prohibited seaward of the top of the coastal bluff. The exceptions to this  
10 prohibition include: 1) wooden stairs and other lightly constructed structures that  
11 provide public beach access, and 2) improvements necessary to provide access  
12 to the beach for emergency responders, if such access is appropriate and no  
13 other methods of access are feasible.
- 14 • **Policy SE 3.4: Installation of New Coastal Armoring.** Pursuant to Public  
15 Resources Code section 30235, revetments, breakwaters, groins, harbor  
16 channels, seawalls, cliff retaining walls, and other such construction that alters  
17 natural shoreline processes shall only be permitted when required to serve  
18 coastal-dependent uses or to protect structures existing as of the effective date  
19 of Public Resources Code section 30235 or public beaches in danger from  
20 erosion and when designed to eliminate or mitigate adverse impacts on local  
21 shoreline sand supply. In particular, the goals of mitigation shall include, but not  
22 be limited to, maintaining beach widths fronting and adjacent to coastal armoring  
23 structures and maintaining safe lateral beach access.
- 24 • **Policy SE 3.6: Repair and Maintenance of Coastal Armoring.** Repair and  
25 maintenance of existing or legally permitted coastal armoring may be permitted  
26 only if the repair and maintenance activities do not result in an enlargement or  
27 extension of armoring, and where an engineering or geological study  
28 demonstrates that in the absence of such repair and maintenance, the structure  
29 protected by the armoring would be subject to damage from identified coastal  
30 hazards. "Existing" as used in this policy shall mean existing as of the effective  
31 date of Public Resources Code section 30235. Repair and maintenance activities  
32 shall not result in a seaward encroachment of the coastal armoring.
- 33 • **Policy SE 3.8: Removal of Derelict Coastal Armoring Structures.** The City  
34 shall support the removal of derelict coastal armoring structures. Derelict coastal  
35 armoring is defined as armoring that was constructed to protect any structure that  
36 has been demolished or removed or armoring that has fallen into disrepair or  
37 presents a nuisance or safety hazard. Portions of the steel-reinforced wooden  
38 seawall along the eastern frontage of the Sandpiper Golf Course (east of the  
39 shoreline oil piers of State Lease 421) should be removed as such portions are  
40 exposed seaward of the toe of the bluff. The placement of additional backfill to

1 shore up this structure shall be prohibited, and natural shoreline processes shall  
2 be allowed to resume. This requirement does not apply to the rock revetment that  
3 protects the access roadway to the State Lease 421 piers, unless and until these  
4 wells are properly abandoned and the pier structures are removed.

- 5 • **Policy SE 3.9: Removal of Beach Hazards.** The City supports existing and new  
6 efforts to identify and properly remove remnant piers, bulkheads, derelict oil well  
7 materials, and other beach hazards. The City encourages implementation of the  
8 State Lands Commission’s Beach Hazards Removal Project, which was  
9 approved by the State Lands Commission in May 2002, but not implemented due  
10 to state budget limitations.

- 11 • **Policy SE 3.10: Complete and Prompt Abandonment of Shoreline**  
12 **Structures.** Upon decommissioning of the two shoreline oil wells (State Lease  
13 421 wells), the complete demolition and removal of all associated structures shall  
14 be required. The timeframe for complete demolition shall be within 3 years of the  
15 ceasing of production operations in accordance with LU 10.4. Associated  
16 structures include but are not limited to the caisson walls, the piers, the  
17 revetment, and any inactive pipelines within 100 feet of the top of the revetment.  
18 Abandonment in place for inactive pipelines associated with State Lease 421  
19 production shall not be permitted, as subsequent coastal erosion could expose  
20 these structures. Pier supports and pilings shall be cut below the surface as far  
21 as possible, and ideally down to bedrock to prevent subsequent exposure by  
22 winter beach scour.

- 23 • **Policy SE 5.1: Evaluation of Slope-Related Hazards.** The City shall require  
24 geotechnical/geological, soil, and structural engineering studies for all  
25 development proposed in areas of known high and moderate landslide potential  
26 or on slopes equaling or exceeding 25 percent. The studies shall evaluate the  
27 potential for landslides, rockfalls, creep, and other mass movement processes  
28 that could impact the development; they shall also identify mitigation to reduce  
29 these potential impacts, if needed. The studies shall be included as part of an  
30 application for development.

- 31 • **Policy SE 5.4: Avoidance of Soil-Related Hazards.** For the proposed  
32 development of any critical facilities in areas subject to soil-related hazards, as  
33 well as for noncritical facilities in areas subject to soil-related hazards, the City  
34 shall require site-specific geotechnical, soil, and/or structural engineering studies  
35 to assess the degree of hazard on the proposed site and recommend any  
36 appropriate site design modifications or considerations as well as any other  
37 mitigation measures. The City shall not approve development in areas subject to  
38 soil-related hazards, unless mitigation measures are identified and committed to  
39 that would reduce hazards to an acceptable level.

- 1       • **Policy SE 5.5: Minimization of Grading in Hazardous Areas.** All construction  
2       proposed for areas with steep (equal to or greater than 25 percent) slopes or  
3       subject to soil and slope-related hazards shall minimize the area to be graded  
4       and shall also minimize the area of vegetation removal or disturbance.

#### 5   **4.6.3     Significance Criteria**

6   Impacts are considered significant if any of the following conditions apply:

- 7       • Ground motion due to a seismic event that could include surface rupture,  
8       liquefaction, subsidence, landslides or tsunami and damage to structural  
9       components
- 10      • Substantial soil erosion or the loss of topsoil
- 11      • Unstable soils which result from Project implementation and cause landslide,  
12      slope failure, lateral spreading, subsidence, liquefaction, or collapse
- 13      • Damage of structural components as a result of soil expansion
- 14      • Soil settling that could damage structural components of the remaining structures
- 15      • Deterioration of structural components due to weathering, fatigue, or erosion that  
16      could reduce structural stability
- 17      • Erosion-induced siltation of nearby waterways as a result of ground disturbing  
18      activities
- 19      • Result in an adverse impact to a unique paleontological resource

#### 20 **4.6.4     Impact Analysis and Mitigation**

21   The Project was evaluated to identify potential geologic hazards that could result in  
22   impacts to people or structures due to Project implementation. A qualitative  
23   evaluation of potential impacts was conducted based on the site-specific  
24   information described in Section 4.6.1, *Environmental Setting*. Additionally, a Project-  
25   specific Coastal Impact Analysis (NV5 2021, Appendix I) and Bluff Retreat Evaluation  
26   Report (Padre 2021, Appendix G) were prepared to support this analysis.

27   Project-triggered geologic hazards would be confined primarily to the Project site and  
28   would be associated with seismic hazards including slope failure and landslides, and  
29   coastal-process-related hazards including erosion and coastal bluff instability resulting  
30   from the proposed decommissioning activities as further discussed below.

31   As discussed above, there is a low potential for paleontological resources to be present  
32   onsite, and Project activities would primarily occur in previously disturbed soils;  
33   therefore, no significant impacts to paleontological resources are anticipated.

1 Component 1

2 **Impact GEO-1: Littoral Transport and Beach Width (Component 1)**

3 Project activities have the potential to affect localized sand availability, beach width and  
4 sediment (sand) transport (**Less than Significant**).

5 **Impact Discussion**

6 As indicated within the coastal impact assessment (NV5 2021, Appendix I), based on a  
7 comparison of historical aerial photography, the PRC 421 caissons have shown to  
8 provide a significant wave sheltering effect to the local area. The wave height and  
9 resulting wave energy behind the caissons are much lower than other beach areas  
10 without sheltering provided by the caissons. Further, the PRC 421 caissons may act as  
11 sand-retention structures during high tides that help prevent sand from moving  
12 southeast in the beach area and thus help retain more sand to the northwest (up-  
13 current). However, because of the limited width (30 to 40 feet) of the caissons and the  
14 relatively high sand level, the effects on longshore currents, longshore sediment  
15 transport, or long-term beach and shoreline evolution trends are minor. Therefore,  
16 removal of these structures during Component 1 is anticipated to have a negligible  
17 impact on the long-term shoreline evolution and beach width at adjacent beaches. If  
18 there is any impact, the impact would be limited to the local areas behind the caissons  
19 and the impact is considered less than significant.

20 **Mitigation Measures**

21 None required.

22 **Impact GEO-2: Weathering and Erosion/Bluff Retreat (Component 1)**

23 Removal of the two PRC 421 caissons and piers could increase bluff retreat due to  
24 weathering and erosion/beach scour (**Less than Significant**).

25 **Impact Discussion**

26 The NV5 report (Appendix I) indicates that the PRC 421 caissons have provided erosion  
27 protection for the beach and shoreline behind the caissons (see Figure 2-9) during the  
28 stormy winter months. Removal of the two caissons and piers would expose the shore  
29 behind the caissons to increased wave energy and associated erosion, in areas that are  
30 not protected by rock revetment, seawalls, or to a lesser degree, the remaining pier  
31 abutments. The storm-induced erosion may substantially lower the sand level or even  
32 completely remove beach sands in front of the access roadway. This would cause  
33 focused erosion at the roadway shoreline face at the two unprotected areas created by  
34 removal of the caissons and piers. As observed in adjacent areas along the bluffs that  
35 have already experienced wooden seawall failure in some segments but not the entirety

1 of the structure, wave action in these gaps has been noted to exacerbate erosion by  
2 enabling waves to eddy behind the remaining structure. This focused erosion may  
3 cause the access roadway shoreline face to fail as was observed during the winter of  
4 2000/2001 when the pipelines were exposed.

5 However, although removal of the caissons and piers will result in an increase in coastal  
6 erosion, removal of these structures would partially return the Project area to its natural  
7 condition. Erosion of the bluffs is occurring in unarmored sections adjacent to the east  
8 and west of the Project area. This increased erosion may also contribute to sand  
9 replenishment in the Project area and downcoast. Although Component 1 would result  
10 in an increase in erosion of the bluffs behind the pier and caisson structures, erosion is  
11 a natural process that is already occurring within the Project area. Therefore geologic  
12 impacts resulting from Component 1 are less than significant.

### 13 **Mitigation Measures**

14 None required.

### 15 Component 2

#### 16 **Impact GEO-3: Littoral Transport and Beach Width (Component 2)**

17 Project activities would have the potential to affect localized sand availability, beach  
18 width, and sediment (sand) transport (**Less than Significant**).

### 19 **Impact Discussion**

20 Component 2 would include removal of the existing rock revetment and wooden seawall  
21 structures. These structures are not wide enough to act as groins and do not currently  
22 affect the existing beach profile, sediment transport, or beach width. A less than  
23 significant impact would result from Component 2.

### 24 **Mitigation Measures**

25 None required.

#### 26 **Impact GEO-4: Weathering and Erosion/Bluff Retreat (Component 2)**

27 Removal of the access roadway, two pipelines, rock revetment, and wooden seawall  
28 could increase bluff retreat due to weathering and erosion/beach scour (**Less than**  
29 **Significant**).

### 30 **Impact Discussion**

31 As summarized above (Section 4.6.1.5, *Coastal Processes*), and shown in Figure 4.6-3,  
32 estimated retreat rates in the Project site area range from 10 to 22 centimeters per year

1 (0.33 to 0.72 foot per year) at the bluff crest (excluding higher value areas directly  
2 influenced by existing landslide or wetlands). The estimated retreat rate in the Project  
3 area at the toe of the bluff is 0 centimeters per year due to the existing rock revetment  
4 and wooden seawall armaments. After removal of the pipelines, access roadway, rock  
5 revetment, and wooden seawall associated with Component 2, the remnants of the  
6 access roadway will consist of earthen material sloped from the bluff face. It is expected  
7 that, due to direct wave action and coastal erosion, this un-armored material will wash  
8 away, exposing the bluff toe behind the former access roadway to those same forces.  
9 Storm-induced erosion would evolve from the beach to the bluff toe, eventually leading  
10 to bluff retreat which is currently prevented by the existing rock revetment and seawall.  
11 Following Project implementation of Component 2, it is likely that the coastal bluff would  
12 begin to retreat at rates similar to those calculated at the western end of the Study Area  
13 in the vicinity of the Bacara Resort where the coastal bluff is not armored (Padre 2021).

**Figure 4.6-3. Bluff Retreat Rates in the Project Area (centimeters per year)  
(Excerpt from Plate 5 of Appendix G)**



Notes: Red box includes Project site; Yellow area includes bluff retreat study area

14 Issues Related to Sea Level Rise. Given the existing bluff retreat rates and exacerbated  
15 conditions that would result following the decommissioning of Component 2 facilities  
16 (including removal of the existing rock revetment and wooden seawall), the Project-  
17 triggered geologic hazards discussed above including erosion and bluff retreat may be  
18 further exacerbated as a result of anticipated sea level rise. Specifically, as discussed in  
19 Section 8.1, sea levels have risen between 4 and 10 inches during the past century and

1 are projected to be affected by climate change in the future. California’s Fourth Climate  
 2 Change Assessment estimates sea level rise in Santa Barbara County as 1.7 inches  
 3 between 1973 and 2016 (average 1.01 millimeter per year). Higher water levels result in  
 4 greater wave energy reaching higher on the shoreline and directly onto the coastal bluff.  
 5 According to the best available models, a 4.6 foot increase in sea level by 2100 would  
 6 cause the coastline of Santa Barbara County to recede by an average of 178 feet  
 7 (California Climate Change Center 2009). Sea level rise of these higher magnitudes  
 8 would affect the remaining cliff face because the loss of beaches would likely result in  
 9 greater wave force on the road and bluff area resulting in increased weathering and  
 10 erosion of the bluff.

11 Although removal of the pipelines, pier abutments, access roadway, rock revetment,  
 12 and wooden seawall associated with Component 2 will result in an increase in coastal  
 13 erosion, removal of these structures would complete the return of the Project area along  
 14 this stretch of coastline back to its natural condition. Erosion of the bluffs is already  
 15 occurring in unarmored sections adjacent to the east and west of the Project area and is  
 16 a natural process. This increased erosion may also contribute to sand replenishment in  
 17 the Project area and downcoast. Therefore, geologic impacts resulting from Component  
 18 2 are less than significant.

19 **Mitigation Measures**

20 None required.

21 **4.6.5 Cumulative Impacts Analysis**

22 The proposed Project would have the potential to result in significant and unavoidable  
 23 geologic impacts relating to soil stability and erosion resulting from loss of the existing  
 24 armament along the bluffs. The Bacara Beach House Relocation Project located  
 25 adjacent to the Bacara Resort fire road access has been proposed in response to soil  
 26 instability and erosion that has impacted the existing beach house structure in this  
 27 location. Demolition of the existing structure and emergency retaining wall and  
 28 relocation of the beach house structure to an upland location is intended to improve this  
 29 condition locally. Since no other project would result in geologic impacts affecting the  
 30 Project area, a cumulative impact would not result.

31 **4.6.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.6-1. Summary of Geology, Soils, and Paleontology Impacts and Mitigation Measures**

Impact	Mitigation Measures
Impact GEO-1: Littoral Transport and Beach Width (Component 1)	None required.

Impact	Mitigation Measures
<b>Impact GEO-2:</b> Weathering and Erosion/Bluff Retreat (Component 1)	None required.
<b>Impact GEO-3:</b> Littoral Transport and Beach Width (Component 2)	None required.
<b>Impact GEO-4:</b> Weathering and Erosion/Bluff Retreat (Component 2)	None required.

## 1 4.7 GREENHOUSE GAS EMISSIONS

### 2 4.7.1 Environmental Setting

3 Climate change, often referred to as “global warming,” is a global environmental issue  
4 that refers to any significant change in measures of climate, including temperature,  
5 precipitation, or wind. Climate change refers to variations from baseline conditions that  
6 extend for a period (decades or longer) of time and is a result of both natural factors,  
7 such as volcanic eruptions, and anthropogenic factors, based on human-activity,  
8 including changes in land-use and burning of fossil fuels. Anthropogenic activities such  
9 as deforestation and fossil fuel combustion emit heat-trapping greenhouse gases  
10 (GHG), defined as any gas that absorbs infrared radiation within the atmosphere.

11 According to data from the National Oceanic and Atmospheric Administration, the 2019  
12 average temperature across global land and ocean surfaces was 1.71 degrees  
13 Fahrenheit above the twentieth-century average of 57.0°F, making it the second-  
14 warmest year on record. The global annual temperature has increased at an average  
15 rate of 0.13 degrees Fahrenheit per decade since 1880 and over twice that rate (0.32  
16 degrees Fahrenheit) since 1981. From 1900 to 1980 a new temperature record was set  
17 on average every 13.5 years; and since 1981 the average period between temperature  
18 records has decreased to every 3 years.

19 GHG emissions are a global issue, as climate change is not a localized phenomenon.  
20 Eight recognized GHGs are described below. The first six are commonly analyzed for  
21 projects, while the last two are often excluded for reasons described below.

- 22 • Carbon Dioxide (CO<sub>2</sub>): natural sources include decomposition of dead organic  
23 matter; respiration of bacteria, plants, animals, and fungus; evaporation from  
24 oceans; and volcanic degassing; anthropogenic sources of CO<sub>2</sub> include burning  
25 fuels such as coal, oil, natural gas, and wood.
- 26 • Methane (CH<sub>4</sub>): natural sources include wetlands, permafrost, oceans, and  
27 wildfires; anthropogenic sources include fossil fuel production, rice cultivation,  
28 biomass burning, animal husbandry (fermentation during manure management),  
29 and landfills.
- 30 • Nitrous Oxide (N<sub>2</sub>O): natural sources include microbial processes in soil and  
31 water, including those reactions which occur in nitrogen-rich fertilizers;  
32 anthropogenic sources include industrial processes, fuel combustion, aerosol  
33 spray propellant, and use of racing fuels.
- 34 • Chlorofluorocarbons (CFCs): no natural sources; synthesized for use as  
35 refrigerants, aerosol propellants, and cleaning solvents.

- 1 • Hydrofluorocarbons (HFCs): no natural sources; synthesized for use in  
2 refrigeration, air conditioning, foam blowing, aerosols, and fire extinguishing
- 3 • Sulfur Hexafluoride (SF<sub>6</sub>): no natural sources; synthesized for use as an  
4 electrical insulator in high voltage equipment that transmits and distributes  
5 electricity. SF<sub>6</sub> has a long lifespan and high global warming potential.
- 6 • Ozone: unlike the other GHGs, ozone in the troposphere is relatively short-lived  
7 and, therefore, is not global in nature. Due to the nature of ozone, and because  
8 this Project is not anticipated to contribute a significant level of ozone (see  
9 Section 4.2), it is excluded from consideration in this analysis.
- 10 • Water Vapor: the most abundant and variable GHG in the atmosphere. It is not  
11 considered a pollutant and maintains a climate necessary for life. Because this  
12 Project is not anticipated to contribute significant levels of water vapor to the  
13 environment, it is excluded from consideration in this analysis.

14 The primary GHGs that would be emitted during proposed decommissioning activities  
15 are CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. The Project is not expected to have any associated use or  
16 release of HFCs, CFCs, or SF<sub>6</sub>.

17 The heat absorption potential of a GHG is referred to as the “Global Warming Potential”  
18 (GWP). Each GHG has a GWP value based on the heat-absorption properties of the  
19 GHG relative to CO<sub>2</sub>. The larger the GWP potential, the more a gas warms the earth  
20 relative to CO<sub>2</sub>. This is commonly referred to as CO<sub>2</sub> equivalent (CO<sub>2</sub>E). The GWP of  
21 the three primary GHGs associated with the proposed Project are defined by the  
22 Intergovernmental Panel on Climate Change (IPCC): CO<sub>2</sub> – GWP of 1, CH<sub>4</sub> – GWP of  
23 28, and N<sub>2</sub>O – GWP of 265.

24 In efforts to reduce and mitigate climate change impacts, State and local governments  
25 are implementing policies and initiatives aimed at reducing GHG emissions. California,  
26 one of the largest state contributors to the national GHG emission inventory, has  
27 adopted significant reduction targets and strategies. The primary legislation affecting  
28 GHG emissions in California is the California Global Warming Solutions Act of 2006  
29 (Assembly Bill [AB] 32). AB 32 (Nuñez; Chapter 488, Statutes of 2006) focuses on  
30 reducing GHG emissions in California and required the State to reduce GHG emissions  
31 to 1990 levels by 2020. CARB prepared a Draft Scoping Plan for Climate Change in  
32 2008 pursuant to AB 32. The Climate Change Scoping Plan was updated in May 2014,  
33 November 2017, and a 2022 Climate Change Scoping Plan is in progress. In 2016, the  
34 State met the AB 32 target, 4 years early. The State Legislature passed Senate Bill (SB)  
35 32 (Pavley; Chapter 249, Statutes of 2016), which codifies a 2030 GHG emissions  
36 reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed  
37 companion legislation AB 197 (Garcia; Chapter 250, Statutes of 2016), which provides  
38 additional direction for developing the Scoping Plan. The 2017 update to the Scoping  
39 Plan indicates the State is on track to reduce GHG emissions to 1990 levels by the

1 2020 target and focuses on strategies to achieve the 2030 target set by Executive Order  
2 B-30-15 and codified by SB 32. CARB indicated in their recent scoping plan update  
3 (November 2021) that AB32 targets were met in 2016 in terms of GHG emissions per  
4 capital and gross domestic product (GDP) (CARB 2021d).

5 In December of 2009, the California Natural Resources Agency adopted amendments  
6 to the CEQA Guidelines (Cal. Code of Regulations, tit. 14, § 15000 et seq.) to comply  
7 with the mandate set forth in Public Resources Code § 21083.05. These revisions  
8 became effective March 18, 2010. According to GHG amendments to the CEQA  
9 Guidelines, each public agency that is a CEQA lead agency needs to develop its own  
10 approach to performing a climate change analysis for projects that generate GHG  
11 emissions. A consistent approach should be applied for the analysis of all such projects,  
12 and the analysis must be based on best available information.

### 13 **4.7.2 Regulatory Setting**

14 Climate change planning is addressed by State and local laws and regulations. State  
15 laws that may be relevant to the Project are identified in Appendix B and discussed in  
16 Section 4.10, *Land Use* (Table 4.10-1). Local laws, regulations, and policies are  
17 discussed below.

#### 18 4.7.2.1 City of Goleta's Climate Action Plan

19 The city of Goleta finalized its Climate Action Plan in July 2014. This Plan established a  
20 2007 baseline inventory and a planning horizon of 2007 through 2030; quantifies GHG  
21 emissions from the community-at-large and City operations; establishes reduction  
22 targets for 2020 and 2030; identifies measures to reduce GHG levels, focusing on those  
23 that the city has authority to implement; and provides guidance for monitoring progress  
24 on an annual basis. Consistent with the State of California's objectives outlined in AB  
25 32, the city added Conservation Element Implementation Action 5 (CE-IA-5) to its 2006  
26 General Plan/Coastal Land Use Plan in 2009 to develop a Greenhouse Gas Reduction  
27 Plan supporting State implementation of AB 32. The Climate Action Plan outlines a  
28 framework to reduce community GHG emissions by 2020 and 2030 in a manner that  
29 meets the intent of CE-1A-5 and is supportive of AB 32 and Executive Order S-3-05.

30 While CE-IA-5 does not specify a reduction target, the city has decided to use a target  
31 of 11 percent below 2007 emissions for emissions in 2020 and 26 percent below 2020  
32 levels for 2030. Measures contained in the Climate Action Plan are intended to increase  
33 the energy and water efficiency of buildings and expand alternative transportation  
34 choices.

### 1 4.7.3 Significance Criteria

2 The city of Goleta has not adopted any GHG emissions significance thresholds. The  
 3 Santa Barbara County Air Pollution Control District (SBCAPCD) has developed a GHG  
 4 threshold of significance of 10,000 metric tons CO<sub>2</sub>E per year, which applies to  
 5 stationary pollutant sources. Although PRC 421 facilities (prior to abandonment) were  
 6 considered a stationary source (part of the South Ellwood Field Source), proposed  
 7 decommissioning is not. Due to the lack of any other threshold, the SBCAPCD's  
 8 stationary source threshold is used in this environmental analysis to determine the  
 9 significance of the Project's GHG emissions.

### 10 4.7.4 Impact Analysis and Mitigation

11 GHG emissions were estimated for each major Project phase to identify the peak 12-  
 12 month period for comparison to the SBCAPCD's stationary source threshold. In  
 13 addition, GHG emissions estimates were prepared separately for Components 1 and 2.  
 14 GHG emissions were estimated using two models developed by CARB; EMFAC 2021  
 15 for on-road vehicles and OFFROAD 2017 for off-road construction equipment.

#### 16 Component 1

#### 17 **Impact GHG-1: Decommissioning-related GHG Emissions**

18 Implementation of proposed Component 1 decommissioning activities would result in  
 19 GHG emissions that may contribute to global climate change (**Less than Significant**).

### 20 **Impact Discussion**

21 Use of heavy equipment, trucks, and worker vehicles would generate GHG emissions  
 22 that may contribute to global climate change. Table 4.7-1 provides a summary of  
 23 Component 1 GHG emissions for each major activity, assuming this component would  
 24 be completed in a 12-month period. Estimated GHG emissions would not exceed the  
 25 SBCAPCD 10,000 metric tons CO<sub>2</sub>E per year stationary source threshold.

**Table 4.7-1. Component 1 GHG Emissions Summary (metric tons/year)**

Task	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> E
Caisson Internal Materials Removal	147.9	0.006	0.005	149.4
Well Abandonment	4.5	<0.001	<0.001	4.5
Caisson Removal	213.9	0.009	0.009	216.6
Pier Removal	37.6	0.002	0.001	38.0
Pipeline Abandonment	9.6	<0.001	<0.001	9.7
Site Restoration	4.2	<0.001	<0.001	4.3

Task	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> E
<b>Total (Component 1)</b>	<b>417.6</b>	<b>0.018</b>	<b>0.016</b>	<b>422.4</b>
<i>SBCAPCD Threshold</i>				<i>10,000</i>

1 **Mitigation Measures**

2 None required.

3 Component 2

4 **Impact GHG-2: Decommissioning-related GHG Emissions (Component 2)**

5 Implementation of proposed Component 2 decommissioning activities would result in  
6 GHG emissions that may contribute to global climate change (**Less than Significant**).

7 **Impact Discussion**

8 Use of heavy equipment, trucks, and worker vehicles would generate GHG emissions  
9 that may contribute to global climate change. Table 4.7-2 provides a summary of  
10 Component 2 GHG emissions for each major activity, assuming this component would  
11 be completed in a 12-month period. Estimated GHG emissions would not exceed the  
12 SBCAPCD 10,000 metric tons CO<sub>2</sub>E per year stationary source threshold.

**Table 4.7-2. Component 2 GHG Emissions Summary (metric tons/year)**

Task	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> E
Pipeline Removal	5.4	<0.001	<0.001	5.5
Rock Revetment and Access Roadway Removal	140.8	0.004	0.008	143.1
Wooden Seawall and Associated Structures Removal	30.7	0.001	0.001	30.9
Pier Abutment Removal	12.9	0.001	<0.001	13.0
<b>Total (Component 2)</b>	<b>189.8</b>	<b>0.006</b>	<b>0.009</b>	<b>192.5</b>
<i>SBCAPCD Threshold</i>				<i>10,000</i>

13 In the unlikely event Component 2 is implemented in the same 12-month period as  
14 Component 1, the combined emissions would not exceed the SBCAPCD 10,000 metric  
15 tons CO<sub>2</sub>E per year stationary source threshold (totaling 614.9 CO<sub>2</sub>E for both  
16 Component 1 and Component 2) and are considered a less than significant impact.

17 **Mitigation Measures**

18 None required.

1 **4.7.5 Cumulative Impacts Analysis**

2 Components 1 and 2

3 **Impact GHG-3: Project Contribution to Global Climate Change**

4 Project GHG emissions may incrementally contribute to global climate change (**Less**  
5 **than Significant**).

6 Greenhouse gas emissions are a cumulative issue since their potential effects on  
7 climate change occur on a regional to global scale. Therefore, any greenhouse gas  
8 emissions may incrementally contribute to global climate change. However, the Project  
9 contribution would be temporary and less than significance thresholds. Therefore, the  
10 Project’s contribution would not be cumulatively considerable.

11 **Mitigation Measures**

12 None required.

13 **4.7.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.7-3. Summary of GHG Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact GHG-1:</b> Decommissioning-related GHG Emissions (Component 1)	None required.
<b>Impact GHG-2:</b> Decommissioning-related GHG Emissions (Component 2)	None required.
<b>Impact GHG-3:</b> Project Contribution to Global Climate Change (Components 1 and 2)	None required.

1 **4.8 HAZARDS AND HAZARDOUS MATERIALS**

2 This section addresses the handling, storage, and disposal of hazardous materials and  
3 potential upset conditions that could result in a release of hazardous materials during  
4 temporary facility decommissioning activities of the existing Pier and Well 421-1 and  
5 421-2 during Component 1, as well as Component 2 activities that include impacted soil  
6 removal and decommissioning of the access roadway, 2-inch-diameter and 6-inch-  
7 diameter pipelines, pier abutment structures, and wooden seawall/rock revetment along  
8 the access roadway and between the piers and associated structures at the Project site.

9 **4.8.1 Environmental Setting**

10 This section characterizes the existing conditions at the Project site in relation to  
11 petroleum hydrocarbons and potentially hazardous materials historically documented or  
12 known to be present at or within the vicinity of the Project site. It is important to note that  
13 Wells 421-1 and 421-2 were previously plugged and abandoned and no longer pose a  
14 threat of release. Other relevant site considerations are summarized below.

15 **4.8.1.1 Natural Oil Seeps**

16 Prolific natural marine hydrocarbon seepage in the Project vicinity occurs offshore in the  
17 Santa Barbara Channel (Figure 4.8-1) (University of California Santa Barbara [UCSB]  
18 2006; Quigley et al. 1999a; Hornafius et al. 1999). Natural oil and gas have  
19 been released from submarine seeps in the Channel for thousands of years at  
20 numerous locations. Seeps emit both liquid and gas hydrocarbon phases, with gas  
21 predominating. The most active gas seeps form visible boils where they intersect  
22 the sea surface. Based on the mapping of the seep locations and comparison  
23 with other data, oil and gas are thought to migrate upward through the overlying  
24 cap rock (Sisquoc Formation) along fractures on the axis of the South Ellwood  
25 anticline and the Coal Oil Point fold complex. These seep locations follow linear trends  
26 that mirror the axes of the folds, suggesting that the release of oil and gas along seeps  
27 in the Channel is controlled by geologic structure (Bartsch et al. 1999).

28 Seepage is most intense at submarine fault conduits and at structural closures  
29 along anticline axes (Quigley et al. 1999a; Hornafius et al. 1999). While the major seeps  
30 described above related to the South Ellwood geologic structure are well known and  
31 mapped, there are numerous hydrocarbon seeps all along the California coast, both in  
32 offshore and onshore locations that contribute to the natural release of hydrocarbons to  
33 the surface. It is estimated from numerous studies (USGS Open File Report 2009-1225,  
34 partial summary of studies) that anywhere from 4,200 to 25,000 gallons of oil per day  
35 and over 3.5 million cubic feet per day of natural gas are released into the Santa  
36 Barbara Channel. This results in 5 to 10 million gallons of oil and over one billion cubic  
37 feet of natural gas released in the offshore region annually. Most large and moderate

1 seeps are documented (over 1,200), however, many small and intermittent seeps are  
2 not.

3 Evidence of natural oil seeps can be directly observed on the beach within the  
4 vicinity of the Project area, where black tar ball deposits are mixed in with beach sand.  
5 Because the natural oil seeps originate offshore, the source of the seeps in the  
6 immediate area does not appear to be the Vaqueros Formation, the reservoir for the  
7 PRC 421 wells, at least in any measured quantity. This conclusion is supported by  
8 multiple lines of study including seep location, seep discharge, variations of seep  
9 emissions through time, and by geochemical analyses performed on oil samples  
10 from offshore platforms and beach tar balls. Laboratory analysis suggests the beach  
11 tar ball geochemistry is most like oil samples collected from Platform Holly,  
12 which produces from the Monterey Formation (Lorenson et al. 2009). Therefore, the  
13 tar balls likely originate offshore and travel onshore via wave action and other coastal  
14 processes.

#### 15 4.8.1.2 Historical Releases of Hydrocarbons within the Project Study Area

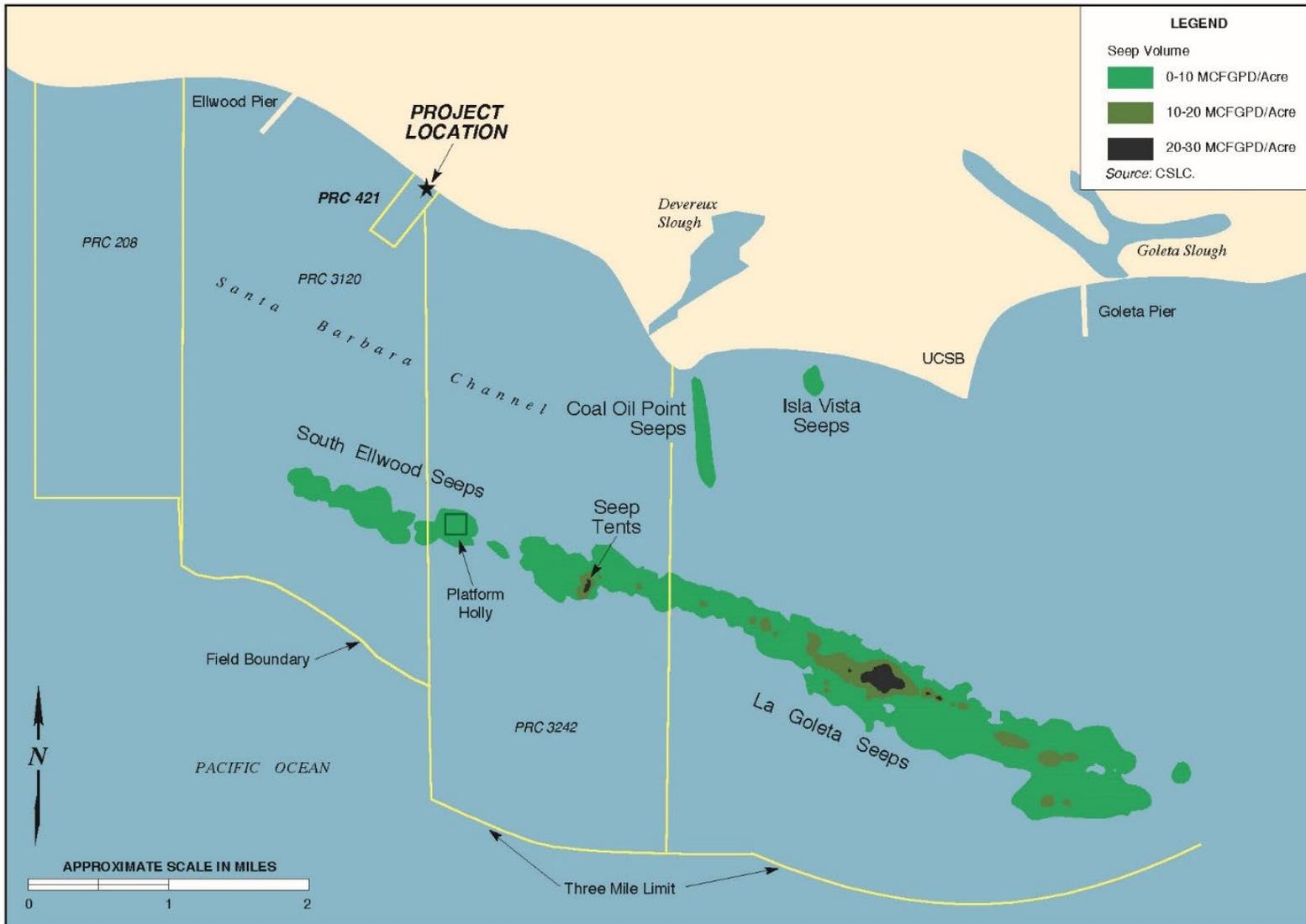
16 The following list is a brief discussion of recent historical releases of hydrocarbons that  
17 have been documented at the Project site; however, this is not a complete list of all  
18 spills at the Project site since its construction in the late 1920s. Releases within the  
19 Project area are shown in Figure 4.8-2.

20 March 1994 – A leak occurred in the 6-inch-diameter pipeline and resulted in a release  
21 to soil of approximately 170 barrels (7,140 gallons) beneath the 12<sup>th</sup> green of the  
22 Sandpiper Golf Course near the coastal bluffs. This release impacted surface and  
23 subsurface soils at the golf course. Production was terminated, and impacted soils were  
24 removed. This pipeline has not been in service since.

25 November 22, 2000 – An oil leak was induced during a routine fluid-level check at Pier  
26 421-2, and an oil leak and sludge were noted in association with a storage tank in  
27 secondary containment on Pier 421-1. The sludge was determined to be hazardous  
28 waste based on an aquatic bio-assay test. The sludge and associated liquids were  
29 removed from the storage tank and disposed of properly. This leak apparently did not  
30 impact soil, sediment, groundwater, or surface water.

31 November 27, 2000 – An oil leak occurred during fluid-level check on Pier 421-2 and  
32 resulted in the release of approximately 15 gallons. The oil was contained in a drum in  
33 secondary containment. This leak apparently did not impact soil, sediment,  
34 groundwater, or surface water.

Figure 4.8-1 Hydrocarbon Seeps in the Project Area



Source: CSLC 2014

Figure 4.8-2. Historically Documented Releases in the Project Vicinity



1 August 2001 – During emergency repairs to PRC 421 facilities, petroleum-hydrocarbon-  
2 contaminated sediment was encountered in three of the five holes dug across the width  
3 of Pier 421-2. The contaminated sediment was encountered at a depth of approximately  
4 15 feet, and the contamination appeared to extend to approximately 20 feet below the  
5 surface of the top of the sediment. Laboratory testing of the contaminated sediment  
6 indicated the presence of several hundred to less than 2,000 parts per million (ppm)  
7 diesel- and lube-oil-range petroleum hydrocarbons. Approximately 143 tons of the  
8 contaminated sediment was excavated from the area near the holes completed for  
9 installation of soldier pile structural sections. The excavated material was transported to  
10 an asphalt recycling plant (Santa Barbara County 2001).

11 January 19, 2004 – A large section of the outer caisson wall of Pier 421-1 sheared off  
12 and fell into the surf below. Large pieces of concrete debris and rebar fell to the base of  
13 the caisson. Based on the long history of oil and gas production at both PRC 421 wells,  
14 it was assumed that fill and sediment inside the caissons at both piers are likely  
15 contaminated with petroleum-related constituents. Therefore, it was noted that the 2004  
16 caisson wall repair was conducted in part to prevent contaminated fill and sediment  
17 materials from being released.

18 During wall repair activities, two leaks were found in the old caisson wall. The leaks  
19 were noted as containing both a lighter oily substance and a black tar-like substance,  
20 both of which were released to the ocean. The leaks from the wall continued during the  
21 repair project and were estimated to reach up to one quart per day. Absorbent pads,  
22 booms, and a topical sealant were used to minimize the leaks but did not completely  
23 prevent them. Once the new caisson wall was constructed, concrete was poured  
24 between the new and old walls, which provided a more effective seal for the leak areas  
25 on the old wall.

26 Following completion of the new caisson wall, samples of the leaking substance and a  
27 “shale mud/sand” were tested. The shale mud/sand sample included concentrations of  
28 total petroleum hydrocarbons (TPH) in the range of 100 to 200 milligrams per kilogram  
29 (mg/kg).

30 The laboratory analysis of the leaking substance that was released from the old caisson  
31 wall was found to have a heavier American Petroleum Institute (API) gravity than would  
32 be expected from the oil produced at PRC 421. PRC 421 wells are anticipated to have  
33 an API gravity of approximately 35, while the leaking substance was found to be much  
34 heavier at 17.8. The source of the leaking fluid remains unknown; however, it was noted  
35 in the MND that the substance may not have originated from PRC 421 (City of Goleta  
36 2006e). Alternately, the substance may have been PRC 421 reservoir oil that had  
37 partially volatilized or decomposed, resulting in a heavier API gravity.

1 April 1, 2005 – A dark substance was found to be leaking from the east side of the old  
2 caisson wall at 421-1 during a California State Lands Commission (CSLC) staff  
3 inspection after completion of the caisson wall repair. During subsequent inspections,  
4 the leaking substance did not appear to be a petroleum release, as no oily or slick  
5 texture was visible, and an anaerobic sulfurous odor was noted.

6 August 21, 2006 – Two slow leaks were reported on the east wall of the outer caisson  
7 by a member of the public. The area around the leak was described as whitish in color  
8 and smelled of sulfur. Santa Barbara County Energy Division staff sampled the fluid  
9 during a site visit in response to the reported chemical leak. The fluid did not appear to  
10 contain hydrocarbon material, and the source of the leaks remains unknown (City of  
11 Goleta 2006e).

12 May 28, 2019 – Oil was released during well 421-2 plugging operations. While  
13 preparing for the surface cement plugs, there was a release of a small quantity of crude  
14 oil both inside and outside of the caisson developing an observable sheen on the water  
15 outside the caisson. The operations were shut down temporarily and appropriate Unified  
16 Command was established to respond to the release. A small area was excavated  
17 outside the southeast corner of the 421-2 caisson to investigate; however, no significant  
18 quantity of oil was discovered, and the sand was backfilled naturally. Once secured and  
19 cleaned up, the well plugging operations were successfully completed.

#### 20 4.8.1.3 Hazardous Materials Databases

21 The Project site is not identified on the Department of Toxic Substances Control (DTSC)  
22 (DTSC 2021) Envirostor databases (commonly referred to as the "Cortese List" (Gov  
23 Code, § 65962.5)). Additionally, no Cortese sites are located within proximity of the  
24 Project site. However, the State Water Resources Control Board (SWRCB) (SWRCB  
25 2021) GeoTracker site includes the Ellwood Onshore Facility (7979 Hollister Avenue) as  
26 a cleanup program site since 2012 (Case No. 371 with Santa Barbara County) for crude  
27 oil, other solvent, or non-petroleum hydrocarbon contaminants of concern.

#### 28 4.8.1.4 Project Component Materials

##### 29 Caissons

30 The Project includes removal of the two caissons, which will include removal of the steel  
31 and concrete caisson walls, interior fill soil, support structures consisting of steel,  
32 concrete, and wood timbers, well cellars, and wellhead risers to the underlying bedrock  
33 surface. Petroleum hydrocarbon-containing soil and interstitial water are present at both  
34 caisson locations, and light non-aqueous phase liquid (LNAPL) has been documented  
35 within the caisson at well 421-1. The laboratory analytical results for soil samples  
36 collected from within both caissons indicated the presence of petroleum hydrocarbons  
37 and associated volatile organic compounds (VOCs), semi-volatile organic compounds

1 (SVOCs), polynuclear aromatic hydrocarbon (PAHs), and polychlorinated biphenyls  
2 (PCBs) constituents (Padre 2019) as further discussed in Section 4.8.1.4 below. The  
3 well cellar may contain residual petroleum hydrocarbons and water.

#### 4 Piers

5 The Project also includes removal of the 421-1 and 421-2 pier structures (Component 1)  
6 and abutments (Component 2) that provide access to the caissons. The pier structures  
7 are constructed with painted steel frames that support wood timber decking and painted  
8 steel guard railing. Based on sampling conducted in November 2021, the painted steel  
9 structures and railings do not contain lead-based paint. However, based upon sampling  
10 of the wooden seawall, the wood decking is also suspected to contain hydrocarbon  
11 wood preservatives (creosote).

#### 12 Access Roadway

13 The access roadway is composed of soil and aggregate materials and was part of the  
14 historical oil field service road that provided access to the oil production piers formerly  
15 located in the area of the Project. An assessment of the soil and aggregate materials  
16 was be conducted to determine the potential presence of chemicals of potential  
17 concern. Based on the sampling conducted in November 2021, artificial material  
18 present within several areas of the access roadway at depths of 4 to 16 feet contains  
19 elevated concentrations of petroleum hydrocarbon constituents (Appendix J).

#### 20 Pipelines

21 The Project includes abandonment of a 6-inch-diameter pipeline that contained  
22 produced oil emulsion and a 2-inch-diameter pipeline that supplied natural gas to the  
23 well locations. The 6-inch-diameter pipeline may contain residual petroleum  
24 hydrocarbons and water, and the 2-inch-diameter pipeline may contain water, gas  
25 condensate, and scale deposits. Both pipelines are wrapped and coated, however  
26 samples of the exposed 6-inch-diameter pipeline (including the coating and wrap) were  
27 tested in November 2021 and no asbestos containing materials (ACMs) were detected.

#### 28 Rock Revetment/Wooden Seawall

29 The rock revetment is constructed along the southern margin of the access roadway  
30 extending from the golf course to approximately 1,400 feet towards the southeast. The  
31 wooden seawall continues from the rock revetment and extends approximately 75 feet  
32 towards the southeast past the PRC 421-2 pier and caisson. The backside of the rock  
33 revetment and wooden seawall may contain petroleum hydrocarbons based on the  
34 presence of petroleum hydrocarbons in the artificial fill within the access roadway.

1 4.8.1.5 Caisson Soil Investigations

2 In June and September 2019, a site assessment was conducted by Padre Associates,  
3 Inc., investigating the subsurface materials located within the two caisson structures at  
4 421-1 and 421-2 to determine the presence of hydrocarbon contamination within the  
5 caisson soils. A series of soil borings, Geoprobe direct-push core holes, and test pits,  
6 were advanced into the subsurface. At both caissons, soil samples were collected for  
7 analysis using a combination of trenching, hand auger, and hydraulic push sampling  
8 methods. The samples were submitted to a state-certified laboratory for a full suite of  
9 analyses to determine potential impacts. Soil boring logs completed at the time  
10 recorded a high degree of oil staining within the soils and noted free-oil present within  
11 421-2 soils at various locations. Laboratory analysis results showed hydrocarbon  
12 impacts (dominantly crude oil) at various concentrations within the caisson soils. The  
13 analysis indicated concentrations of TPH up to 41,000 mg/kg (4.1 percent by weight) in  
14 caisson 421-1, and up to 69,120 mg/kg (6.9 percent by weight) within samples taken in  
15 caisson 421-2. Contaminated soils were present in both caissons from about 6 feet to  
16 19 feet below surface grade, where contact is made with the underlying Monterey  
17 siltstone/claystone bedrock (Padre 2019).

18 Oil-saturated soils were also observed within caisson 421-2 during a soil excavation  
19 pilot project conducted in September 2020, by InterAct PMTI. Soil sampling and  
20 laboratory analysis was not included in the scope of that project, however visible oil-  
21 saturation of the caisson-fill soil was reported at similar depths to those indicated in the  
22 Padre Report (approximately 4 to 6 feet below surface grade).

23 **4.8.2 Regulatory Setting**

24 Federal and state laws and regulations pertaining to hazards and hazardous materials  
25 and relevant to the Project including California Coastal Act Chapter 3, Section 30232  
26 are discussed in Appendix B and Section 4.10, *Land Use* (Table 4.10-1). Local goals,  
27 policies, or regulations applicable to the Project with respect to hazards and hazardous  
28 materials are presented below.

29 4.8.2.1 Local Regulations

30 **City of Goleta General Plan.** The city of Goleta has adopted policies through the City  
31 General Plan that address hazardous materials facilities. Specifically, the following City  
32 polices provide guidance on City requirements for new development and construction  
33 activities:

- 34 • **Policy SE 10.2: Compliance with Law.** The storage, handling and disposal of  
35 any hazardous material shall be done only in strict compliance with applicable  
36 City, state, and federal law.

- 1       • **Policy SE 10.6: Responsibility for Cleanup by Responsible Party.** No new  
2 development or substantial redevelopment shall be permitted on land determined  
3 to contain actionable contamination until the party responsible for such  
4 contamination has been identified and has accepted financial responsibility for  
5 any required remediation. The posting of a bond or other appropriate surety in an  
6 amount and form acceptable to the City shall be required as a condition of  
7 development approval. In appropriate circumstances, the City may assist in  
8 attempting to obtain outside grants or other resources to address contamination  
9 issues and help fund remediation.
- 10       • **Policy SE 10.7: Identification, Transport, and Disposition of Potentially**  
11 **Contaminated Soil.** The City shall require a Soil Management Plan and a  
12 project-specific Health and Safety Plan for all new development and  
13 redevelopment within areas containing potentially contaminated soil. The Soil  
14 Management Plan and Health and Safety Plan should establish standards and  
15 guidelines for the following:
- 16           ○ Identification of contaminated soil.
  - 17           ○ Identification of appropriate personal protective equipment to minimize  
18 potential worker exposure to contaminated soil.
  - 19           ○ Characterization of contaminated soil.
  - 20           ○ Soil excavation.
  - 21           ○ Interim and final soil storage.
  - 22           ○ Verification sampling.
  - 23           ○ Soil transportation and disposal.
  - 24           ○ The Soil Management Plan and Health and Safety Plan should also  
25 address naturally occurring hazardous materials that may be present in  
26 the soil, such as methane and Radon-222, and include contingencies  
27 (e.g., characterization, management, and disposal) if they are present.

28 Santa Barbara County Public Health Department (SBCPHD)

29 The SBCPHD has an open case (Local Case No.: 20261; State GeoTracker site No.:  
30 T10000016015) regarding the contaminated soils known to exist within the caissons. A  
31 Preliminary Remedial Action Plan (RAP) has been filed with the SBCPHD and is on file  
32 available at the State GeoTracker website. A revision of this RAP will likely be required  
33 for the final removal of the impacted soil from the caissons, and a Closure Report is  
34 required detailing the removal and disposal verification of these materials.

1 Santa Barbara County Air Pollution Control District (SBCAPCD)

2 Certain SBCAPCD rules apply to excavation of contaminated soils and operation of  
3 equipment. A SBCAPCD permit is required for excavation volume exceeding 1,000  
4 cubic yards to ensure the safe removal and disposal of the soil materials. An Air  
5 Monitoring Program would need to be established to minimize odors and dust emissions  
6 during the decommissioning operations. Equipment used in the decommissioning  
7 process would also be subject to review by the SBCAPCD to ensure they have  
8 approved permits to operate at the Project site.

9 **4.8.3 Significance Criteria**

10 The significance criteria for the following hazards and hazardous materials analysis  
11 were developed by considering the potential impacts specific to the study area. For the  
12 purposes of this assessment, an impact would be significant if it:

- 13 • Creates a significant hazard to the public or the environment through the routine  
14 transport, use, or disposal of hazardous materials
- 15 • Creates a potential for fire, explosion, releases of flammable/toxic materials or  
16 oil, or other accidents resulting from Project operations that could cause injury or  
17 death to Project personnel or members of the public
- 18 • Increased the probability or volume of oil spills into the environment, and existing  
19 or proposed emergency response capabilities are not adequate to effectively  
20 mitigate Project spills and other accidents
- 21 • Is located on a site included on a list of hazardous materials sites compiled  
22 pursuant to Government Code section 65962.5, and as a result would create a  
23 significant hazard to the public or the environment

24 **4.8.4 Impact Analysis and Mitigation**

25 The Project was evaluated for the presence of hazardous substances that, if present in  
26 sufficient quantities in existing structures planned for decommissioning or known to exist  
27 in study area media (soil, sediment, groundwater, or surface water), could result in  
28 impacts to human health or the environment. Impacts and proposed mitigation  
29 measures are discussed below. Impacts are limited to potential releases during the  
30 course of decommissioning activities (Approximately 143 workdays during Component 1  
31 and 63 workdays during Component 2).

1 Component 1

2 **Impact HAZ-1: Exposure of the Public or Environment to Hazardous Materials**  
3 **(Component 1)**

4 The Project could create a potential hazard to the public or the environment through the  
5 demolition, transport, or disposal of hazardous materials encountered during  
6 decommissioning activities (**Less than Significant with Mitigation**).

7 **Impact Discussion**

8 Both caissons are known to contain petroleum-contaminated soil. The caisson walls and  
9 any interior structure members may also contain hazardous materials, and removal of  
10 these structures could result in exposure of this material to the marine environment.  
11 However, the Project includes measures to limit exposure through incremental and  
12 strategic removal of the caisson walls and use of hydro-excavation (as feasible) to  
13 capture encountered contaminated soil. Prior to demolition, the interior caisson walls  
14 would be pressure washed to remove any hydrocarbon residue, with immediate  
15 recovery of wash water using a vacuum truck or pumped into a container. Periodic  
16 structural evaluations of caisson walls and appropriate reinforcement measures would  
17 be implemented during decommissioning operations to reduce the potential for  
18 hydrocarbon-contaminated soils to enter the marine environment. The beach area  
19 beneath and immediately adjacent to the structures would be protected to the extent  
20 possible with sheeting during the demolition process. Regardless of proposed  
21 preventive measures, an accidental release of a small volume of contaminated soil or  
22 structural materials may still occur.

23 Several spills have been documented at the Project site during its 70 year history of oil  
24 production. In addition, during construction of historical improvements, soils  
25 contaminated with hydrocarbons were discovered beneath Pier 421-1 and removed  
26 from the site. Contaminated soils within both caisson structures were identified in the  
27 2019 Padre Associates Site Assessment Report and observed within caisson 421-2  
28 during the soil excavation pilot project in September 2020. Therefore, there is a  
29 potential to discover contaminated soils during decommissioning activities. A RAP to  
30 address removal of contaminated soils within the caissons was submitted to the Santa  
31 Barbara County Public Health Department in August 2020 (Interact 2020) (see **MM**  
32 **HAZ-1a** below).

33 Based upon sampling results confirming presence within the wooden seawall, the  
34 wooden decking of each pier is also likely to contain wood preservatives. The 2-inch-  
35 diameter and 6-inch-diameter pipelines may also contain residual hydrocarbons from  
36 historical use that could be released during flushing and isolation operations during  
37 Component 1 (if not properly executed). Improper handling or disposal of these  
38 components may result in exposure of the public to hazardous materials.

1 However, as described in **MM HAZ-1c**, Project activities would be conducted in  
2 accordance with the existing facilities Oil Spill Contingency Plan Addendum that was  
3 developed specifically on behalf of the Project to minimize potential impacts (CSLC  
4 2021). Implementation of **MM HAZ-1a** through **MM HAZ-1c** would reduce potential  
5 impacts from handling and disposal of hazardous materials during Component 1 to less  
6 than significant. Additionally, **MM HWQ-1** would include development of a Stormwater  
7 Pollution Prevention Program (SWPPP) to implement best management practices  
8 (BMPs) onsite for protection of surface water resources.

## 9 **Mitigation Measures**

10 **MM HAZ-1a: Remedial Action Plan Implementation.** The Remedial Action  
11 Plan (RAP) submitted to the Santa Barbara County Public Health  
12 Department; Environmental Health Services Division shall be implemented  
13 during Component 1 Project decommissioning activities. The RAP will also  
14 be shared with the California Department of Fish and Wildlife Office of Spill  
15 Prevention and Response (OSPR), Regional Water Quality Control Board  
16 (RWQCB), CCC, and city of Goleta (as applicable) for review and approval  
17 prior to the initiation of construction activities. Final approval of the plan  
18 shall be under the purview of OSPR, RWQCB, and the Santa Barbara  
19 County Public Health Department. Upon approval, all contaminated  
20 materials shall be removed and disposed of in accordance with procedures  
21 described in the RAP. All soil sampling results shall be provided to the  
22 Santa Barbara County Public Health Department and city of Goleta  
23 immediately upon receiving results.

24 **MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs.**  
25 Prior to Project activities related to removal of contaminated soil, the Air  
26 Pollution Control District must be notified as an Air Pollution Control District  
27 Permit will be required. In addition, the following measures shall be  
28 implemented:

- 29 ○ Covers on storage piles shall be maintained in place at all times in areas  
30 not actively involved in soil addition or removal
- 31 ○ Contaminated soil that is stockpiled or containerized shall be covered  
32 with at least 6 inches of packed uncontaminated soil or another TPH-  
33 non-permeable barrier such as plastic tarp. No headspace shall be  
34 allowed where vapors could accumulate
- 35 ○ Covered piles shall be designed in such a way to eliminate erosion due  
36 to wind or water. No openings in the covers are permitted.
- 37 ○ The air quality impacts from the excavation and haul trips associated  
38 with removing the contaminated soil must be evaluated and mitigated if

- 1 total emissions exceed the Air Pollution Control District's construction
- 2 phase thresholds
- 3 ○ During soil excavation, odors shall not be evident to such a degree as to
- 4 cause a public nuisance
- 5 ○ Clean soil must be segregated from contaminated soil

6 **MM HAZ-1c: Oil Spill Contingency Plan Implementation.** The EOF's existing  
7 Oil Spill Contingency Plan (OSCP) (BeaconWest 2020) and Addendum  
8 (CSLC 2021) shall be implemented during all Project activities in the event  
9 of a release of oil or contaminants. The OSCP delineates prevention  
10 measures including daily inspection of equipment, refueling at designated  
11 stations, and secondary containment for equipment to prevent spills.  
12 Additionally, the onshore work sites shall maintain onsite response  
13 equipment to clean up minor spills. In the event of a major spill (greater  
14 than five barrels), the OSCP requires utilization of an independent oil spill  
15 response contractor (i.e., Marine Spill Response Corporation) to provide  
16 secondary cleanup.

17 **MM HWQ-1: Storm Water Pollution Prevention Plan** (see Section 4.9.4,  
18 *Hydrology and Water Quality*)

19 **Impact HAZ-2: Use of Hazardous Materials During Decommissioning Activities**  
20 **(Component 1)**

21 The Project would require the use of heavy equipment and machinery, including  
22 hydrocarbon fuels and lubricants, that would have the potential to spill into the  
23 environment (**Less than Significant with Mitigation**).

24 **Impact Discussion**

25 Decommissioning activities include the use of vehicles and equipment that may result in  
26 the accidental release of hazardous materials, and subsequent environmental and  
27 human exposure, due to accidental spills of hydrocarbons (including diesel fuel).  
28 Implementation of **MM HAZ-2** would reduce potential impacts from use of hazardous  
29 materials in onsite equipment to less than significant.

30 **Mitigation Measures**

31 **MM HAZ-2: Hazardous Materials Management and Contingency Plan.** A  
32 Hazardous Materials Management and Contingency Plan shall be  
33 developed prior to Project implementation. Measures shall include, but not  
34 be limited to, identification of appropriate fueling and maintenance areas for  
35 equipment, daily equipment inspection schedule, and reference to the

1 EOF's existing spill response plan and spill response supplies to be  
2 maintained onsite.

3 Component 2

4 **Impact HAZ-3: Exposure of the Public or Environment to Hazardous Materials**  
5 **(Component 2)**

6 The Project could create a potential hazard to the public or the environment through the  
7 demolition, transport, or disposal of hazardous materials encountered during  
8 decommissioning activities (**Less than Significant with Mitigation**).

9 **Impact Discussion**

10 Based on sampling results, petroleum hydrocarbon contaminated soil would be  
11 encountered during access roadway removal and may also be present behind the rock  
12 revetment and wooden seawall based on these results. The 6-inch-diameter pipeline  
13 was the source of a 1994 oil leak; therefore, residual contaminated soils may also be  
14 encountered during pipeline removal. In addition, the wooden seawall also contains  
15 hydrocarbon wood preservatives. During Component 2 activities, implementation of **MM**  
16 **HAZ-1a** through **MM HAZ-1c** would reduce potential impacts from handling and  
17 disposal of these hazardous materials to less than significant. Additionally, **MM HWQ-1**  
18 would include development of a Stormwater Pollution Prevention Program (SWPPP) to  
19 implement best management practices (BMPs) onsite for protection of surface water  
20 resources. Overall, Component 2 impacts would be less than significant with mitigation.

21 **Mitigation Measures**

22 **MM HAZ-1a: Remedial Action Plan Implementation**

23 **MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs**

24 **MM HAZ-1c: Oil Spill Contingency Plan Implementation**

25 **MM HWQ-1: Storm Water Pollution Prevention Plan** (see Section 4.9.4,  
26 *Hydrology and Water Quality*)

27 **Impact HAZ-4: Use of Hazardous Materials During Decommissioning Activities**  
28 **(Component 2)**

29 The Project would require the use of heavy equipment and machinery, including  
30 hydrocarbon fuels and lubricants that would have the potential to spill into the  
31 environment (**Less than Significant with Mitigation**).

1 **Impact Discussion**

2 Decommissioning activities include the use of vehicles and equipment that may result in  
3 the accidental release of hazardous materials, and subsequent environmental and  
4 human exposure, due to accidental spills of hydrocarbons (including diesel fuel).  
5 Implementation of **MM HAZ-2** would reduce potential impacts from use of hazardous  
6 materials in onsite equipment to less than significant.

7 **Mitigation Measures**

8 **MM HAZ-2: Hazardous Materials Management and Contingency Plan**

9 **4.8.5 Cumulative Impacts Analysis**

10 Components 1 and 2

11 **Impact HAZ-5: Potential Cumulative Hazardous Materials Impacts**

12 Temporary decommissioning-related hazardous materials impacts would incrementally  
13 contribute to cumulative impacts if other projects were conducted at the same time in  
14 this location (**Less than Significant with Mitigation**).

15 **Impact Discussion**

16 The Project may contribute to cumulative hazardous materials impacts affecting human  
17 and environmental receptors. Other projects that may take place at the same time as  
18 the Project would be limited to the Beach Hazards Removal Project and Bacara Beach  
19 House Relocation Project. The Beach Hazards Removal Project (managed by the  
20 CSLC) may include activities on the beach in proximity to the proposed Project and  
21 would also require the short-term use of construction equipment (and the potential for  
22 hazardous materials discharges) to remove existing oil and gas facility remnants.  
23 However, no hazard removal activities are currently scheduled within the Project area  
24 during the proposed decommissioning timeframe.

25 The Bacara Beach House Relocation Project is located adjacent to the Bacara Resort  
26 fire road access. If this project were to occur at the same time as the proposed  
27 decommissioning activities, it would also require short-term use of construction  
28 equipment for demolition and construction activities and the potential for hazardous  
29 materials discharges and could be implemented at the same time as the proposed  
30 decommissioning activities. The implementation of **MMs HAZ-1a** through **MM HAZ-1c**  
31 would reduce potential impacts from handling and disposal of hazardous materials to  
32 less than significant. Additionally, **MM HWQ-1** would include development of a SWPPP  
33 to implement BMPs onsite for protection of surface water resources, and  
34 implementation of **MM HAZ-2** would reduce potential impacts from use of hazardous

1 materials in onsite equipment to less than significant. The incremental contribution of  
 2 the Project to cumulative impacts would not be considerable.

3 **4.8.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.8-1. Summary of Hazards and Hazardous Materials Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact HAZ-1:</b> Exposure of Public or Environment to Hazardous Materials (Component 1)	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>Impact HAZ-2:</b> Use of Hazardous Materials During Decommissioning Activities (Component 1)	<b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>Impact HAZ-3:</b> Exposure of Public or Environment to Hazardous Materials (Component 2)	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>Impact HAZ-4:</b> Use of Hazardous Materials During Decommissioning Activities (Component 2)	<b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>Impact HAZ-5:</b> Potential Cumulative Hazardous Materials Impacts	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan

1 **4.9 HYDROLOGY AND WATER QUALITY**

2 This section addresses issues involving the potential impacts on hydrology and water  
3 quality resulting from the removal of the existing oil and gas production facilities at the  
4 Project site. The environmental setting provides information on existing water quality  
5 characteristics of the Santa Barbara Channel offshore and surface waters onshore in  
6 the vicinity of the Project. The impacts evaluation focuses on the potential effects of the  
7 proposed Project and potential for cumulative impacts on hydrology and water quality in  
8 the area and identifies mitigation measures intended to lessen significant impacts.

9 **4.9.1 Environmental Setting**

10 This section characterizes the marine environment, including nearshore processes and  
11 marine water quality, as well as discusses the onshore hydrologic and water quality  
12 characteristics of the Project site.

13 4.9.1.1 Regional Oceanographic Processes

14 The Project site is located along the coastline of the Santa Barbara Channel (Channel),  
15 near the western edge of the city of Goleta, along an area known as the Ellwood Coast.  
16 Major ocean currents in the Project vicinity include the dominant California Current and  
17 the Southern California countercurrent that flows northward along the continental shelf.

18 Surface and Subsurface Flows in the Santa Barbara Channel

19 The mean flow of surface waters within the Channel are counterclockwise, and monthly  
20 average flows reach 3 knots (nautical miles [nm] per hour) during most of the year  
21 (Winant et al. 1999). However, currents and surface transport are highly complex within  
22 the Channel and are affected by periodic winds, coastal headlands, and subsurface  
23 bathymetric features. Subsurface currents are important in determining the fate of oil  
24 and other contaminants if released. Average monthly current profiles in the Channel are  
25 often strongly sheared and rotate in a counterclockwise direction as depth increases.  
26 Average flow speeds of subsurface flows increase with depth throughout most of the  
27 year. The exception is during the late fall when surface flows intensify and become  
28 comparable to the speed of subsurface flows (CSLC 2009).

29 Local Wave Action

30 Waves generated on the surface of the ocean develop from a mixture of remotely  
31 generated ocean swells and local winds. Due to the presence of the Channel Islands off  
32 the coast, the Santa Barbara Channel is comparatively sheltered from swells generated  
33 outside the Channel. Consequently, wave heights within the Channel are typically low,  
34 ranging from 3 to 6 feet throughout most of the year. Waves are typically larger during  
35 winter storms that encroach on the California coastline from the west, although the

1 coastline is sheltered from North Pacific swells by Point Conception (CSLC 2009).  
2 However, large swells from winter and fall storms occasionally penetrate into the  
3 Channel and create high surf conditions along the coast. For example, El Niño  
4 conditions in 1983 generated very large surf, which combined with exceptionally high  
5 tides to cause extensive damage along normally calm sections of the coastline within  
6 the Channel. More recently, storms in the winter of 2005 to 2006 generated very high  
7 surf along the Goleta coast, with wave heights exceeding 15 feet at exposed point  
8 breaks.

9 Waves land on the mainland shore of the Channel at a slightly oblique angle, generally  
10 from the west. This drives a long-shore current toward the east within the surf zone. As  
11 a result, the net transport of particulates suspended in the water column nearshore is  
12 toward the east, in contrast to the typically westward transport that is observed further  
13 offshore.

#### 14 Marine Water Quality

15 Marine water quality in the region is affected by several factors including oceanographic  
16 processes (e.g., waves, currents), contaminant discharge, erosion, and freshwater  
17 inflow. Petroleum development activities, commercial and recreational vessels, natural  
18 hydrocarbon seeps, river runoff, municipal wastewater outfalls, and minor industrial  
19 outfalls typically can contribute to the increased presence of nutrients, trace metals,  
20 synthetic organic contaminants, and pathogens in ocean waters and sediments.

21 Water quality sampling is conducted at 16 County beaches by the Santa Barbara  
22 County Public Health Department to identify exceedances of public health  
23 bacteriological standards and determine if beach closures are necessary. Beach  
24 sampling includes Sands Beach at Coal Oil Point (sampled weekly throughout the year),  
25 located approximately 1.8 miles southeast of the Project site. Beach water quality  
26 sampling and analysis is limited to bacterial contamination typically associated with  
27 human or animal waste, including total coliform, fecal coliform, and Enterococcus. High  
28 bacterial levels are associated with rainfall events, which transport pollutants from the  
29 watersheds to the beaches. Beaches are closed when coliform or Enterococcus levels  
30 exceed public health standards.

#### 31 4.9.1.2 Petroleum Hydrocarbons

32 Petroleum hydrocarbons are organic contaminants that enter the ocean both naturally  
33 and as the result of human influence (i.e., oil spills). The principal sources of petroleum  
34 hydrocarbons in the Santa Barbara Channel include:

- 35 • Natural oil seeps
- 36 • Urban runoff of road material, auto exhaust, lubricating oils, gasoline, diesel fuel,  
37 and tire particles

- 1 • Discharge of water present in geologic formations produced in association with
- 2 natural oil seeps
- 3 • Atmospheric deposition from the combustion of fossil fuels
- 4 • Vessel leaks, spills, and exhaust
- 5 • Leaching of creosote from wooden pilings
- 6 • Oil and grease contained in municipal sewage effluent

7 As discussed in Section 4.8.1.1, *Natural Oil Seeps* above, natural seeps found along  
8 the coasts of Santa Barbara and Ventura counties discharge significant quantities of oil  
9 and tar to the near-shore waters of the Channel. This has been documented by  
10 numerous studies over many decades. The Western States Petroleum Association  
11 estimates 150 to 170 barrels of oil seeps from the sea floor near Coal Oil Point  
12 (approximately 5 miles southeast of the Project area) each day (Helix 2006). Similarly, a  
13 2009 USGS Open File Report (Number 2009-1225) reported that approximately 20,000  
14 tons of oil enter the coastal waters each year from natural seeps. This equates to  
15 roughly 147,000 barrels of oil seeping annually. Consequently, the intertidal zone at  
16 Goleta, particularly along the Ellwood Coast in the Project vicinity, frequently  
17 experiences naturally occurring oil and tar from the Coal Oil Point Seep (USGS 2009).

#### 18 4.9.1.3 Surface Water

19 Primary Project components are situated in the surf zone, nearshore areas, and on low-  
20 lying coastal areas immediately inland from the beach. The nearest named drainages to  
21 the Project area are Bell Canyon and Tecolote Creeks to the northwest and Devereux  
22 Creek to the southeast. Bell Canyon and Tecolote Creeks drain primarily rural and  
23 agricultural areas northwest of the urban areas of the city of Goleta and discharge into  
24 lagoons west of the Project site. Devereux Creek drains a largely urbanized watershed,  
25 which encompasses the western portions of the city of Goleta and empties into the  
26 Devereux Slough located approximately 1.8 miles southeast of the Project area.

#### 27 Water Quality

28 The SWRCB has listed Bell Canyon Creek as impaired for nitrates under their Clean  
29 Water Act Section 303d listing program. Water quality sampling was performed during  
30 storm events in Bell Canyon, Tecolote, and Devereux Creeks as part of the countywide  
31 “Project Clean Water” program until 2002. The most recent Project Clean Water quality  
32 analysis report that includes data for these creeks is for rain year 2001 to 2002. During  
33 this rain year, both Bell Canyon and Devereux Creeks exceeded the maximum  
34 contaminant standards for copper, mercury, and zinc. Tecolote Creek also exceeded  
35 the standard for copper and zinc, but not mercury. In addition, Bell Canyon and  
36 Tecolote Creeks exceeded the maximum diazinon standard and Devereux and Tecolote  
37 Creeks exceeded the maximum standard for chlorpyrifos. Tecolote Creek also

1 exceeded the maximum standard for malathion. Oil and grease and TPH were not  
2 detected in any of the samples for either of these creeks. Water quality data collected  
3 during two prior rain years (1999-2000 and 2000-2001) were similar to 2001-2002 data  
4 (Santa Barbara County 2003).

#### 5 4.9.1.4 Groundwater

6 The Project area is adjacent to the West Subbasin of the Goleta Groundwater Basin.  
7 This underground reservoir is considered hydrologically separate from the North and  
8 Central Subbasins of the Goleta Groundwater Basin. Available storage in the West  
9 Basin is estimated to be 7,000 acre-feet. Based on the most recent analysis, the West  
10 Subbasin is in a state of surplus. However, water in this subbasin is considered poor  
11 quality and low yield but is classified as beneficial use drinking water by the RWQCB  
12 under the *Water Quality Control Plan for the Central Coastal Region* (Central Coast  
13 Basin Plan) (RWQCB 2019).

### 14 **4.9.2 Regulatory Setting**

15 Federal and state laws and regulations pertaining to hydrology and water quality and  
16 relevant to the Project including California Coastal Act Chapter 3, Section 30231 are  
17 discussed in Appendix B and Section 4.10, *Land Use* (Table 4.10-1). Local goals,  
18 policies, or regulations applicable to the Project with respect to hydrology and water  
19 quality are presented below.

#### 20 4.9.2.1 Local Regulations

21 **Project Clean Water.** The Santa Barbara County Water Agency, Project Clean Water  
22 was established to reduce or eliminate discharges of pollution into creeks, rivers, ponds,  
23 or ocean waters, through implementation of National Pollutant Discharge Elimination  
24 System (NPDES) permit requirements and applicable regulations. This agency  
25 completes stormwater sampling at select locations throughout the county. The County  
26 Water Agency has adopted provisions of the Storm Water Phase II Final Rule, which  
27 requires the operator of a regulated small municipal separate storm sewer system  
28 (MS4) to obtain NPDES permit coverage because discharges of stormwater from such  
29 systems are considered point sources of pollution.

30 **Goleta General Plan.** The city of Goleta has adopted policies through the City General  
31 Plan that address protection of wetlands, beach and shoreline habitats, watersheds,  
32 and water quality. Specifically, the following City General Plan polices provide guidance  
33 on requirements for new development and construction activities in the city:

- 34 • **Policy CE 10.1: New Development and Water Quality.** New development shall  
35 not result in the degradation of the water quality on groundwater basins or  
36 surface waters; surface waters include the ocean, lagoons, creeks, ponds, and

1 wetlands. Urban runoff pollutants shall not be discharged or deposited such that  
2 they adversely affect these resources.

- 3 • **Policy CE 10.2: Siting and Design of New Development.** [GP/CP] New  
4 development shall be sited and designed to protect water quality and minimize  
5 impacts to coastal waters by incorporating measures designed to ensure the  
6 following:
  - 7 a. Protection of areas that provide important water quality benefits, areas  
8 necessary to maintain riparian and aquatic biota, and areas susceptible to  
9 erosion and sediment loss
  - 10 b. Limiting increases in areas covered by impervious surfaces
  - 11 c. Limiting the area where land disturbances occur, such as clearing of  
12 vegetation, cut-and-fill, and grading, to reduce erosion and sediment loss
  - 13 d. Limiting disturbance of natural drainage features and vegetation
- 14 • **Policy CE 10.3 - Incorporation of Best Management Practices for**  
15 **Stormwater Management.** New development shall be designed to minimize  
16 impacts to water quality from increased runoff volumes and discharges of  
17 pollutants from nonpoint sources to the maximum extent feasible, consistent with  
18 the City's Storm Water Management Plan or a subsequent Storm Water  
19 Management Plan approved by the City and the Central Coast Regional Water  
20 Quality Control Board. Post construction structural BMPs shall be designed to  
21 treat, infiltrate, or filter stormwater runoff in accordance with applicable standards  
22 as required by law. Examples of BMPs include, but are not limited to, the  
23 following:
  - 24 a. Retention and detention basins
  - 25 b. Vegetated swales
  - 26 c. Infiltration galleries or injection wells
  - 27 d. Use of permeable paving materials
  - 28 e. Mechanical devices such as oil-water separators and filters
  - 29 f. Revegetation of graded or disturbed areas
  - 30 g. Other measures as identified in the City's adopted Storm Water  
31 Management Plan and other City-approved regulations (City of Goleta  
32 2019)

### 33 **4.9.3 Significance Criteria**

34 Impacts to water quality would be considered significant if:

- 1 • Contaminant concentrations within the Channel Islands National Marine  
2 Sanctuary (CINMS) or within Santa Barbara Channel coastal wetlands  
3 measurably increase relative to background concentrations
- 4 • Water quality objectives contained in the Central Coast Basin Plan are violated
- 5 • Water quality objectives contained in the California Ocean Plan are violated
- 6 • Water quality criteria in the California Toxics Rule (2000) are violated
- 7 • Project operations or discharges that change background levels of chemical and  
8 physical constituents or elevate turbidity producing long-term changes in the  
9 receiving environment of the site, area, or region, thereby impairing the beneficial  
10 uses of the receiving water occur
- 11 • Contaminant levels in the water column are increased to levels with the potential  
12 to cause harm to marine organisms even if the levels do not exceed formal  
13 objectives in the Central Coast Basin Plan or California Ocean Plan

#### 14 **4.9.4 Impact Analysis and Mitigation**

15 The following sections discuss potential impacts to nearshore and onshore water  
16 resources and proposed mitigation measures associated with the proposed Project.  
17 Because the proposed Project consists of decommissioning of former oil and gas  
18 production caissons/piers and associated structures that have already been plugged  
19 and abandoned, the impacts to hydrology and water quality are anticipated to be short  
20 term in nature.

#### 21 Component 1

#### 22 **Impact HWQ-1: Potential Water Quality Impacts During Implementation of** 23 **Decommissioning Project (Component 1)**

24 Decommissioning activities may adversely affect marine water quality as a result of  
25 incidental release of contaminated materials to the marine environment (**Less than**  
26 **Significant with Mitigation/Beneficial**).

#### 27 **Impact Discussion**

28 As discussed in Section 4.8, Hazards and Hazardous Materials, Component 1 activities  
29 involve decommissioning of former oil and gas facilities that contain residual  
30 hydrocarbons and structures that may contain other hazardous materials (including, but  
31 not limited to, the potential for lead-based paint and wood preservatives). Additionally,  
32 large equipment operating on the beach would contain hazardous materials such as  
33 fuel, lubricant, and oils. During decommissioning, accidental hazardous materials  
34 discharge to the beach during construction could temporarily adversely affect ocean  
35 water quality or result in a violation of water quality standards. Contaminants from

1 construction vehicles and equipment could increase the pollutant load in any runoff  
2 transported to the ocean. This potential risk would be somewhat minimized through  
3 timing of the proposed activities to occur during periods of lower low tides and during  
4 periods of calm seas. Implementation of **MMs HAZ-1a** through **HAZ-1c** and **MM HAZ-2**  
5 would minimize potential effects by ensuring that rapid deployment of containment and  
6 clean-up occurs for minor spills, that major spills have a process for notification and  
7 clean-up, and any hazardous materials are removed from the Project area with minimal  
8 effect on the marine or terrestrial environment. Implementation of these measures  
9 would mitigate these impacts to a level of less than significant.

10 Completion of Component 1 removal activities would result in a beneficial impact to  
11 water quality as hydrocarbons contained within the caisson soils would no longer be a  
12 threat to the public or environment.

### 13 **Mitigation Measures**

14 **MM HAZ-1a: Remedial Action Plan Implementation** (see Section 4.8.4,  
15 *Hazards and Hazardous Materials*)

16 **MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs** (see  
17 Section 4.8.4, *Hazards and Hazardous Materials*)

18 **MM HAZ-1c: Oil Spill Contingency Plan Implementation** (see Section 4.8.4,  
19 *Hazards and Hazardous Materials*).

20 **MM HAZ-2: Hazardous Materials Management and Contingency Plan** (see  
21 Section 4.8.4, *Hazards and Hazardous Materials*).

### 22 **Impact HWQ-2: Construction-related Erosion and Sedimentation Impacts to** 23 **Marine and Onshore Water Quality (Component 1)**

24 Project-related construction could cause erosion or siltation resulting in substantial  
25 degradation of surface water quality (**Less than Significant with Mitigation**).

### 26 **Impact Discussion**

27 The proposed Project consists of decommissioning of existing facilities associated with  
28 PRC 421. Demolition activities on the beach and within the surf zone would include the  
29 use of excavation equipment and concrete cutting/breaking tools to remove the existing  
30 caissons and structures. These activities would result in soil disturbance, which may  
31 result in an increase in the amount of sediments discharged to the ocean during storm  
32 events and an associated increase in turbidity. Implementation of **MM HWQ-1** would  
33 reduce short-term decommissioning-related impacts to water quality to a less than  
34 significant level.

1 **Mitigation Measures**

2 **MM HWQ-1: Storm Water Pollution Prevention Plan.** CSLC shall prepare and  
3 implement a Storm Water Pollution Prevention Plan (SWPPP), including:

- 4 • All fueling and maintenance of vehicles and heavy equipment will occur in  
5 designated areas at least 50 feet from waterways. Designated areas will  
6 include spill containment devices (e.g., drain pans) and absorbent  
7 materials to clean up spills
  
- 8 • Vehicles and equipment will be maintained properly to prevent leakage of  
9 hydrocarbons and other fluids
  
- 10 • Any accidental spill of hydrocarbons or other fluids that may occur at the  
11 work site will be cleaned immediately. Spill containment devices and  
12 absorbent materials will be maintained on the work site for this purpose.  
13 The Governor’s Office of Emergency Services will be notified immediately  
14 in the event of a reportable quantity accidental spill to ensure proper  
15 notification, clean up, and disposal of waste
  
- 16 • Waste and debris generated during construction will be stored in  
17 designated waste collection areas and containers away from drainage  
18 features, and will be disposed of regularly
  
- 19 • Storm water pollution prevention best management practices will be used  
20 around the construction area perimeters during construction and around  
21 any construction operations that could potentially degrade water quality
  
- 22 • Erosion and sedimentation best management practices (e.g., silt fences  
23 straw wattles, mulching, and hydroseeding) will be installed properly and  
24 maintained regularly. Other best management practices will be  
25 implemented as necessary and as required by Project permits
  
- 26 • Runoff will be conveyed to prevent erosion from slopes and channels and  
27 directed to engineered drainage facilities
  
- 28 • Disturbed slopes will be re-vegetated with appropriate native vegetation

## 1 Component 2

### 2 **Impact HWQ-3: Potential Water Quality Impacts During Implementation of Project** 3 **(Component 2)**

4 Decommissioning activities may adversely affect marine water quality as a result of  
5 incidental release of contaminated materials to the marine environment (**Less than**  
6 **Significant with Mitigation/Beneficial**).

## 7 **Impact Discussion**

8 Prior to implementation of Component 2, the two pipelines would have been flushed and  
9 isolated back to the EOF and would no longer contain contaminated materials.  
10 However, as discussed in Section 4.8, *Hazards and Hazardous Materials*, Component 2  
11 activities involve decommissioning of PRC 421 facilities (including the access roadway  
12 fill material and wooden seawall) that contain residual hydrocarbons and wood  
13 preservatives. Additionally, large equipment operating on the beach would contain  
14 hazardous materials such as fuel, lubricant, and oils. During decommissioning,  
15 accidental hazardous materials discharge to the beach during construction could  
16 temporarily adversely affect ocean water quality or result in a violation of water quality  
17 standards. Contaminants from construction vehicles and equipment could increase the  
18 pollutant load in any runoff transported to the ocean. This potential risk would be  
19 somewhat minimized through timing of the proposed activities to occur during periods of  
20 lower low tides and during periods of calm seas. Implementation of **MMs HAZ-1a**  
21 through **HAZ-1c**, and **MM HAZ-2** would minimize potential effects by ensuring that rapid  
22 deployment of containment and clean-up occurs for minor spills, that major spills have a  
23 process for notification and clean-up, and any hazardous materials are removed from  
24 the Project area with minimal effect on the marine or terrestrial environment.  
25 Implementation of these measures would mitigate these impacts to a level of less than  
26 significant.

27 Completion of Component 2 removal activities would result in a beneficial impact to  
28 water quality as hydrocarbons contained within the access roadway fill and wooden  
29 seawall wood preservatives would no longer be a threat to the public or environment.

## 30 **Mitigation Measures**

31 **MM HAZ-1a: Remedial Action Plan Implementation** (see Section 4.8.4,  
32 *Hazards and Hazardous Materials*)

33 **MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs** (see  
34 Section 4.8.4, *Hazards and Hazardous Materials*)

35 **MM HAZ-1c: Oil Spill Contingency Plan Implementation** (see Section 4.8.4,  
36 *Hazards and Hazardous Materials*)

1           **MM HAZ-2: Hazardous Materials Management and Contingency Plan** (see  
2           Section 4.8.4, *Hazards and Hazardous Materials*)

3 **Impact HWQ-4: Construction-related Erosion and Sedimentation Impacts to**  
4 **Marine and Onshore Water Quality (Component 2)**

5 Project-related construction could cause erosion or siltation resulting in substantial  
6 degradation or surface water quality (**Less than Significant with Mitigation**).

7 **Impact Discussion**

8 The proposed Project consists of decommissioning of existing facilities associated with  
9 PRC 421. Re-grading the slope to remove the existing access roadway and removal of  
10 the existing pier abutments, rock revetments, and wooden seawall would de-stabilize  
11 the toe of the adjacent bluffs. These activities would result in soil disturbance, which  
12 may result in an increase in the amount of sediments discharged to the ocean during  
13 storm events and an associated short-term increase in turbidity. Implementation of **MM**  
14 **HWQ-1** would reduce short-term erosion and sedimentation impacts to water resources  
15 to a less than significant level.

16 **Mitigation Measures**

17           **MM HWQ-1: Storm Water Pollution Prevention Plan**

18 **4.9.5 Cumulative Impacts Analysis**

19 Components 1 and 2

20 **Impact HWQ-5: Potential for Cumulative Water Quality Impacts**

21 Temporary Project-related water quality impacts would incrementally contribute to  
22 cumulative impacts if other projects were conducted at the same time in this location  
23 (**Less than Significant with Mitigation**).

24 **Impact Discussion**

25 The Project may contribute to cumulative water quality impacts associated with use of  
26 heavy equipment on or near the beach, which may result in inadvertent hydrocarbon  
27 spills and sediment-laden stormwater discharges to adjacent marine waters. Other  
28 projects that may take place at the same time would be limited to the Beach Hazards  
29 Removal Project and Bacara Beach House Relocation Project. The Beach Hazards  
30 Removal Project (managed by the CSLC) may include activities on the beach in  
31 proximity to the proposed Project and would also require the short-term use of  
32 construction equipment (and the potential for hydrocarbon and sediment discharges) to  
33 remove existing oil and gas facility remnants. However, no hazard removal activities are

1 currently scheduled within the Project area during the proposed decommissioning  
2 timeframe.

3 The Bacara Beach House Relocation Project is located adjacent to the Bacara Resort  
4 fire road access. If this project were to occur at the same time as the proposed  
5 decommissioning activities, it would also require short-term use of construction  
6 equipment for demolition and construction activities and the potential for hydrocarbon  
7 and sediment discharges. With implementation of **MM HWQ-1**, the incremental  
8 contribution of the Project to cumulative impacts would not be considerable.

#### 9 **4.9.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.9-1. Summary of Hydrology and Water Quality Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact HWQ-1:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 1)	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>Impact HWQ-2:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 1)	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>Impact HWQ-3:</b> Potential Water Quality Impacts During Implementation of Decommissioning Project (Component 2)	<b>MM HAZ-1a:</b> Remedial Action Plan Implementation <b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs <b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation <b>MM HAZ-2:</b> Hazardous Materials Management and Contingency Plan
<b>Impact HWQ-4:</b> Construction-related Erosion and Sedimentation Impacts to Marine and Onshore Water Quality (Component 2)	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan
<b>Impact HWQ-5:</b> Potential for Cumulative Water Quality Impacts (Components 1 and 2)	<b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan

1 **4.10 LAND USE AND PLANNING**

2 This section details the existing land use and planning conditions in the Project vicinity,  
3 outlines applicable land use plans and policies, and summarizes potential land use and  
4 planning impacts and mitigation measures (MMs) associated with the Project.

5 **4.10.1 Environmental Setting**

6 State Oil and Gas Lease PRC 421 is located within the coastal zone off the Ellwood  
7 Coast, just south of Sandpiper Golf Course, southeast of the EOF, and approximately  
8 2,000 feet west of the Ellwood Mesa. The lease area is offshore of the city of Goleta,  
9 extending from the surf zone just above the 421-1 and 421-2 well locations offshore to a  
10 water depth of about 50 feet. As shown in Figure 4.10-1, jurisdiction of the Project is  
11 shared by CSLC and the CCC within the coastal zone in the city of Goleta. The majority  
12 of the Project site is located at or below the mean high tide line (including the 421-1 and  
13 421-2 piers, caissons, and wells), which are under the jurisdiction of the CSLC and CCC  
14 (Figure 1-2). The remaining portions are located above the mean high tide line  
15 (including the access roadway, rock revetment, wooden seawall, pipelines, and pier  
16 abutments, as well as the proposed staging areas located at the EOF and Bacara  
17 Resort fire road access route which are under the jurisdiction of the CCC within the  
18 coastal zone boundary in the city of Goleta.

19 **4.10.1.1 CSLC Submerged Tidelands**

20 The Project site includes Pier 421-1 and 421-2, which are located on State tide and  
21 submerged lands within PRC 421. The original oil and gas lease (Lease Number 89)  
22 was issued in 1929, terminated and renewed under PRC 421 in 1949, and subsequently  
23 reassigned several times with the last assignment to Venoco, Inc. (Venoco) in 1997. In  
24 March 2016, Venoco filed for Chapter 11 Bankruptcy to reorganize. In April 2017,  
25 Venoco again filed for bankruptcy and subsequently began liquidation of its assets  
26 which included quitclaiming its oil and gas leases back to the State of California. Lease  
27 PRC 421 and the associated two wells and pier structures were among the assets  
28 turned over to the State.

29 **4.10.1.2 Project Parcels and Sandpiper Golf Course Easements**

30 Several parcels are included in the Project area. The PRC 421 piers/wells (below the  
31 mean high tide line [MHTL] last surveyed in 2018) are within the jurisdiction of CSLC  
32 (Figure 1-2). All other Project components above the MHTL, such as the easements  
33 with Sandpiper Golf Course (APN 079-210-059) for the access roadway leading to the  
34 PRC 421 piers and the pipelines from Platform Holly and PRC 421, are under the  
35 jurisdiction of the city of Goleta. Due to the Venoco bankruptcy, CSLC currently

- 1 contracts for staffing the property that the EOF occupies (Assessor's Parcel Number
- 2 [APN] 079-210-042).

**Figure 4.10-1. Jurisdictional Land Use**



1 4.10.1.3 City of Goleta Land Use and Zoning Designations

2 **Land Use Designations.** Although it has been historically utilized in support of oil and  
3 gas processing activities, all of the Project components are located within an area that  
4 has been designated by the city of Goleta for Open Space/Active Recreation.  
5 Surrounding land uses include the Bacara Resort to the west, which is designated in  
6 support of Visitor Serving Uses. The area adjacent to the east of Sandpiper Golf Course  
7 along Ellwood Mesa has been designated in support of Open Space/Passive  
8 Recreation (City of Goleta 2006c).

9 **Zoning Designations.** In accordance with the land use designations noted above, the  
10 Project area has been zoned within the city’s Coastal Zoning Ordinance (Article II,  
11 Chapter 35, Goleta Municipal Code) as (OSAR) Open Space – Active Recreation (City  
12 of Goleta 2020). Similarly, the surrounding land uses include the Bacara Resort, zoned  
13 as a Commercial District or VS (Visitor Serving Commercial), and the Ellwood Mesa  
14 area has been zoned OSPR (Open Space – Passive Recreation).

15 **4.10.2 Regulatory Setting**

16 There are no federal regulations, authorities, or administering agencies that regulate  
17 land use that are specifically applicable to the Project. State laws, regulations, and  
18 policies regarding land use including California Coastal Act Chapter 3, Sections 30220,  
19 30221, 30222, 30223, and 30224 are discussed below and in Appendix B. Local laws,  
20 regulations, and policies are also discussed below.

21 4.10.2.1 California State Lands Commission

22 The CSLC has jurisdiction and management authority over all ungranted tidelands,  
23 submerged lands, and the beds of navigable lakes and waterways. All tidelands and  
24 submerged lands, granted or ungranted, as well as navigable lakes and waterways, are  
25 subject to the protections of the Common Law Public Trust. In this case, CSLC is also  
26 the Project applicant, as the Project components were quitclaimed back to the State of  
27 California following the Venoco bankruptcy and liquidation of its assets.

28 4.10.2.2 California Coastal Commission

29 The CCC was established in 1972 and made permanent through adoption of the  
30 California Coastal Act in 1976. The CCC, in partnership with coastal cities and counties,  
31 plans and regulates the use of land and water in the coastal zone. Development  
32 activities, which are broadly defined by the California Coastal Act to include (among  
33 others) construction of buildings, divisions of land, and activities that change the  
34 intensity of use of land or public access to coastal waters, generally require a coastal  
35 development permit from either the CCC or the local government. Implementation of  
36 California Coastal Act policies is accomplished primarily through the preparation of local

1 coastal programs (LCPs) that are required to be completed by each of the counties and  
2 cities located in whole or in part in the coastal zone. Completed LCPs must be  
3 submitted to the CCC for review and approval. Following certification of an LCP, coastal  
4 development permit authority is delegated to the local jurisdiction, but the CCC retains  
5 original permit jurisdiction over certain specified lands (such as tidelands and public  
6 trust lands). The CCC also has appellate authority over development approved by local  
7 governments in specified geographic areas as well as certain other developments (e.g.,  
8 oil and gas projects). The city of Goleta has submitted their LCP to the CCC for  
9 certification, which is pending, and as such, Project components within the coastal zone  
10 of the city would require a coastal development permit from the CCC. The standard of  
11 review for the CCC includes the policies included in Chapter 3 of the California Coastal  
12 Act.

#### 13 4.10.2.3 City of Goleta

14 **General Plan/Coastal Land Use Plan.** The city of Goleta General Plan (GP)/Coastal  
15 Land Use Plan (CLUP) was adopted on October 2, 2006 and governs land use and  
16 physical development within the city limits. The Coastal Zone portions of the GP/CLUP  
17 have not yet been certified by the CCC. Until these portions of the GP/CLUP are  
18 certified, the CCC retains jurisdiction over the Coastal Zone within the city of Goleta.

19 The city of Goleta GP/CLUP includes a number of elements that contain goals and  
20 policies intended to guide development within the city. In order to determine potential  
21 land use impacts that could result from the proposed Project, review of the General Plan  
22 Land Use Element (2006c, last updated 2019), Open Space Element (2006b, last  
23 updated 2017), and Conservation Element (2006, last updated 2009) was conducted.  
24 Table 4.10-1 includes a summary of applicable city of Goleta land use policies and the  
25 Project's consistency with these elements. Additionally, Project consistency with other  
26 General Plan Elements (including the Visual and Historic Resources Element, Safety  
27 Element, Noise Element, Public Facilities Element, and Transportation Element) has  
28 been considered within each of their respective impact analysis sections.

29 **Coastal Zoning Ordinance (1997).** The following provisions of the Coastal Zoning  
30 Ordinance are most applicable to the Project:

- 31 • **Section 35-61: Beach Development.** Prohibits permanent above-ground  
32 structures on the dry sandy beach except facilities necessary for public health  
33 and safety, such as lifeguard towers, or where such restriction would cause the  
34 inverse condemnation of the lot by the county. This section also requires all new  
35 development between the first public road and the ocean to grant lateral  
36 easements to allow for public access along the shoreline. In coastal areas, where  
37 the bluffs exceed 5 feet in height, the lateral easement shall include all beach  
38 seaward of the base of the bluff.

- 1       • **Section 35-67: Bluff Development.** This standard provides minimum setbacks  
2       for new development from the bluff edge. Requirement 4 includes that  
3       “development and activity of any kind beyond the required blufftop setback shall  
4       be constructed to ensure that all surface and subsurface drainage shall not  
5       contribute to the erosion of the bluff face or the stability of the bluff itself”.
- 6       • **Section 35-89: Recreation District.** This district provides open space for  
7       various forms of outdoor recreation of either a public or private nature. The intent  
8       is to encourage outdoor recreational uses which will protect and enhance areas  
9       which have both active and passive recreation potential because of their beauty  
10      and natural features. No permits for development including grading shall be  
11      issued except in conformance with an approved Final Development Plan, as  
12      provided in Sec. 35-174 (Development Plans), and with Sec. 35-169 (Coastal  
13      Development Permits).

#### 14   **4.10.3   Significance Criteria**

15   Land use impacts are considered to be significant if the Project would result in:

- 16       • Conflicts with adopted land use plans, policies, or ordinances, including the  
17       California Coastal Act and city of Goleta GP/CLUP and zoning ordinance
- 18       • Incompatible adjacent land uses as defined by planning documentation

#### 19   **4.10.4   Impact Analysis and Mitigation**

20 <b>Impact LU-1: Temporary Conflicts with State and Local Policies</b>
--

21   Project decommissioning activities would have the potential to result in temporary 22   conflicts with State and local policies ( <b>Less than Significant with Mitigation</b> ).
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#### 23   **Impact Discussion**

##### 24   Components 1 and 2

25   **City of Goleta General Plan.** The proposed Project objective includes  
26   decommissioning of the piers, caissons, and remaining portions of the wells (the riser  
27   pipe from the top of the cement plug and wellheads) and other infrastructure, including  
28   the pipelines within the access roadway and golf course back to the tie-in points just  
29   outside of the EOF at the 12<sup>th</sup> tee, and the access roadway and supporting rock  
30   revetment. Some of these structures now represent a physical coastal obstruction, a  
31   potential public safety hazard, and a potential environmental hazard represented by the  
32   known presence of hydrocarbon-impacted soil and fill contained within the pier caissons  
33   and access roadway as well as wood preservatives in the wooden seawall. The removal  
34   of these structures would be a significant public benefit, would allow full use of the

1 beach coastline by the public, and would eliminate an existing threat to public safety  
 2 and the environment.

3 As shown in Table 4.10-1, implementation of the Project would be consistent with all  
 4 applicable city policies and meets the intention of policies intended to return the Project  
 5 area to a natural condition following completion of the former oil and gas activities.  
 6 Additionally, removal of the 421-1 and 421-2 piers and caissons/wells would restore  
 7 public access to this portion of Haskell’s Beach and improve the aesthetic value of this  
 8 stretch of coastline.

9 However, implementation of the proposed Project would also include elements that are  
 10 potentially inconsistent with some Sections of the California Coastal Act and the city of  
 11 Goleta General Plan policies contained within the Land Use and Conservation Elements  
 12 and require mitigation measures to reduce this potential impact to be less than  
 13 significant. During decommissioning, construction equipment would be present for  
 14 approximately 143 days during Component 1 and 63 days during Component 2. Each  
 15 component would have the potential to result in short-term construction disturbances  
 16 such as noise, lighting, air quality impacts, potential disturbance to biological resources,  
 17 and potential impacts resulting from water quality sedimentation, pollution, or runoff.  
 18 Specifically, during decommissioning activities, residual soil within the 421-1 and 421-2  
 19 caissons and access roadway may include contamination that would have the potential  
 20 to come into contact with the marine environment. Additionally, there are several  
 21 ESHAs in the Project vicinity, including Bell Canyon Creek located adjacent to the  
 22 western boundary of the EOF and Project access/staging areas, a wetland located  
 23 adjacent to the access roadway north of PRC 421-2, and rocky intertidal areas offshore.  
 24 During construction, temporary impacts to ESHAs may occur due to indirect  
 25 construction disturbances such as noise and lighting. Additionally, Component 2 would  
 26 require removal of the access roadway that would result in potential impacts to the  
 27 existing wetland area.

28 During construction, Project design and mitigation measures would reduce the potential  
 29 for these impacts as further described in Sections 4.1, *Aesthetics*; 4.2, *Air Quality*; 4.3,  
 30 *Biological Resources*; 4.8, *Hazards and Hazardous Materials*; 4.9, *Hydrology and Water*  
 31 *Quality*; and 4.13, *Recreation* as summarized in Table 4.10-1 below. The Project would  
 32 remain consistent with applicable land use policies and a less than significant impact  
 33 would result following implementation of mitigation as noted in Table 4.10-1.

**Table 4.10-1. Policy Consistency Evaluation**

Policy	Consistency Evaluation
<b>California Coastal Act (CCA)</b>	
Section 30211: Development not to interfere with access. Development shall not interfere with the public's right of	The proposed Project would not require the construction of any permanent structure that would interfere with the

Policy	Consistency Evaluation
<p>access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.</p>	<p>public’s right of access to the sea. However, the Project would include removal of the existing facilities within PRC 421, which would require construction equipment to work adjacent to and on Haskell’s Beach for about 5 months during Component 1 and about 3 months during Component 2. During this time, public access may be partially impeded along this stretch of beach to safely accommodate large construction equipment and work activities, however the beach area outside of the work zone would remain open east and west of the Project site(s). <b>MM REC-1</b> is provided to maximize beach access during Component 1 activities. Following completion of the Project, the Project site would be returned to natural conditions, which would result in additional beach area for the public to access. Therefore, the Project is consistent with this Section of the CCA.</p>
<p>Section 30230: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.</p>	<p>The Project is located in and adjacent to Haskell’s Beach and the Pacific Ocean. Decommissioning activities would be limited to the areas of original installation for the 421-1 and 421-2 pier and caissons/wells (Component 1) as well as the rock revetment, access road, and wooden seawall (Component 2) within this area. During decommissioning activities, residual soil within the 421-1 and 421-2 caissons and access roadway may include contamination that would have the potential to come into contact with the marine environment. Additionally, implementation of Component 2 would have the potential to impact the existing wetland area located adjacent to the north of Pier 421-2. During construction, Project design and mitigation measures including, but not limited to <b>MMs HAZ-1a through MM HAZ-1c, MM HAZ-2, MM HWQ-1, MMs BIO-3a through MM BIO-</b></p>

Policy	Consistency Evaluation
	<p><b>3e</b> would reduce the potential for impacts to marine resources. Therefore, the Project would remain consistent with this Section of the CCA.</p>
<p>Section 30231: The biological productivity and the quality of coastal waters, creeks, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural creeks.</p>	<p>Decommissioning activities are anticipated to result in small-scale, temporary increases in turbidity. However, best management practices would be implemented to reduce sedimentation and runoff (<b>MM HWQ-1</b>). Potentially significant water quality impacts could also result from the inadvertent release of petroleum products from the equipment. Should a spill occur, the facilities Oil Spill Contingency Plan (<b>MM HAZ-1c</b>) would be executed immediately to reduce impacts to less than significant. In the absence of proper controls, ground disturbance associated with removal of the facilities or potentially contaminated soil in the caissons or access roadway would have the potential to impact surface water quality. However, construction would be short term in nature; and implementation of Project design and mitigation measures including, but not limited to <b>MMs HAZ-1a</b> through <b>MM HAZ-1c</b>, <b>MM HAZ-2</b>, and <b>MM HWQ-1</b> would reduce the potential for impacts. Additionally, the area would return to its pre-Project condition following completion of decommissioning activities. The Project would therefore be consistent with this Section of the CCA.</p>
<p>Section 30232: Oil and hazardous substance spills. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.</p>	<p>Decommissioning activities would utilize diesel-fueled equipment and carry materials that would have the potential to contribute to impacts related to a release of hazards and hazardous materials. As such, the facilities existing Oil Spill Contingency Plan (OSCP) (<b>MM HAZ-1c</b>) would be adhered to during all work activities. The OSCP includes preventative measures, as well as</p>

Policy	Consistency Evaluation
	<p>procedures to be followed in the event of a spill, including hydraulic fluids as well as fuel and other types of oil spills onshore.</p> <p>Project design considerations as well as appropriate noticing, and adherence to the approved OSCP would be implemented to avoid a potential spill. In the event of an accidental petroleum release, the containment and cleanup measures specified in the OSCP would reduce effects to the greatest extent possible. Therefore, the Project would be consistent with this Section of the CCA.</p>
<p>Section 30240: (a) Environmentally sensitive habitat areas (ESHAs) be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.</p>	<p>There are several ESHAs in the Project vicinity, including Bell Canyon Creek located adjacent to the western boundary of the EOF and Project access/staging areas, a wetland located adjacent to the access roadway north of PRC 421-2, and rocky intertidal areas offshore. During construction, temporary impacts to ESHAs would have the potential to result due to indirect construction disturbances such as noise and lighting. Additionally, Component 2 would require removal of the access roadway resulting in potential impacts to the existing wetland area, however <b>MM BIO-3a</b> and <b>MM BIO-3b</b> are proposed to reduce potential impacts to wetlands. Additionally, <b>MM BIO-6a</b> has been proposed to compensate for the loss of terrestrial ESHA bluff scrub habitat and <b>MM BIO-6b</b> has been proposed to avoid the southern foredunes. As such, the Project would be consistent with this Section of the CCA.</p>
<p>Section 30251: Scenic and visual qualities. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal</p>	<p>Construction activities associated with Project implementation would have potentially significant short-term impacts to the visual quality of the Project area. The existing visual environment would be temporarily degraded during decommissioning activities during</p>

Policy	Consistency Evaluation
<p>areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.</p>	<p>Component 1 and Component 2 from the presence of heavy construction equipment (e.g., excavators, crane) and stockpiles/bins of materials placed in the staging area(s) prior to transport offsite. This visual impact would be present for about 5 months during Component 1 and an additional 3 months during Component 2. Additionally, in some instances during Component 1, night lighting may be required to take advantage of nighttime low tide periods.</p> <p>Although the addition of heavy equipment during demolition would introduce additional industrial elements to the existing environment, it is important to note that it is not out of the existing visual character at the Project site to have equipment present in these locations. Additionally, mitigation measures have been included to minimize the presence of construction equipment within the viewshed, as well as limit the use of night lighting during decommissioning. The Project would return the site to natural conditions. The Project is consistent with this Section of the CCA.</p>
<p><b>City of Goleta General Plan – Land Use Element</b></p>	
<p>Policy LU 1.7: New Developments and Protection of Environmental Resources. Approvals of all new development shall require adherence to high environmental standards and the preservation and protection of environmental resources, such as environmentally sensitive habitats, consistent with the standards set forth in the Conservation Element and the City’s Zoning Code.</p>	<p>Consistent. See Response to CCA Policy 30240 above regarding ESHAs.</p>
<p>Policy LU 6.3: Open Space/Active Recreation. This designation is intended to identify existing or planned areas for public parks and active recreational activities and facilities, such as</p>	<p>The Project would include removal of the existing facilities within PRC 421, which would require construction equipment to work adjacent to Haskell’s Beach for about 5 months during Component 1 and</p>

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<p>playgrounds, picnic areas, tennis courts, ballparks, and sports fields. This use category is also intended to apply to significant private outdoor recreational facilities, such as golf courses and privately owned parks. Individual recreational areas may include a mix of passive and active recreational features or improvements. Appropriate caretaker facilities and residences may also be allowed if consistent with the character of the planned uses. The designation may also include storm drainage facilities.</p>	<p>about 3 months during Component 2. During this time, public access may be partially impeded along this stretch of beach to safely accommodate large construction equipment and work activities, however the beach area outside of the work zone would remain open east and west of the Project site(s). Following decommissioning activities, the Project site would be returned to natural conditions and would be consistent with the Open Space/Active Recreation designation outlined in Policy LU 6.3.</p>
<p>Policy LU 9.2: Site #2 – Coastal Recreation. This parcel, occupied as of 2005 by the Venoco EOF, is designated in the Open Space/Active Recreation use category. The requirements applicable to this site are as follows:</p> <ul style="list-style-type: none"> <li>a. The Recreation designation shall continue the nonconforming status of the existing use. The use was nonconforming at the time of incorporation of the city of Goleta. Its nonconforming status dates to the early 1990s when the property’s zoning was changed by the County of Santa Barbara to the Recreation District as part of a plan to consolidate onshore oil and gas processing at the Las Flores Canyon site in the unincorporated area west of Goleta.</li> <li>d. Upon termination of the oil and gas processing use, the priority use for the site shall be coastal-dependent and coastal-related recreational uses that are conducted primarily outdoors or limited to small-scale structures. Adequate onsite parking shall be provided to serve all recreational uses (see related Policy OS 2).</li> </ul>	<p>See Response to LU 6.3 above. Following completion of the Project, the Project site would be returned to natural conditions and would be consistent with the Coastal Recreation provisions of Policy LU 9.2.</p>
<p>Policy LU 10: Energy-Related On- and Off-Shore Uses Objective: To promote the discontinuation of onshore processing</p>	<p>The Project purpose is removal of an unused and abandoned oil and gas facility. Following removal, the Project site</p>

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<p>and transport facilities for oil and gas, the removal of unused or abandoned facilities, and the restoration of areas affected by existing or former oil and gas facilities within the city.</p>	<p>would be returned to natural conditions and is consistent with Policy LU 10.</p>
<p>Policy LU 10.2: Decommissioning of the Venoco Ellwood Onshore Oil and Gas Processing Facility. The following requirements shall apply to the cessation of operations and decommissioning of the facility:</p> <p>a. Within 12 months of cessation of operations, the existing owner/operator shall submit an Abandonment Plan application for City review and approval. The Abandonment Plan shall include a detailed description of all decommissioning work and site restoration, including, but not limited to, remediation of soil and groundwater contamination if required by the City or County Fire Department. Removal of all oil and gas facilities and debris from the site shall be required, except where such removal would result in greater adverse impacts than abandonment in place. Disposition of all materials shall be at a properly licensed disposal site and in compliance with any applicable requirements. The estimated cost of the decommissioning work shall be deposited to an escrow account no later than the time the Abandonment Plan is submitted to the City.</p> <p>c. The owner/operator shall commence the decommissioning activities within 2 years of the cessation of operations and shall complete removal of all oil and gas facilities within 2 years following the start of the decommissioning project.</p>	<p>Removal of the EOF is not included as part of the proposed Project. However, the proposed decommissioning activities are intended to partially fulfill the outlined decommissioning requirements. The Project is consistent with Policy LU 10.2.</p>

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<p>d. Decommissioning shall include restoration of the EOF site to a natural condition or to a condition that is suitable for the uses and development that are allowed within the Open Space/Active Recreation use category designated for the property. Restoration shall include recontouring the site, if appropriate, and revegetation with suitable native plant material. The restoration plan shall be prepared by the owner/operator and shall be subject to review and approval by the City</p>	
<p>Policy LU 10.4: State Lands Commission Lease 421. Two idle wells, one for oil production and one for wastewater injection, and related piers exist as of 2005 in state tidelands at the Pacific shoreline below the Sandpiper Golf Course property. These are the last two remaining shoreline oil wells in the state. Production has been idled since 1994 when the former owner/operator stopped operations following a pipeline rupture and oil spill. The location of the wells within the tidal zone results in a risk of discharge of oil into the seawater in the event of failure of the wells or their components. S.L. 421 is served by several onshore facilities, including pipelines and an access roadway protected by a riprap seawall at the base of the bluff. The current owner, Venoco, has an interest in recommissioning production at the idled oil well. The following policy applies to S.L. 421 and the related onshore facilities (only those applicable included):</p> <p>a. The City’s intent is that oil production not be recommenced at S.L. 421 because of the environmental hazards posed by the resumption of oil production and processing over coastal waters and the impacts to</p>	<p>In accordance with Policy LU 10.4, the proposed Project includes decommissioning and removal of Pier 421-1 and 421-2 and the associated caissons/wells within Lease 421. Component 2 includes proposed removal of the rock revetment and wooden seawall within this area. Following removal, the site would be returned to natural conditions.</p>

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<p>visual resources and recreation at the beach. Unless it is determined that there is a vested right to resume production at S.L. 421, the City supports termination of the lease by the State Lands Commission (SLC) and/or a quitclaim of the lease by the owner/operator.</p> <p>c. Decommissioning and proper abandonment of S.L. 421 facilities, including the piers and riprap seawall, shall be required concurrent with decommissioning of the EOF or immediately upon termination of S.L. 421.</p> <p>d. Decommissioning work shall include restoration of the site to its natural pre-Project conditions.</p>	
<p><b>City of Goleta General Plan – Open Space Element</b></p>	
<p>Policy OS 1.3: Preservation of Existing Coastal Access and Recreation. Goleta’s limited Pacific shoreline of approximately 2 miles provides a treasured and scarce recreational resource for residents of the city, region, and State. Existing public beaches, shoreline, parklands, trails, and coastal access facilities shall be protected and preserved and shall be expanded or enhanced where feasible.</p>	<p>Removal of the 421-1 and 421-2 piers and caissons/wells would restore this section of beach to natural conditions and provide additional area of public access to the beach. The Project is consistent with Policy OS 1.3.</p>
<p>Policy OS 1.4: Minimization of Impacts to Lateral Coastal Access. New development, including expansions and/or alterations of existing development, shall be sited and designed to avoid impacts to public access and recreation along the beach and shoreline. If there is no feasible alternative that can eliminate all access impacts, then the alternative that would result in the least significant adverse impact shall be required. Impacts shall be mitigated through the dedication of an access and/or trail easement where the Project</p>	<p>The Project would include removal of the existing facilities within PRC 421, which would require construction equipment to work adjacent to Haskell’s Beach for about 5 months during Component 1 and about 3 months during Component 2. During this time, public access may be partially impeded along this stretch of beach to safely accommodate large construction equipment and work activities, however the beach area outside of the work zone would remain open east and west of the Project site(s).</p>

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<p>site encompasses an existing or planned coastal access way.</p>	<p>Following decommissioning activities, the Project site would be returned to natural conditions. The Project is therefore consistent with Policy OS 1.4.</p>
<p>Policy OS 2.3: Preservation of Existing Vertical Accessways. Vertical access to Goleta’s Pacific shoreline was limited to two locations as of 2005. These include access to Haskell’s Beach within the Bacara Resort property and access at the City-owned Santa Barbara Shores Park and Sperling Preserve properties. The latter includes numerous trails that provide access to the bluff tops, although access from the bluff top to Ellwood Beach is available at only two locations. Existing public vertical coastal access facilities shall be protected and preserved and shall be expanded or enhanced where feasible.</p>	<p>See response to OS 1.4 above. The Project would not preclude vertical public access to Haskell’s Beach from the Bacara Resort property or from the bluffs to Ellwood Beach. The Project is consistent with Policy OS 2.3.</p>
<p><b>City of Goleta General Plan – Conservation Element</b></p>	
<p>Policy CE 1.6: Protection of ESHAs. ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within ESHAs or their buffers. The following shall apply:</p> <ul style="list-style-type: none"> <li>a. No development, except as otherwise allowed by this element, shall be allowed within ESHAs.</li> <li>b. A setback or buffer separating all permitted development from an adjacent ESHA shall be required and shall have a minimum width as set forth in subsequent policies of this element. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area.</li> </ul>	<p>Consistent. See Response to CCA Policy 30240 above regarding ESHAs.</p>
<p>Policy CE 1.8: ESHA Buffers. Development adjacent to an ESHA shall</p>	<p>Consistent. See Response to CCA Policy 30240 above regarding ESHAs.</p>

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<p>minimize impacts to habitat values or sensitive species to the maximum extent feasible. Native vegetation shall be provided in buffer areas to serve as transitional habitat. All buffers shall be of a sufficient size to ensure the biological integrity and preservation of the ESHA they are designed to protect.</p>	
<p>Policy CE 1.9: Standards Applicable to Development Projects. The following standards shall apply to consideration of developments within or adjacent to ESHAs (applicable policies included):</p> <ul style="list-style-type: none"> <li>d. All new development shall be sited and designed so as to minimize grading, alteration of natural landforms and physical features, and vegetation clearance in order to reduce or avoid soil erosion, creek siltation, increased runoff, and reduced infiltration of stormwater and to prevent net increases in baseline flows for any receiving water body.</li> <li>e. Light and glare from new development shall be controlled and directed away from wildlife habitats. Exterior night lighting shall be minimized, restricted to low intensity fixtures, shielded, and directed away from ESHAs.</li> <li>f. All new development should minimize potentially significant noise impacts on special-status species in adjacent ESHAs.</li> <li>h. The timing of grading and construction activities shall be controlled to minimize potential disruption of wildlife during critical time periods such as nesting or breeding seasons.</li> <li>i. Grading, earthmoving, and vegetation clearance adjacent to an ESHA shall be prohibited during the rainy season, generally from November 1 to March 31, except as follows: 1) where erosion control measures such as</li> </ul>	<ul style="list-style-type: none"> <li>d. Decommissioning activities are anticipated to result in small-scale, temporary increases in turbidity. However, best management practices included in <b>MM HWQ-1</b> would be implemented to reduce sedimentation and runoff.</li> <li>e. In some instances during Component 1, night lighting may be required to accommodate tidal fluctuations in the Project construction schedule. However, mitigation measures have been included to limit the use of night lighting during decommissioning.</li> <li>f. Project activities are short term in nature and primarily limited to daytime hours. The Project is not anticipated to have significant noise impacts that would have the potential to affect sensitive species in the adjacent ESHAs.</li> <li>h. <b>MM BIO-1</b> has been proposed to mitigate potential disruption to active cliff swallow nests under Pier 421-1. <b>MM BIO-2</b> has been proposed to mitigate potential disturbance to bats. Additionally, <b>MM BIO-4</b> has been proposed to ensure avoidance/protection during grunion spawning season. Less than significant impacts during construction would result.</li> <li>i/j. Work activities would be conducted when sand conditions provide optimal access for demolition of the 421-1 and 421-2 piers and caissons/wells. Best</li> </ul>

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<p>sediment basins, silt fencing, sandbagging, or installation of geofabrics have been incorporated into the project and approved in advance by the City; 2) where necessary to protect or enhance the ESHA itself; or 3) where necessary to remediate hazardous flooding or geologic conditions that endanger public health and safety.</p> <p>j. In areas that are not adjacent to ESHAs, where grading may be allowed during the rainy season, erosion control measures such as sediment basins, silt fencing, sandbagging, and installation of geofabrics shall be implemented prior to and concurrent with all grading operations.</p>	<p>management practices with respect to erosion and siltation would be incorporated in <b>MM HWQ-1</b> during all work activities, regardless of season.</p>
<p>Policy CE 3.1: Definition of Wetlands. Wetlands are defined as any area that meets the definition of a wetland as defined by the California Coastal Commission, California Department of Fish and Game, and U.S. Fish and Wildlife Service. The most protective of definitions shall be applied and used to determine the boundary of a wetland. The city of Goleta uses the identification of a single indicator (soil, hydrology, or plants) to determine the boundary of a wetland</p>	<p>Wetlands located onsite have been determined through field reconnaissance as described in Section 4.3 (Biological Resources). This survey was conducted in accordance with the definition outlined in Policy 3.1. See Appendix F for Wetland Delineation Report.</p>
<p>Policy CE 3.4: Protection of Wetlands in the Coastal Zone. The biological productivity and the quality of wetlands shall be protected and, where feasible, restored in accordance with the federal and state regulations and policies that apply to wetlands within the Coastal Zone. Only uses permitted by the regulating agencies shall be allowed within wetlands. The filling, diking, or dredging of open coastal waters, wetlands, estuaries, and lakes is</p>	<p>Project Component 2 would require removal of a portion of the existing pier access roadway that would have the potential to diminish the existing wetlands located behind 421-2. Additionally, a 100 foot buffer from this wetland would not be feasible in order to fulfill the Project objectives and complete decommissioning activities. As such, <b>MM BIO-5a</b> and <b>MM BIO-5b</b> have been proposed to reduce the potential impacts to these wetlands. With incorporation of these mitigation measures, potential</p>

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<p>prohibited unless it can be demonstrated that:</p> <ol style="list-style-type: none"> <li>a. There is no feasible, environmentally less damaging alternative to wetland fill.</li> <li>b. The extent of the fill is the least amount necessary to allow development of the permitted use.</li> <li>c. Mitigation measures have been provided to minimize adverse environmental effects.</li> <li>d. The purposes of the fill are limited to: incidental public services, such as burying cables or pipes; restoration of wetlands; and nature study, education, or similar resource-dependent activities.</li> </ol> <p>A wetland buffer of a sufficient size to ensure the biological integrity and preservation of the wetland shall be required. Generally, the required buffer shall be 100 feet, but in no case shall wetland buffers be less than 50 feet. The buffer size should take into consideration the type and size of the development, the sensitivity of the wetland resources to detrimental edge effects of the development to the resources, natural features such as topography, the functions and values of the wetland, and the need for upland transitional habitat. A 100-foot minimum buffer area shall not be reduced when it serves the functions and values of slowing and absorbing flood waters for flood and erosion control, sediment filtration, water purification, and ground water recharge. The buffer area shall serve as transitional habitat with native vegetation and shall provide physical barriers to human intrusion.</p>	<p>impacts would be reduced to less than significant levels. Following mitigation, the Project would be consistent with Policy CE 3.4.</p>
<p>Policy CE 3.6: Mitigation of Wetland Fill. Where any dike or fill development is permitted in wetlands in accordance with the Coastal Act and the policies of this</p>	<p>See response to CE 3.4 above.</p>

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<p>plan, at a minimum; mitigation measures shall include creation or substantial restoration of wetlands of a similar type. Adverse impacts shall be mitigated at a ratio of 3:1 unless the project proponent provides evidence that the creation or restoration of a lesser area of wetlands will fully mitigate the adverse impacts of the fill. However, in no event shall the mitigation ratio be less than 2:1. All mitigation measures are subject to the requirements of CE 1.7.</p>	
<p>Policy CE 3.7: Lagoon Protection. The lagoons at the mouths of Bell Canyon and Tecolote Creeks shall be protected. Lagoon breaching or water level modification shall not be allowed.</p>	<p>During construction, an equipment access ramp would be created near the entrance to the existing pier access roadway. Alternatively, equipment may access the Project site from the existing Bacara Resort fire road. In this case, equipment and personnel would have to cross the Bell Canyon Creek area in route to the Project site. However, during the proposed Project timing during the summer months, Bell Canyon Creek is not anticipated to be outflowing or connected to the Pacific Ocean, therefore no crossing of the Creek waters would be required. Given the proposed Project timing, the Project would be consistent with Policy CE 3.7.</p>
<p>Policy CE 6.2: Protection of Marine ESHAs. The following protections shall apply to marine ESHAs (applicable provisions noted):</p> <ul style="list-style-type: none"> <li>a. Marine ESHAs shall be protected against significant disruption of habitat values, and only uses dependent on such resources, such as fishing, whale watching, ocean kayaking, and similar recreational activities, shall be allowed within the offshore area.</li> <li>b. All existing oil and gas production facilities, including platform Holly and the piers at PRC 421, shall be decommissioned immediately upon</li> </ul>	<ul style="list-style-type: none"> <li>a. Consistent. See Response to CCA Policy 30240 above regarding ESHAs.</li> <li>b. The proposed Project would include decommissioning of the 421 piers and caissons/wells. Removal would return the Project site to its natural conditions, which is consistent with subpart b.) to Policy CE 6.2.</li> </ul>

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<p>termination of production activities. All facilities and debris shall be completely removed and the sites restored to their prior natural condition as part of the decommissioning activities. No new oil and gas leases or facilities shall be allowed within State waters offshore from Goleta.</p> <p>f. Near-shore shallow fish habitats and shore fishing areas shall be preserved and, where appropriate and feasible, enhanced.</p>	
<p>Policy CE 7.6: Restoration of Degraded Shoreline Areas. Removal of existing beach and shoreline structures, such as seawalls, roadways, and riprap, and removal of remnants of shoreline oil and gas facilities are allowed and encouraged activities. Such areas shall be restored to a natural condition.</p>	<p>Decommissioning activities would include removal of the 421-1 and 421-2 pier and caissons/wells (Component 1) as well as the rock revetment and wooden seawall (Component 2) and restoration of the area to a natural condition. These activities are consistent with Policy CE 7.6.</p>
<p>Policy CE 10.5: Beachfront and Blufftop Development. Development adjacent to the beach or blufftop shall incorporate BMPs designed to prevent or minimize polluted runoff to the beach and ocean waters.</p>	<p>Decommissioning activities are anticipated to result in small-scale, temporary increases in turbidity. However, best management practices included within <b>MM HWQ-1</b> would be implemented to reduce sedimentation and runoff. Potentially significant water quality impacts could also result from the inadvertent release of petroleum products from the equipment. Should a spill occur, the facility Oil Spill Contingency Plan (<b>MM HAZ-1c</b>) would be executed immediately to reduce impacts to less than significant. In the absence of proper controls, ground disturbance associated with removal of the facilities or hydrocarbon impacted soil in the caissons or access roadway would have the potential to impact surface water quality. <b>MMs HAZ-1a</b> through <b>MM HAZ-1c</b> as well as <b>MM HWQ-1</b> would be implemented to reduce the potential for exposure to the marine environment. Additionally, construction would be short term in nature; and the area would return</p>

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	to its pre-Project condition following completion of decommissioning activities. Following implementation of the proposed mitigation, the Project would be consistent with Policy CE 10.5.
<p>Policy CE 12.3: Control of Emissions During Grading and Construction. Construction site emissions shall be controlled by using the following measures:</p> <ol style="list-style-type: none"> <li>a. Watering active construction areas to reduce windborne emissions.</li> <li>b. Covering trucks hauling soil, sand, and other loose materials.</li> <li>c. Paving or applying nontoxic solid stabilizers on unpaved access roads and temporary parking areas.</li> <li>d. Hydroseeding inactive construction areas.</li> <li>e. Enclosing or covering open material stockpiles.</li> <li>f. Revegetating graded areas immediately upon completion of work</li> </ol>	<p>The Project would not result in emissions above the established thresholds. Although not required since Project-related emissions would not exceed the significance threshold, implementation of emissions reduction measures recommended by the SBCAPCD would reduce air pollutant emissions and may facilitate attainment of the State 8-hour ozone standard. <b>MM AQ-1a</b> and <b>MM AQ-1b</b> would enforce fugitive dust control and equipment exhaust reduction measures in order to minimize emissions during demolition activities. The Project would be consistent with Policy CE 12.3.</p>
<p>Policy CE 15.5: Reduction of Construction Wastes. In instances where demolitions of existing buildings and structures are authorized, it is encouraged that such structures be deconstructed and that structural components, fixtures, and materials be salvaged for future reuse. Provisions for recycling of waste materials at all construction sites, including and demolition sites shall be required.</p>	<p>The removal of fill and structural material from the Project site would require the use of a variety of trucks including vacuum trucks, bin transport trucks, half-round dump trucks and flatbed trailers, to facilitate the recycling and disposal of the different materials that comprise the 421 pier structures and caissons. Approximately 1,146 truck trips from the site have been estimated based on the volume of materials that make up the pier structures, access roadway, pipelines, and wooden seawall/rock revetment removal (Table 2-2). All steel materials would be taken to an appropriate waste receiving facility to be recycled. Therefore, the Project is consistent with Policy 15.5.</p>

1 **Mitigation Measures**

2 No further mitigation measures proposed.

3 The Project would be consistent with all applicable land use policies following  
4 implementation of the proposed mitigation measures included in Table 4.10-1.

5 **4.10.5 Cumulative Impacts Analysis**

6 Components 1 and 2

7 **Impact LU-2: Cumulative Impacts of Project Implementation**

8 Impacts to ESHAs and other sensitive biological resources during implementation would  
9 result in a potentially significant impact. When the cumulative environment is  
10 considered, the short-term contribution from the Project could be significant (**Less Than**  
11 **Significant with Mitigation**).

12 **Impact Discussion**

13 Cumulative impacts associated with the Project include the potential to create  
14 temporary or permanent land use impacts or policy inconsistencies to similar resources.  
15 Other projects anticipated to occur within the region that could contribute to potential  
16 construction impacts in the area include the Beach Hazards Removal Project and the  
17 Bacara Beach House Relocation Project. The Beach Hazards Removal Project  
18 (managed by CSLC) would also require the short-term introduction of construction  
19 equipment to remove existing derelict oil and gas remnants; however, no hazard  
20 removal projects are currently scheduled within the Project area during the proposed  
21 decommissioning timeframe. The Bacara Beach House Relocation Project is located  
22 adjacent to the Bacara Resort fire road access area. If this project were to occur at the  
23 same time as the proposed decommissioning activities, it would require the introduction  
24 of short-term construction equipment for demolition and construction activities. Use of  
25 construction equipment in this area would have similar short-term impacts as the Project  
26 and could contribute to cumulative impacts to air quality, sensitive biological resources,  
27 ESHAs, or localized water quality.

28 However, mitigation measures proposed within Sections 4.2, Air Quality; 4.3, Biological  
29 Resources; 4.8, Hazards and Hazardous Materials, and 4.9, Hydrology and Water  
30 Quality (as also shown under Impact LU-1) would reduce potential impacts of the  
31 Project to less than significant. As such, cumulative impacts due to inconsistencies with  
32 land use policies are not anticipated.

1 4.10.6 Summary of Impacts and Proposed Mitigation Measures

Table 4.10-3. Summary of Potential Land Use Impacts and Mitigation Measures

Impact	Mitigation Measures
<p><b>Impact LU-1:</b> Temporary Conflicts with State and Local Policies (Components 1 and 2)</p>	<p><b>MM AES-1a:</b> Overnight Storage of Equipment</p> <p><b>MM AES-1b:</b> Material Removal at Construction Completion</p> <p><b>MM AES-1c:</b> Minimize Night Lighting</p> <p><b>MM AQ-1a:</b> Fugitive Dust Control Measures</p> <p><b>MM AQ-1b:</b> Equipment Exhaust Emissions Reduction Measures</p> <p><b>MM BIO-1:</b> Avoidance of Active Cliff Swallow Nests</p> <p><b>MM BIO-2:</b> Transitional Bat Habitat</p> <p><b>MM BIO-3a:</b> Avoidance of Estuarine Waters/Tidewater Goby Relocation</p> <p><b>MM BIO-3b:</b> CRLF Fencing at the EOF</p> <p><b>MM BIO-3c:</b> Environmental Awareness Training</p> <p><b>MM BIO-3d:</b> Biological Pre-activity Surveys and Monitoring</p> <p><b>MM BIO-3e:</b> Delineation of Work Limits</p> <p><b>MM BIO-4:</b> Grunion Spawning Avoidance</p> <p><b>MM BIO-5a:</b> Coastal Wetlands Mitigation</p> <p><b>MM BIO-5b:</b> Retain Coastal Wetlands Adjacent to Pier 421-2</p> <p><b>MM BIO-6a:</b> Coastal Bluff Scrub Replacement</p> <p><b>MM BIO-6b:</b> Southern Foredunes Avoidance</p> <p><b>MM HAZ-1a:</b> Remedial Action Plan Implementation</p> <p><b>MM HAZ-1b:</b> Hydrocarbon Contaminated Soil Notification(s) and BMPs</p> <p><b>MM HAZ-1c:</b> Oil Spill Contingency Plan Implementation</p> <p><b>MM HWQ-1:</b> Storm Water Pollution Prevention Plan</p> <p><b>MM REC-1:</b> Maximize Beach Access</p>

Impact	Mitigation Measures
<b>Impact LU-2:</b> Cumulative Impacts of Project Construction (Components 1 and 2)	Same as above.

1 **4.11 NOISE**

2 **4.11.1 Environmental Setting**

3 4.11.1.1 Sound, Noise and Acoustics Background

4 Sound can be described as the mechanical energy of a vibrating object transmitted by  
5 pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such  
6 as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the  
7 science of acoustics, the fundamental model consists of a sound (or noise) source, a  
8 receiver, and the propagation path between the two. The loudness of the noise source  
9 and obstructions or atmospheric factors affecting the propagation path to the receiver  
10 determines the sound level and characteristics of the noise perceived by the receiver.  
11 The field of acoustics deals primarily with the propagation and control of sound.

12 Continuous sound can be described by frequency (pitch) and amplitude (loudness). A  
13 low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of  
14 cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred  
15 to as 250 Hz). High frequencies are sometimes more conveniently expressed in  
16 kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is  
17 generally between 20 Hz and 20,000 Hz.

18 The amplitude of pressure waves generated by a sound source determines the  
19 loudness of that source. Sound pressure amplitude is measured in micro-Pascals  
20 (mPa). One mPa is approximately one hundred-billionth (0.0000000001) of normal  
21 atmospheric pressure. Sound pressure amplitudes for different kinds of noise  
22 environments can range from less than 100 to 100,000,000 mPa. Because of this huge  
23 range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale  
24 is used to describe sound pressure level in terms of decibels (dB). The threshold of  
25 hearing for young people is about 0 dB, which corresponds to 20 mPa.

26 Because decibels are logarithmic units, sound pressure level cannot be added or  
27 subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound  
28 energy corresponds to a 3 dB increase. In other words, when two identical sources are  
29 each producing sound of the same loudness, the resulting sound level at a given  
30 distance would be 3 dB higher than one source under the same conditions. For  
31 example, if one automobile produces a sound pressure level of 70 dB when it passes an  
32 observer, two cars passing simultaneously would not produce 140 dB, they would  
33 combine to produce 73 dB. Under the decibel scale, three sources of equal loudness  
34 together produce a sound level 5 dB louder than one source.

1 The decibel scale alone does not adequately characterize how humans perceive noise.  
2 The dominant frequencies of a sound have a substantial effect on the human response  
3 to that sound. Although the intensity (energy per unit area) of the sound is a purely  
4 physical quantity, the loudness or human response is determined by the characteristics  
5 of the human ear. Human hearing is limited in the range of audible frequencies as well  
6 as in the way it perceives the sound pressure level in that range. In general, people are  
7 most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within  
8 that range better than sounds of the same amplitude in higher or lower frequencies. To  
9 approximate the response of the human ear, sound levels of individual frequency bands  
10 are weighted, depending on the human sensitivity to those frequencies. Then, an “A-  
11 weighted” sound level (expressed in units of dBA) can be computed based on this  
12 information.

13 The A-weighting network approximates the frequency response of the average young  
14 ear when listening to most ordinary sounds. When people make judgments of the  
15 relative loudness or annoyance of a sound, their judgments correlate well with the A-  
16 scale sound levels of those sounds. Other weighting networks have been devised to  
17 address high noise levels or other special problems (e.g., B-, C-, and D-scales), but  
18 these scales are rarely used in noise impact assessments. Noise levels for impact  
19 assessments are typically reported in terms of A-weighted decibels or dBA.

20 As discussed above, doubling sound energy results in a three dB increase in sound.  
21 However, given a sound level change measured with precise instrumentation, the  
22 subjective human perception of a doubling of loudness will usually be different than  
23 what is measured.

24 Under controlled conditions in an acoustical laboratory, the trained, healthy human ear  
25 is able to discern one dB changes in sound levels, when exposed to steady, single-  
26 frequency (“pure-tone”) signals in the midfrequency (1,000 Hz to 8,000 Hz) range. In  
27 typical noisy environments, changes in noise of one to two dB are generally not  
28 perceptible. However, it is widely accepted that people are able to begin to detect sound  
29 level increases of three dB in typical noisy environments. Further, a five dB increase is  
30 generally perceived as a distinctly noticeable increase, and a 10 dB increase is  
31 generally perceived as a doubling of loudness. Therefore, a doubling of sound energy  
32 (e.g., doubling the volume of traffic on a highway) that would result in a three dB  
33 increase in sound, would generally be perceived as barely detectable.

#### 34 4.11.1.2 Noise Descriptors

35 Noise in our daily environment fluctuates over time. Some fluctuations are minor, but  
36 some are substantial. Some noise levels occur in regular patterns, but others are  
37 random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary  
38 widely, but others are relatively constant. Various noise descriptors have been

1 developed to describe time-varying noise levels. The following are the noise descriptors  
2 most commonly used in community noise analysis.

- 3 • Equivalent Sound Level (Leq) represents an average of the sound energy  
4 occurring over a specified period. The one-hour A-weighted equivalent sound  
5 level (Leq) is the energy average of A-weighted sound levels occurring during a  
6 one-hour period.
- 7 • Percentile-Exceeded Sound Level represents the sound level exceeded for a  
8 given percentage of a specified period (e.g., L10 is the sound level exceeded 10  
9 percent of the time, and L90 is the sound level exceeded 90 percent of the time).
- 10 • Maximum Sound Level (Lmax) is the highest instantaneous sound level  
11 measured during a specified period.
- 12 • Day-Night Level (DNL) is the energy average of A-weighted sound levels  
13 occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted  
14 sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.  
15 This means that 10 dB is added to noise measured during nighttime hours before  
16 the data is processed to produce a 24-hour average. This noise descriptor  
17 accentuates the greater effect of nighttime noise.
- 18 • Community Noise Equivalent Level (CNEL) is the energy average of the A-  
19 weighted sound levels occurring over a 24-hour period, with a 10 dB penalty  
20 applied to A-weighted sound levels occurring during the nighttime hours between  
21 10:00 p.m. and 7:00 a.m., and a 5 dB penalty applied to the A-weighted sound  
22 levels occurring during evening hours between 7:00 p.m. and 10:00 p.m. This  
23 noise descriptor accentuates the greater effect of evening and nighttime noise.

#### 24 4.11.1.3 Project Noise Environment

25 The noise environment of areas potentially affected by the proposed Project is  
26 dominated by traffic noise generated by U.S. Highway 101 as well as local traffic on  
27 Hollister Avenue and other adjacent roadways. In addition, the Union Pacific Railroad  
28 tracks are located just south of U.S. Highway 101, and rail noise dominates the noise  
29 environment along this corridor for periods during train pass-throughs.

30 The city of Goleta considers noise sensitive land uses as residences, transient lodging,  
31 hospitals, nursing homes, schools, libraries, churches, and places of public assembly.  
32 Noise sensitive land uses near the Project site include:

- 33 • Residential land uses north of Hollister Avenue approximately 0.4 mile north-  
34 northeast of PRC 421-1
- 35 • Residential land uses on Island Oak Lane approximately 0.4 mile east of PRC  
36 421-1

1 • Ellwood Elementary School on Hollister Avenue approximately 0.7 mile northeast  
2 of PRC 421-1

3 • Bacara Resort located approximately 0.4 mile northwest of the EOF staging area

4 Ambient noise levels were recorded in 2003 as part of preparation of the City's General  
5 Plan/Coastal Land Use Plan, including two locations in the Project area:

6 • Ellwood Elementary School: 55.1 dBA Leq

7 • Winchester Commons (0.6 mile northeast of PRC 421-1): 54.5 dBA Leq

8 Ambient noise levels were also recorded in 2005 as part of the Ellwood Marine Terminal  
9 Lease Renewal EIR, including two locations in the Project area:

10 • Ellwood Mesa trail (1.6 miles east of PRC 421-2): 49.6 dBA Leq (daytime), 56.3  
11 dBA Leq (evening), 51.3 dBA Leq (nighttime) and 58.6 dBA CNEL

12 • Public beach south of Ellwood Mesa (1.6 miles southeast of PRC 421-2): 63.2  
13 dBA Leq (daytime), 59.7 dBA Leq (evening), 54.7 dBA Leq (nighttime) and 64.0  
14 dBA CNEL

15 These noise levels are considered representative of the current ambient noise levels  
16 since the city has not grown significantly since the noise levels presented were  
17 recorded.

#### 18 4.11.1.4 Existing Traffic and Rail Noise

19 The city of Goleta's General Plan/Coastal Land Use Plan indicates the 60 dBA CNEL  
20 noise contour generated by vehicle traffic on U.S. Highway 101 and rail noise from the  
21 Union Pacific Railroad tracks extends approximately 1,000 feet south of U.S. Highway  
22 101. Therefore, residential land uses along Hollister Avenue, Ellwood Elementary  
23 School, and most of the Bacara Resort are located within the 60 dBA CNEL noise  
24 contour. These data indicate land uses near the U.S. Highway 101/rail corridor are  
25 substantially affected by these noise sources.

#### 26 4.11.1.5 Characteristics of Ground-borne Vibration and Noise

27 In contrast to airborne noise, ground-borne vibration is not a common environmental  
28 problem. It is unusual for vibration from sources such as buses and trucks to be  
29 perceptible, even in locations close to major roads. Some common sources of ground-  
30 borne vibration are trains, buses on rough roads, and construction activities such as  
31 blasting, pile driving, and operating heavy earth-moving equipment.

32 The effects of ground-borne vibration include detectable movement of the building  
33 floors, rattling of windows, shaking of items on shelves or hanging on walls, and  
34 rumbling sounds. In extreme cases, the vibration can cause damage to buildings.

1 Building damage is not a factor for most projects, with the occasional exception of  
2 blasting and pile-driving during construction. Annoyance from vibration often occurs  
3 when the vibration exceeds the threshold of perception by only a small margin. A  
4 vibration level that causes annoyance would be well below the damage threshold for  
5 normal buildings.

6 Vibration is an oscillatory motion which can be described in terms of the displacement,  
7 velocity, or acceleration. Because the motion is oscillatory, there is no net movement of  
8 the vibration element, and the average of any of the motion descriptors is zero.  
9 Displacement is the easiest descriptor to understand. For a vibrating floor, the  
10 displacement is simply the distance that a point on the floor moves away from its static  
11 position. The velocity represents the instantaneous speed of the floor movement, and  
12 acceleration is the rate of change of the speed. The peak particle velocity (PPV) is  
13 defined as the maximum instantaneous positive or negative peak of the vibration signal.  
14 PPV is often used in monitoring of blasting vibration since it is related to the stresses  
15 that are experienced by buildings.

#### 16 **4.11.2 Regulatory Setting**

17 Noise is regulated by a variety of federal, state, and local laws and regulations. Federal  
18 and state laws that may be relevant to the Project are identified in Appendix B and  
19 Section 4.10, *Land Use* (Table 4.10-1). Local laws, regulations, and policies are  
20 discussed below.

##### 21 4.11.2.1 City of Goleta General Plan/Coastal Land Use Plan

22 The policies of the Noise Element of the city's GP/CLUP identifies noise and land use  
23 compatibility standards for new development; requires noise buffers when feasible,  
24 requires roadway noise barriers as needed; requires assessment of rail noise for new  
25 development; requires noise mitigation measures for new, expanded, or upgraded  
26 stationary noise sources; and provides restrictions on construction noise. Noise Element  
27 policies considered on behalf of the proposed Project include:

- 28 • **Policy NE 6.4: Restrictions on Construction Hours.** This policy limits  
29 construction activities to 8:00 a.m. to 5:00 p.m., Monday through Friday near  
30 residential areas or other sensitive receptors, and 7:00 a.m. to 4:00 p.m.,  
31 Monday through Friday in non-residential areas away from sensitive receptors.  
32 Construction is discouraged on weekends and State holidays.
- 33 • **Policy NE 6.5: Other Measures to Reduce Construction Noise.** This policy  
34 requires implementation of the following measures for new development (grading  
35 or building plans):
  - 36 ○ All construction equipment shall have properly maintained sound control  
37 devices and no unmuffled exhaust systems.

- 1           ○ Contractors shall implement appropriate additional noise control measures  
2           which many include changing the location of equipment and provided  
3           acoustic barriers.
- 4           ○ Noise buffers are required to reduce noise levels to 65 dBA CNEL at sensitive  
5           receptors.

6           This policy does not apply to the proposed Project because it is not a new or  
7           modified development.

#### 8   4.11.2.2 City of Goleta Municipal Code

9   Section 17.39.070 of the city's Municipal Code limits noise-generating construction  
10 activities within 1,600 feet of sensitive receptors to Monday through Friday from 8:00  
11 a.m. to 5:00 p.m., and from Monday through Friday from 7:00 a.m. to 4:00 p.m. for  
12 noise-generating construction activities not located within 1,600 feet of sensitive  
13 receptors. However, exceptions to these restrictions are allowed for good cause at the  
14 discretion of the city's Public Works Director.

#### 15   **4.11.3 Significance Criteria**

16 A noise impact is considered significant if it would exceed local noise standards or be  
17 inconsistent with local policies and result in a physical change (such as noise  
18 increases). The following significance thresholds are taken from the city of Goleta's  
19 Environmental Thresholds and Guidelines Manual (as taken from the County of Santa  
20 Barbara Thresholds Manual 2002).

- 21           • A proposed development that would generate noise levels in excess of 65 dBA  
22           CNEL and could affect sensitive receptors would generally be presumed to have  
23           a significant impact.
- 24           • Outdoor living areas of noise sensitive uses that are subject to noise levels in  
25           excess of 65 dBA CNEL would generally be presumed to be significantly  
26           impacted by ambient noise. A significant impact would also generally occur  
27           where interior noise levels cannot be reduced to 45 dBA CNEL or less.
- 28           • A project will generally have a significant effect on the environment if it will  
29           increase substantially the ambient noise levels for noise-sensitive receptors  
30           adjoining areas. This may generally be presumed when ambient noise levels  
31           affecting sensitive receptors are increased to 65 dBA CNEL or more. However, a  
32           significant effect may also occur when ambient noise levels affecting sensitive  
33           receptors increase substantially but remain less than 65 dBA CNEL, as  
34           determined on a case-by-case basis.
- 35           • Noise from grading and construction activity proposed within 1600 feet of  
36           sensitive receptors, including schools, residential development, commercial

1 lodging facilities, hospitals or care facilities, would generally result in a potentially  
2 significant impact.

3 In addition, violation of Section 17.39.070 of the City's Municipal Code is considered a  
4 significant impact.

#### 5 **4.11.4 Impact Analysis and Mitigation**

6 Noise levels at sensitive receptors associated with proposed decommissioning activities  
7 were estimated using the Federal Highway Administration's Roadway Construction  
8 Noise Model (2006). Two sensitive receptors are addressed in this impact analysis:  
9 residences on Island Oak Lane and the Bacara Resort. Sensitive receptors along  
10 Hollister Avenue (residential areas and the Ellwood Elementary School) were not  
11 addressed due to relatively high levels of ambient noise generated by roadway and rail  
12 traffic.

13 Two peak day scenarios were modeled, caisson removal and rock revetment removal,  
14 because these activities involve the largest number of noise sources. Each noise source  
15 associated with these scenarios was included in the modeling. Based on guidance  
16 provided in the Roadway Construction Noise Model Users Guide, an 8 dBA barrier  
17 attenuation was applied when the coastal bluff is located between the noise sources  
18 and receptors.

19 The existing ambient background noise at Island Oak Lane is anticipated to be very  
20 similar to that measured at Ellwood Mesa (49.6 dBA Leq daytime, 56.3 dBA Leq  
21 evening, and 51.3 dBA Leq nighttime). The existing ambient background noise at the  
22 Bacara Resort is anticipated to be very similar to that measured at the public beach  
23 south of Ellwood Mesa (63.2 dBA Leq daytime, 59.7 dBA Leq evening, and 54.7 dBA  
24 Leq nighttime).

25 Vibration impacts are not addressed in this analysis since the nearest potentially  
26 affected structure (Sandpiper Golf Course clubhouse) is located at least 1,600 feet  
27 away from any proposed use of heavy equipment and any Project-related vibration  
28 would be undetectable.

#### 29 Component 1

#### 30 **Impact N-1: Noise Impacts to Sensitive Receptors (Component 1)**

31 Decommissioning activities would generate temporary noise that may adversely affect  
32 sensitive receptors (**Less than Significant**).

## 1 Impact Discussion

- 2 The results of noise modeling using the Roadway Construction Noise Model is provided  
 3 in Table 4.11-1. These noise levels would mostly occur between 7:00 a.m. to 7:00 p.m.,  
 4 but periodic evening and nighttime work may be required to take advantage of low tide  
 5 periods. Proposed decommissioning activities would not occur within 1,600 feet of  
 6 sensitive receptors. Estimated noise levels associated with caisson removal would be  
 7 less than anticipated ambient levels at sensitive receptors (daytime or evening).  
 8 Therefore, noise generated by decommissioning activities would not be detectable at  
 9 the nearest sensitive receptor and is considered a less than significant impact.
- 10 Proposed work hours are not fully in compliance with the city's Municipal Code;  
 11 however, it is anticipated that an exception would be approved by the city due to the  
 12 lack of affected sensitive receptors and constraints of conducting work during low tide  
 13 periods which may require periodic evening or nighttime work.

**Table 4.11-1. Noise Modeling Results**

Nearest Sensitive Receptor	Distance to Nearest Project Noise Source (feet)	Barrier Attenuation Applied?	Noise Level at Receptor (dBA Leq)
<b>Component 1 (Caisson Removal)</b>			
Island Oak Lane	2,300	Yes	42.0
Bacara Resort	3,850	Yes	37.8
<b>Component 2 (Rock Revetment Removal)</b>			
Island Oak Lane	2,200	Yes	40.8
Bacara Resort	2,600	No*	47.6

\* Barrier attenuation not applied in this instance because the coastal bluff would not attenuate noise from the western end of the revetment at the Bacara Resort (beach part).

## 14 Mitigation Measures

- 15 None required.

1 Component 2

2 **Impact N-2: Noise Impacts to Sensitive Receptors (Component 2)**

3 Decommissioning activities would generate temporary noise that may adversely affect  
4 sensitive receptors (**Less than Significant**).

5 **Impact Discussion**

6 The results of noise modeling using the Roadway Construction Noise Model is provided  
7 in Table 4.11-1. These noise levels would mostly occur between 7:00 a.m. to 7:00 p.m.,  
8 but periodic evening and nighttime work may be required to take advantage of low tide  
9 periods. Proposed decommissioning activities would not occur within 1,600 feet of  
10 sensitive receptors. Estimated noise levels associated with rock revetment removal  
11 (47.6 dBA or less) would be less than anticipated ambient levels at sensitive receptors  
12 (daytime or evening, 49.6 to 63.2 dBA). Therefore, noise generated by  
13 decommissioning activities would not be detectable at the nearest sensitive receptor  
14 and is considered a less than significant impact.

15 Proposed work hours are not fully in compliance with the city's Municipal Code;  
16 however, it is anticipated that an exception would be approved by the city due to the  
17 lack of affected sensitive receptors and constraints of conducting work during low tide  
18 periods which may require periodic evening or nighttime work.

19 **Mitigation Measures**

20 None required.

21 **4.11.5 Cumulative Impacts Analysis**

22 Components 1 and 2

23 **Impact N-3: Cumulative Decommissioning/Construction Noise**

24 The Project would incrementally contribute to cumulative decommissioning/construction  
25 noise (**Less than Significant**).

26 **Impact Discussion**

27 Cumulative projects that could occur at the same time as the Proposed Project and  
28 could affect the sensitive noise receptors are limited to the Bacara Beach House  
29 Relocation. That project would generate short-term construction-related noise in the  
30 Project area. The proposed Project would incrementally contribute to construction noise  
31 impacts associated with the Bacara Beach House Relocation project. However, due to  
32 the distance between Project noise sources and sensitive receptors and barrier

- 1 attenuation provided by the coastal bluff, the Project contribution would not be
- 2 cumulatively considerable.

3 **4.11.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.11-2. Summary of Noise Impacts and Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>Impact N-1:</b> Noise Impacts to Sensitive Receptors (Component 1)	None required.
<b>Impact N-2:</b> Noise Impacts to Sensitive Receptors (Component 2)	None required.
<b>Impact N-3:</b> Cumulative Decommissioning/Construction Noise (Components 1 and 2)	None required.

## 1 4.12 PUBLIC SERVICES

2 This Section characterizes the potential for increased demand for public services during  
3 Project decommissioning activities. Since the Project does not include construction of  
4 any new structures and would not increase the existing population, there would be no  
5 need for additional public services resulting from the Project. As such, this assessment  
6 is focused on the need for additional fire protection and emergency response services  
7 during temporary construction-related activities only.

### 8 4.12.1 Environmental Setting

#### 9 4.12.1.1 Regional Fire Protection and Emergency Response

#### 10 Santa Barbara County Fire Department

11 The city of Goleta receives fire protection and related services from the Santa Barbara  
12 County Fire Department (SBCFD). The SBCFD serves an area of approximately 2,480  
13 square miles of unincorporated and incorporated areas of the county. Services are  
14 provided through six fire stations in the Goleta valley, including three stations located  
15 within city boundaries (Fire Stations 11, 12, and 14). Most of Goleta falls within the  
16 5-minute response time from existing fire stations; however, the western city edge and  
17 some northern neighborhoods may experience longer response times (SBCFD 2021).  
18 Fire station response times to PRC 421 are shown in Table 4.12-1.

**Table 4.12-1. Goleta Fire Station Response Times to PRC 421**

Station Number	Location/Address	Distance to PRC 421 (miles)	Response Time to PRC 421
11	6901 Frey Way (Storke Rd. south of Hollister Ave.)	3.5	10 to 12 minutes <sup>1</sup>
12	5330 Calle Real	4.0	12 to 14 minutes <sup>1</sup>
14	320 Los Carneros	5.5	10 to 12 minutes <sup>1</sup>

Source: <sup>1</sup> SBFD. Phone Conversation. 15 February 2021 (via Interact report, 2021)

#### 19 Santa Barbara County Office of Emergency Management

20 The Santa Barbara County Office of Emergency Management (OEM) was once a  
21 division of the SBCFD but currently acts under direction from the County Executive  
22 Offices. The Santa Barbara County OEM is responsible for emergency management  
23 and coordination of the Santa Barbara Operational Area. Santa Barbara County OEM  
24 develops and maintains emergency plans and procedures, including the Santa Barbara  
25 County Emergency Operations Plan.

## 1 4.12.1.2 Onsite Emergency Response

2 Existing Facility Response Plan

3 According to the Ellwood Emergency Action Plan (EAP) (updated November 2021),  
 4 notification of 911 would be initiated by Beacon West as contract operator of the  
 5 facilities on behalf of CSLC. The 911 call would notify the SBCFD, the Santa Barbara  
 6 County Sheriff, Santa Barbara County OEM, Santa Barbara County Energy Division,  
 7 and the city of Goleta for all emergencies. In addition to Santa Barbara County's publicly  
 8 provided fire protection and emergency response equipment, oil facilities are required  
 9 by federal and state regulations to have onsite firefighting equipment as well as  
 10 materials to control oil spills or other hazardous materials releases. Beacon West as  
 11 contract operator of the facilities has firefighting and emergency response capabilities  
 12 for its South Ellwood Field facilities in accordance with these regulations. Table 4.12-2  
 13 lists fire protection and control equipment available at the EOF and Ellwood Pier.

**Table 4.12-2. Beacon West Fire Protection and Control Equipment**

Facility	Equipment
EOF	Extinguishers, hoses, fire foam and fire monitors, hydrants, fire blankets, fire alarm, smoke detectors, and combustible gas detector
Ellwood Pier	Extinguishers, fire water tank, and fire hose reels

Source: Interact 2021

14 Incident Command System (ICS)

15 Any significant emergency incident that occurs at the Project site would be managed  
 16 using an Incident Command System (ICS) consistent with standard federal and state  
 17 emergency command structure guidelines. This system provides the capability and  
 18 flexibility to respond to a wide range of emergency incidents, allows for complete  
 19 integration with all government agency emergency response organizations, and ensures  
 20 the proper and efficient response to all emergency incidents. Such incidents would  
 21 include an injury or fatality or a major spill event requiring resources beyond those on-  
 22 hand as part of the facility OSCP.

23 The Ellwood EAP is the primary emergency response document for all Ellwood  
 24 operations including Platform Holly, Ellwood Onshore Facility, and Lease 421 and is  
 25 approved by the California State Lands Commission, County of Santa Barbara, and city  
 26 of Goleta. The Ellwood OSCP, approved by California Department of Fish and Wildlife,  
 27 Office of Spill Prevention and Response (CDFW OSPR), is a separate regulatory  
 28 required plan incorporated into and is under the umbrella of the Ellwood EAP to be  
 29 enacted for all oil spill incidents. Upon the occurrence of any emergency event as listed  
 30 in the "Guidance for Reporting Hazardous Material Spill/Release Incidents" Project

1 supervision shall immediately notify the EOF Person-in-Charge (PIC) who would initiate  
2 appropriate emergency response actions, all notifications and resources to be mobilized  
3 in accordance with the approved response plans. The Emergency Management System  
4 consists of a facility-based initial incident response team (IIRT). Personnel assigned  
5 specific positions on the IIRT are required to be thoroughly familiar with their roles and  
6 responsibilities and to participate in specified training programs and exercises  
7 simulating emergency events. Emergency response contractors and Oil Spill Response  
8 Organizations are also integrated into this emergency management system. The  
9 Emergency Management System is described in detail in the South Ellwood Field EAP.

#### 10 **Initial Incident Response Team**

11 In the event of an emergency incident, the IIRT would be activated immediately and  
12 would provide initial response. The IIRT consists of Beacon West personnel on-site at  
13 the time of an incident, 421 decommissioning Project personnel, the ExxonMobil site  
14 representative, and all other EOF facility personnel who may be immediately available.

15 The IIRT Incident Commander, which would be the facility supervisor, would work with  
16 local agency emergency response organization incident commanders within a unified  
17 command structure. The unified command formulates tactical and strategic decisions to  
18 ensure efficient and effective response to the emergency.

#### 19 **Sustained Incident Response Team**

20 Depending on the size and complexity of the incident, the IIRT Incident Commander  
21 may expand the response organization to include members of the Sustained Incident  
22 Response Team (SIRT) as necessary. At any time during the incident, the IIRT Incident  
23 Commander may request transfer of command to the SIRT, or the SIRT Incident  
24 Commander may formally take command of the incident.

25 A SIRT is designed and organized to respond to a major onsite incident or major  
26 incident with onsite and offsite consequences. The SIRT is designed to augment and  
27 expand the capabilities of the IIRT as needed. The degree to which the SIRT is  
28 activated is dependent on the nature and size of the incident. The SIRT Command is  
29 facilitated through the Marine Spill Response Corporation (MSRC) who has response  
30 vessels in Santa Barbara, Ventura, the Coho Mooring near Point Conception and at  
31 Port Hueneme, and a large amount of response equipment and materials at the MSRC  
32 Warehouse in Carpinteria, California.

33 The SIRT is organized into five functional sections: Command, Operations, Planning,  
34 Logistics, and Finance. The Command Section is responsible for overall management  
35 of the response and includes certain staff functions required to support command  
36 function. The Operations Section is responsible for directing and coordinating all  
37 offshore, shoreline, and land operations responses to an incident. The Planning Section

1 is responsible for the collection, evaluation, and dissemination of tactical information  
2 about the incident. The Logistics Section is responsible for providing all support needs  
3 to the response efforts. The Finance Section is responsible for providing financial  
4 services.

5 When activated by the SIRT Incident Commander, representatives from the five  
6 functional sections of the SIRT would respond to the Command Post within 12 hours of  
7 the onset of the event. Emergency response contractors and Oil Spill Response  
8 Organizations would respond in accordance with federal and state requirements and  
9 Beacon West emergency response plans (Beacon West 2018 and 2019).

## 10 **Fire Prevention and Preparedness Plan**

11 The Project would operate under the South Ellwood Facilities Fire Prevention and  
12 Preparedness Plan that is administered through the contract operator, Beacon West  
13 Energy. The Plan defines the measures to be implemented and maintained by Beacon  
14 West personnel in the event of a fire. The plan contains safety and fire prevention,  
15 detection, and protection systems for the EMT and the EOF. This plan is designed to be  
16 implemented in conjunction with the South Ellwood Field EAP, Emergency Evacuation  
17 Plans, and hydrogen sulfide (H<sub>2</sub>S) Contingency Plans; however, the plan does not  
18 contain measures solely specific to PRC 421 but is inclusive of all the Ellwood facilities.

### 19 **4.12.2 Regulatory Setting**

20 Fire protection systems for operational facilities are detailed in fire protection plans and  
21 must include systems and designs that ensure compliance with a range of codes and  
22 standards. A number of federal, state, and local laws regulate oil production and  
23 processing facilities for fire protection and emergency response. Please refer to Section  
24 4.8, *Hazards and Hazardous Materials*, Section 4.10, *Land Use* (Table 4.10-1), and  
25 Appendix B for a complete description of these requirements, while the local regulatory  
26 setting is discussed below.

#### 27 4.12.2.1 Santa Barbara County

28 The following Santa Barbara County Fire Department Development standards are  
29 applicable to the Project:

- 30 • Standard 1, Private Road and Driveway
- 31 • Standard 3, Stored Water Fire Protection Systems
- 32 • Standard 7, Access Gates

33 Additionally, the Santa Barbara County Code, Chapter 15, Fire Prevention (SBC 2017)  
34 (Adoption of the 2019 California Fire Code and portions of the 2018 International Fire

1 Code) and Santa Barbara County Public Works Engineering Design Standards  
2 regarding Roadways (2011 SBCPW) would apply.

3 4.12.2.2 City of Goleta General Plan

4 The following policies from the city of Goleta Public Facilities Element (2009) are  
5 applicable to the Project:

- 6 • **Policy PF 3: Public Safety Services and Facilities.** Ensure that adequate fire  
7 and police services and facilities are available to meet the needs of both existing  
8 and new development in the city as well as service demands from outside  
9 Goleta's boundaries.

10 **4.12.3 Significance Criteria**

11 Impacts to fire protection and emergency response services would be considered  
12 significant if:

- 13 • The Project results in the need for new or physically altered governmental  
14 facilities, the construction of which could cause significant environmental impacts  
15 to maintain the current level of fire protection and emergency response services
- 16 • The Project is located more than 10 miles or 15 minutes from an emergency  
17 response location with firefighting and spill response capabilities
- 18 • Accessibility to the Project site is difficult or limited
- 19 • The Project does not have an approved fire protection or emergency response  
20 plan

21 **4.12.4 Impact Analysis and Mitigation**

22 Components 1 and 2

23 **PS-1: Potential for Short-term Impacts to Public Services During**  
24 **Decommissioning Activities**

25 During short-term decommissioning activities, an increase in public services such as fire  
26 or police response could result (**Less than Significant**).

27 **Impact Discussion**

28 The Project is a short-term decommissioning that does not involve the construction of  
29 any residences, buildings, or infrastructure. The Project would not require or generate a  
30 future need for any additional public services during or after decommissioning activities.  
31 Once the Project is complete, the Project site would be returned to natural conditions  
32 and no impact to public services would result. The wells are permanently plugged, and  
33 there are no operational production assets remaining at PRC 421.

1 During decommissioning, additional personnel and trucks would be required to access  
 2 the area. Maintaining fire and emergency vehicle access to the site at all times has  
 3 been incorporated into the Project decommissioning plan and proposed staging/access  
 4 areas. Additionally, Project decommissioning activities requiring remediation of  
 5 contaminated soils would be conducted in accordance with an approved Remedial  
 6 Action Plan (RAP) with the Santa Barbara County Public Health, Environmental Health  
 7 Services Department. Further, Project activities would be conducted in accordance with  
 8 the existing facilities-approved South Ellwood Field EAP and South Ellwood Facilities  
 9 Fire Prevention and Preparedness Plan (FPPP).

10 Although PRC 421 is located in an area that is identified as being under-served by fire  
 11 protection services available by the SBCFD, the area is within the significance threshold  
 12 of 15 minutes for a response time. Any potential Project impacts would be temporary  
 13 and not significant. As such, no mitigation measures are required.

#### 14 **Mitigation Measures**

15 None required.

#### 16 **4.12.5 Cumulative Impacts Analysis**

#### 17 **Impact Discussion**

18 The proposed Project would not preclude access to emergency public services or  
 19 create a long-term need for additional public services. No impacts would result that  
 20 would have the potential to contribute to cumulative impacts to public services.

#### 21 **4.12.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.12-3. Summary of Public Services Impacts and Mitigation Measures**

Impact	Mitigation Measures
<b>Impact PS-1:</b> Potential for Short-term Impacts to Public Services During Decommissioning Activities (Components 1 and 2)	None required.

1 **4.13 RECREATION**

2 **4.13.1 Environmental Setting**

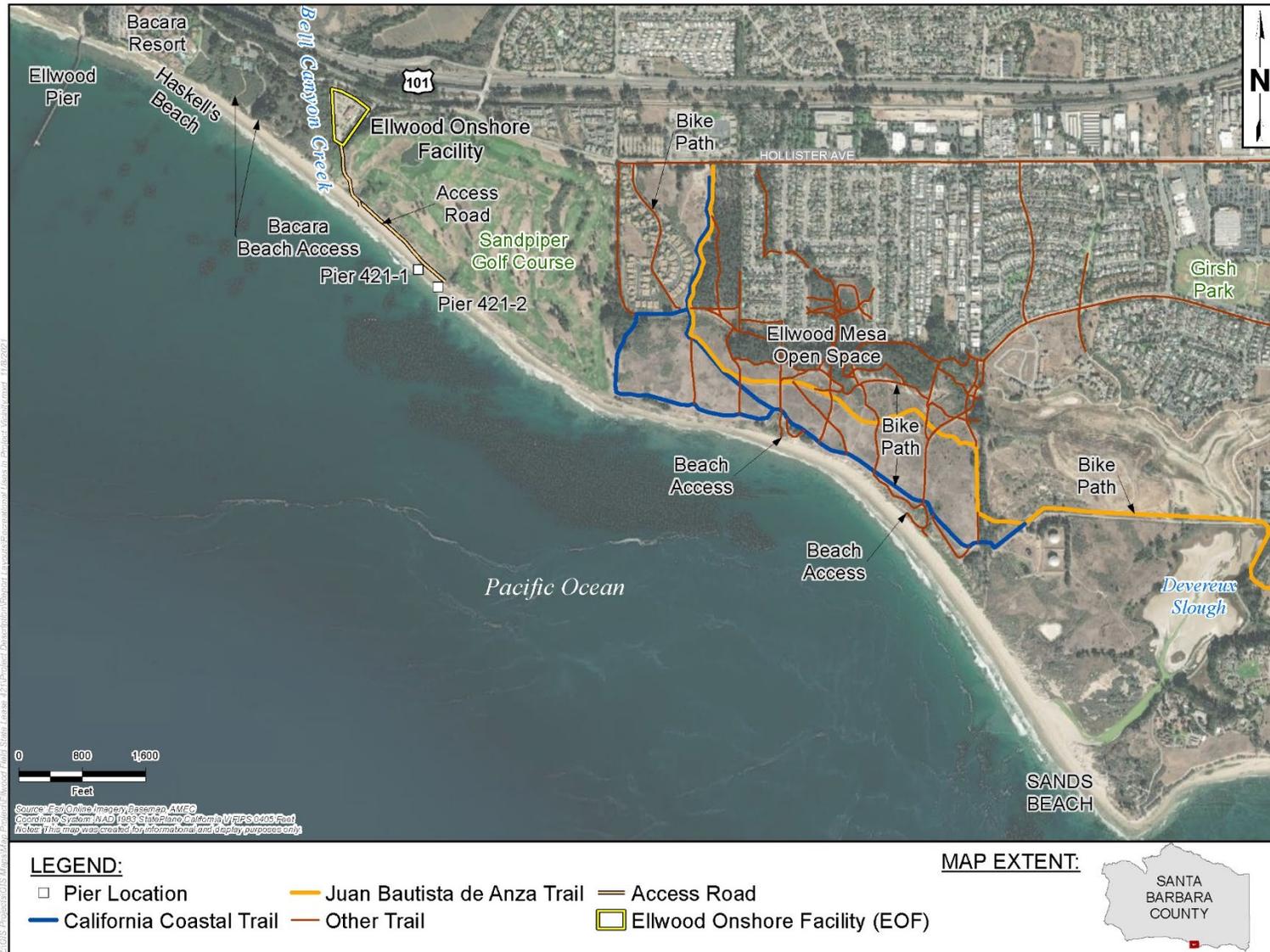
3 The Project site is located in a region that offers a wealth of recreational opportunities  
4 due to its natural beauty, undeveloped beaches and open space, topography, and  
5 climate. PRC 421 is located near Haskell’s Beach just east of the Bacara Resort, the  
6 only beachfront resort in the city of Goleta, and adjacent to the south side of the  
7 Sandpiper Golf Course, which is open to the public. Sands Beach, the University of  
8 California Santa Barbara’s (UCSB’s) Coal Oil Point Reserve and open lands, and the  
9 Ellwood Mesa Open Space and associated five coastal access points are all located  
10 east of and within 2 miles of the Project site (Figure 4.13-1). These undeveloped open  
11 spaces and beaches are major coastal recreational areas used by thousands of beach  
12 goers annually. The combination of the miles of beach front, varied ecological habitats,  
13 and scenic ocean and mountain vistas attracts many visitors to the area. This is a  
14 heavily used, passive recreation area that provides high quality recreational  
15 opportunities to the inhabitants of the surrounding areas, as well as the greater Santa  
16 Barbara area and beyond. Passive recreational activities currently take place over most  
17 of the area that is accessible to the public.

18 The primary recreational activities that currently take place in the Project vicinity include  
19 walking, jogging, picnicking, wildlife viewing, mountain biking, horseback riding,  
20 sunbathing, swimming, surfing, surf fishing, dog walking, bird watching, and  
21 photography. Sandpiper Golf Course is located north and adjacent to the Project area.  
22 Additional recreational resources within the Project vicinity are maintained and operated  
23 by a number of entities, including Santa Barbara County, city of Goleta, and private  
24 providers. Approximately 40 percent of the city’s 2.0 miles of Pacific shoreline is in city  
25 ownership (City of Goleta 2006b).

26 **4.13.1.1 Recreational Fishing**

27 Recreational fishing may occur along the beach and in the nearshore Project area via  
28 kayak or private boats. CDFW tracks catch data of recreational fisherman as part of the  
29 California Recreational Fisheries Survey (CRFS) program. These recreational fishing  
30 data are available through the Recreational Fisheries Information Network (RecFin)  
31 maintained by the Pacific States Marine Fisheries Commission. The following section  
32 describes data retrieved from the RecFin database and provides a summary of  
33 recreational fishing activity for the region (RecFin 2021).

Figure 4.13-1. Recreational Areas in the Project Vicinity



1 Common landings within 3 miles of the coast for recreational fishing in Santa Barbara  
 2 County include, rockfish (*Sebastes* spp.), market squid (*Doryteuthis opalescens*), barred  
 3 surfperch (*Amphistichus argenteus*), flatfish such as California halibut (*Paralabrax*  
 4 *nebulifer*) and Pacific sanddab (*Citharichthys sordidus*), ocean whitefish (*Caulolatilus*  
 5 *princeps*), kelp bass (*Paralabrax calthyratus*), and Pacific mackerel (*Scomber japonicus*)  
 6 (RecFin 2021). Table 4.13-1 summarizes the total catch during 2016-2020 of the top  
 7 three recreational fisheries present in the Project area.

**Table 4.13-1. 2016-2020 Recreational Fishing Summary  
 Total Catch (individual fish)**

Species	Mode	2016	2017	2018	2019	2020	Total
Rockfish	Private/rental boat and manmade/jetty	4,595	6,185	4,790	6,661	3,191	25,422
Pacific (chub) mackerel	Private/rental boat and manmade/jetty	2,706	1,363	1,261	1,500	597	7,427
Ocean whitefish	Private/rental Boat	216	819	2,079	1,852	2,112	7,078
Market squid	Private/rental Boat	859	2,083	200	1,053	--*	4,195
Flatfish	Private/rental boat	449	749	948	1,088	408	3,642

\*No market squid data were reported for 2020 within 3 miles of the Santa Barbara Coast.

## 8 4.13.2 Regulatory Setting

9 There are no federal regulations, authorities, or administering agencies that regulate  
 10 recreational resources that are specifically applicable to the Project. State laws,  
 11 regulations, and policies regarding visual resources including California Coastal Act  
 12 Chapter 3, Sections 30210, 30220, 30221, and 30222.5 are discussed in Appendix B  
 13 and Section 4.10, *Land Use* (Table 4.10-1). Local laws, regulations, and policies are  
 14 discussed below.

### 15 4.13.2.1 City of Goleta General Plan/Coastal Land Use Plan – Visual and Historic 16 Resources Element

17 The city of Goleta General Plan/Coastal Land Use Plan, Land Use and Open Space  
 18 Elements (2006b and 2006c), identify the following recreational policies that are  
 19 applicable to the proposed Project. Please see Table 4.10-1, Policy Consistency  
 20 Evaluation, for full text of these policies.

- 1 • Policy LU 6.3 (Open Space/Active Recreation)
- 2 • Policy LU 9.2 (Site Number 2 – Coastal Recreation)
- 3 • Policy OS 1.3 (Preservation of Existing Coastal Access and Recreation)
- 4 • Policy OS 1.4 (Minimization of Impacts to Lateral Coastal Access)
- 5 • Policy OS 2.3 (Preservation of Existing Vertical Accessways)

### 6 **4.13.3 Significance Criteria**

7 Recreational impacts are considered significant if the Project would result in:

- 8 • Conflicts with planning efforts to protect recreational resources of the Project
- 9 area
- 10 • Residual impacts on sensitive shoreline lands, and or water and non-water
- 11 recreation

### 12 **4.13.4 Impact Analysis and Mitigation**

#### 13 Component 1

#### 14 **Impact REC-1: Temporary Loss of Recreational Access During Decommissioning**

#### 15 **Activities (Component 1)**

16 The Project would temporarily reduce recreational beach access (**Less than**)  
 17 **Significant with Mitigation).**

### 18 **Impact Discussion**

19 The Project would temporarily affect recreational use of the Haskell's Beach area for  
 20 about 5 months during demolition of Component 1. Recreational access to the beach  
 21 would remain open to the east and west of the Project work area during this time, with  
 22 up to about 1,000 linear feet of beach affected (working at both caissons at once). No  
 23 public access points would be impeded during decommissioning activities. The Bacara  
 24 Resort fire road alternative access point is private and not currently open to the public  
 25 for lateral access to the beach. The existing pathway providing lateral access to the  
 26 beach from the Bacara Resort is unaffected by use of this private fire road. However,  
 27 the piers and caissons extend from the bluff to the intertidal area, such that beach users  
 28 coming from the west (Bacara Resort beach access) would be precluded from passing  
 29 by the work area to access the beach area to the east during periods of high tides.  
 30 During times when decommissioning work was not ongoing there may be potentially  
 31 hazardous debris present such that the public may be precluded from passing  
 32 through/by the work area for extended periods. There is an alternative beach access  
 33 from Santa Barbara Shores Drive, located approximately 1 mile east along Hollister  
 34 Avenue, such that the beach area east of the work area could be readily accessed by

1 the public. Temporary loss of recreational access during Project decommissioning  
2 activities would be reduced to a less than significant level through implementation of  
3 **MM AES-1a** and **MM REC-1**.

#### 4 **Mitigation Measures**

5 **MM AES-1a: Overnight Storage of Equipment** (see Section 4.1.5, *Aesthetics*)

6 **MM REC-1: Maximize Beach Access.** Pier and caisson work areas shall be  
7 made passable by the public walking along the beach by removing debris to  
8 staging/storage areas off the beach and backfilling or placing steel plates  
9 over any open excavations at the end of each workday. If these measures  
10 are not feasible during periods of high tides or storm conditions, signage (in  
11 both English and Spanish) and temporary fencing shall be provided to notify  
12 the public that passage is not allowed and that alternative beach access  
13 locations can be found nearby.

#### 14 **Impact REC-2: Increase in Beach Area Associated with Removal of Piers and** 15 **Caissons**

16 Removal of existing piers and caissons would provide additional beach area for  
17 recreational use (**Beneficial**).

#### 18 **Impact Discussion**

19 Removal of the piers and caissons would make about 0.4 acre of beach area available  
20 for recreational use. This increase in available beach area is considered a beneficial  
21 impact.

#### 22 **Mitigation Measure**

23 None required.

#### 24 Component 2

#### 25 **Impact REC-3: Temporary Loss of Recreational Access During Decommissioning** 26 **Activities (Component 2)**

27 The Project would temporarily reduce recreational beach access (**Less than**  
28 **Significant with Mitigation**).

#### 29 **Impact Discussion**

30 Heavy equipment would be used to remove the rock revetment, access roadway, and  
31 wooden seawall, which would preclude public use of the upper beach for about 3  
32 months. The affected area would be up to 1,600 linear feet but may be much less on

1 any given day. No public access points would be impeded during decommissioning  
 2 activities. Temporary loss of recreational access during Project decommissioning  
 3 activities would be reduced to a level of less than significant through implementation of  
 4 **MM AES-1a**, which would remove heavy equipment from the beach at the end of the  
 5 workday, allowing public access during non-work hours and weekends.

## 6 **Mitigation Measure**

7 **MM AES-1a: Overnight Storage of Equipment** (see Section 4.1.5, *Aesthetics*)

### 8 **4.13.5 Cumulative Impacts Analysis**

9 Components 1 and 2

## 10 **Impact Discussion**

11 Cumulative projects that identified in Section 3.0 that could occur at the same time as  
 12 the Proposed Project and could affect recreational opportunities are limited to the  
 13 Bacara Beach House Relocation project. During the proposed decommissioning  
 14 activities, the proposed Project would contribute to short-term impacts to recreational  
 15 use. These impacts would be mitigated through implementation of **MM AES-1a** and **MM**  
 16 **REC-1**. Additionally, based on the Mitigated Negative Declaration prepared for the  
 17 Bacara Beach House Relocation project, public access to trails and the beach would be  
 18 maintained during the construction period. Therefore, there would be no cumulative  
 19 impacts to recreation.

### 20 **4.13.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.1-3. Summary of Recreation Impacts and Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>Impact REC-1:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 1)	<b>MM AES-1a:</b> Overnight Storage of Equipment <b>MM REC-1:</b> Maximize Beach Access
<b>Impact REC-2:</b> Increase in Beach Area Associated with Removal of Piers and Caissons (Component 1)	None required.
<b>Impact REC-3:</b> Temporary Loss of Recreational Access During Decommissioning Activities (Component 2)	<b>MM AES-1a:</b> Overnight Storage of Equipment

1 **4.14 TRANSPORTATION AND TRAFFIC**

2 **4.14.1 Environmental Setting**

3 4.14.1.1 Affected Roadways

4 Vehicles associated with proposed decommissioning activities would access the Project  
 5 site from both northbound and southbound U.S. Highway 101 via the Hollister  
 6 Avenue/Cathedral Oaks Road interchange. Inbound traffic would then turn south to  
 7 Hollister Avenue, west on Hollister Avenue, then left (south) into the EOF. Hollister  
 8 Avenue is classified as an arterial east of the Cathedral Oaks Road intersection (stop  
 9 sign-controlled), and a local street to the west of this intersection. Only one vehicle  
 10 collision was recorded at the Hollister Avenue/Cathedral Oaks Road intersection  
 11 between January 1, 2014, and December 21, 2019 (Kimley-Horn 2021).

12 The quality of traffic service provided by a roadway system can be described through  
 13 the Level of Service (LOS) concept. LOS is a standardized means of describing traffic  
 14 conditions by comparing traffic volumes in a roadway system with the system's capacity.  
 15 A LOS rating of A, B or C indicates that the roadway is operating efficiently. Minor  
 16 delays are possible on an arterial with a LOS of D. Level E represents traffic volumes at  
 17 or near the capacity of the roadway, resulting in possible delays and unstable flow.

18 Table 4.14-1 provides traffic data from the city's General Plan/Coastal Land Use Plan.  
 19 Note that the Hollister Avenue/U.S. 101 interchange was entirely re-constructed in  
 20 2011, which was forecasted in the traffic modeling. Therefore, year 2030 projections  
 21 should remain valid.

**Table 4.14-1. Traffic Volume and Level of Service Data**

Roadway Segment	2005 Peak Hour Volume	2030 Peak Estimated Hour Volume*	2005 Average Daily Volume	2030 Average Estimated Daily Volume*
Hollister Avenue between Cathedral Oaks Road and Las Armas Road	707	590	6,500	5,400
Intersection	2005 LOS	2030 LOS*		
Hollister Avenue/Cathedral Oaks Road	--	A	--	--
Hollister Avenue/U.S. 101 southbound ramp	B	A	--	--

\*Includes planned new land uses and transportation improvements

1 4.14.1.2 Transportation Planning

2 The Santa Barbara County Association of Governments (SBCAG) finalized its Regional  
 3 Transportation Plan and Sustainable Communities Strategy in 2017 in coordination with  
 4 Santa Barbara County and affected cities (including the city of Goleta). This document  
 5 is known as Fast Forward 2040, and includes goals (addressing the environment,  
 6 mobility, system reliability, equity, health and safety and the economy), multi-modal  
 7 transportation investment and a sustainable community’s strategy to integrate  
 8 transportation, and housing and land use planning to meet greenhouse gas reduction  
 9 targets while accommodating forecast growth.

10 **4.14.2 Regulatory Setting**

11 Traffic operations and transportation planning is regulated by a variety of federal, state,  
 12 and local laws and regulations including California Coastal Act Chapter 3, Section  
 13 30254 as discussed in Appendix B and Section 4.10, *Land Use* (Table 4.10-1). Local  
 14 laws, regulations, and policies are included below.

15 4.14.2.1 City of Goleta General Plan/Coastal Land Use Plan

16 The Transportation Element of the city’s GP/CLUP provides policies and standards for  
 17 new development and identifies major transportation improvement projects required to  
 18 address future circulation needs. None of the Transportation Element policies are  
 19 applicable to the proposed Project because it does not represent a new development  
 20 that would generate or attract vehicle trips, or otherwise require transportation  
 21 improvements or service.

22 **4.14.3 Significance Criteria**

23 The city’s Environmental Thresholds Manual indicates a project would have a significant  
 24 impact if the following thresholds were exceeded.

- 25 • An impact is considered significant if the addition of project traffic to an  
 26 intersection exceeds the following values:

<b>Intersection Level of Service (Including Project)</b>	<b>Increase in Volume to Capacity (V/C) or Hourly Trips Greater Than</b>
LOS A	0.20 V/C ratio increase
LOS B	0.15 V/C ratio increase
LOS C	0.10 V/C ratio increase
LOS D	15 New Hourly Trips
LOS E	10 New Hourly Trips
LOS F	5 New Hourly Trips

- 1       • The project's access to a major road or arterial road would require a driveway  
2       that would create an unsafe situation, a new traffic signal or major revisions to an  
3       existing traffic signal.
- 4       • The project adds traffic to a roadway that has design features (e.g., narrow width,  
5       road-side ditches, sharp curves, poor sight distance, inadequate pavement  
6       structure) or receives use which would be incompatible with substantial increases  
7       in traffic (e.g., rural roads which use by farm equipment, livestock, horseback  
8       riding, or residential roads with heavy pedestrian or recreational use) that would  
9       become a potential safety problem with the addition of project or cumulative  
10      traffic.
- 11      • Project traffic would utilize a substantial portion of an intersections capacity  
12      where the intersection is currently operating at an acceptable LOS (A-C) but with  
13      cumulative traffic would degrade, or approach LOS D (Volume to Capacity [V/C]  
14      0.81) or lower. Substantial is defined as a minimum change of 0.03 for an  
15      intersection which would operate from 0.80 to 0.85, a change of 0.02 for an  
16      intersection which would operate from 0.86 to 0.90, and 0.01 for intersections  
17      operating at anything lower.

18      Senate Bill (SB) 743 (Steinberg; Chapter 386, Statutes of 2013) fundamentally changed  
19      the way transportation analysis is conducted under CEQA. LOS, although permitted as  
20      a local policy threshold, is no longer considered an impact on the environment. Instead,  
21      vehicle miles of travel (VMT) are now the primary transportation metric for evaluated  
22      projects under CEQA. SB 743 provides agencies the authority to establish their impact  
23      thresholds. In addition, the California Office of Planning and Research developed the  
24      *Technical Advisory for Evaluating Transportation Impacts in CEQA* to provide guidance  
25      in preparing transportation impact analyses.

26      The city of Goleta (in coordination with GHD) completed a VMT Threshold Study in July  
27      2020 (GHD 2020) to assess and recommend analysis tools, environmental baseline,  
28      and impact criteria in accordance with SB 743 and Office of Planning and Research  
29      guidance. This Study concluded that the SBCAG model is the most accurate tool for  
30      measuring VMT as prescribed by the Office of Planning and Research. As part of the  
31      VMT Threshold Study, the city adopted a small project screening threshold of 110 daily  
32      trips, meaning projects generating or attracting 110 daily one-way trips or less are  
33      presumed to have a less than significant impact.

#### 1 4.14.4 Impact Analysis and Mitigation

##### 2 Component 1

##### 3 **Impact T-1: Decommissioning Vehicle Trip Generation (Component 1)**

4 Proposed Component 1 decommissioning activities would generate vehicle trips that  
5 may contribute to traffic congestion (**Less than Significant**).

##### 6 **Impact Discussion**

7 Disposal of recovered materials associated with Component 1 decommissioning  
8 activities would generate a total of approximately 497 truckloads (994 one-way trips) of  
9 materials to be transported off-site (Table 2-2). In addition, worker transportation would  
10 generate up to 5,560 one-way trips. It is anticipated that a peak day may include up to  
11 30 one-way heavy-duty truck trips and 50 one-way worker vehicle trips (80 total one-  
12 way daily trips), with peak hour consisting of about five heavy-duty truck trips and five  
13 worker vehicle trips. The peak hour volume assumptions are based on most worker trips  
14 avoiding typical peak hour due to Project scheduling (typical 10-hour workday). This trip  
15 generation would represent only a few percent of existing peak hour traffic volumes and  
16 would only affect intersections operating at LOS A. Therefore, traffic congestion impacts  
17 are considered less than significant.

18 In addition, Component 1 trip generation would be less than the city's 110 daily trips  
19 VMT screening threshold such that the Project would not have a significant adverse  
20 impact on transportation.

##### 21 **Mitigation Measures**

22 None required.

##### 23 **Impact T-2: Traffic Safety Associated with Heavy-duty Truck Operations** 24 **(Component 1)**

25 Heavy-duty trucks would turn off and onto Hollister Avenue in an area with poor sight  
26 distance (**Less than Significant with Mitigation**).

##### 27 **Impact Discussion**

28 The driveway serving the EOF (primary access route) at Hollister Avenue (posted speed  
29 limit of 25 miles per hour) is located in an area with poor sight distance, about 700 feet  
30 to the east and 300 feet to the west. Heavy-duty trucks pulling out of the EOF onto  
31 Hollister Avenue or slowing down to turn into the EOF from Hollister Avenue may cause  
32 a traffic hazard as motorists would have only a few seconds to react to avoid a collision.  
33 The driveway off Hollister Avenue for the secondary access route (Bacara Resort fire

1 road) also has poor sight distance (300 feet to the east, 200 feet to the west) and would  
2 have similar traffic safety issues. Implementation of **MM T-1** would alert motorists and  
3 minimize traffic safety impacts. After implementation of **MM T-1**, traffic safety impacts  
4 associated with heavy-duty truck operations would be mitigated to a less than significant  
5 level.

## 6 **Mitigation Measures**

7 **MM T-1. Truck Entrance Signage.** Easily visible signage shall be posted on  
8 Hollister Avenue at least 1,000 feet east and west of the EOF driveway to  
9 alert motorists of a truck entrance. This signage shall also be required at  
10 the Bacara Resort fire road entrance if this secondary access route is used  
11 by heavy-duty trucks.

## 12 Component 2

### 13 **Impact T-3: Decommissioning Vehicle Trip Generation (Component 2)**

14 Proposed Component 2 decommissioning activities would generate vehicle trips that  
15 may contribute to traffic congestion (**Less than Significant**).

## 16 **Impact Discussion**

17 Disposal of recovered materials associated with Component 2 decommissioning  
18 activities would generate approximately 649 truckloads (1,298 one-way trips) of  
19 materials to be transported off-site (Table 2-2). In addition, worker transportation would  
20 generate up to 2,098 one-way trips. It is anticipated that a peak day may include up to  
21 44 one-way heavy-duty truck trips and 36 one-way worker vehicle trips (for a total of 80  
22 one-way trips), with peak hour consisting of about five heavy-duty truck trips and five  
23 worker vehicle trips. The peak hour volume assumptions are based on most worker trips  
24 avoiding typical peak hour due to Project scheduling (typical 10-hour workday). This trip  
25 generation would represent only a few percent of existing peak hour traffic volumes and  
26 would only affect intersections operating at LOS A. Therefore, traffic congestion impacts  
27 are considered less than significant.

28 Similar to Impact T-1, Component 2 trip generation would be less than the city's 110  
29 daily trips VMT screening threshold such that the Project would not have a significant  
30 adverse impact on transportation.

## 31 **Mitigation Measures**

32 None required.

**Impact T-4: Traffic Safety Associated with Heavy-duty Truck Operations (Component 2)**

Heavy-duty trucks would turn off and onto Hollister Avenue in an area with poor sight distance (**Less than Significant with Mitigation**).

**Impact Discussion**

The driveway serving the EOF (primary access route) at Hollister Avenue (posted speed limit of 25 miles per hour) is located in an area with poor sight distance, about 700 feet to the east and 300 feet to the west. Heavy-duty trucks pulling out of the EOF onto Hollister Avenue or slowing down to turn into the EOF from Hollister Avenue may cause a traffic hazard as motorists would have only a few seconds to react to avoid a collision. The driveway off Hollister Avenue for the secondary access route (Bacara Resort fire road) also has poor sight distance (300 feet to the east, 200 feet to the west) and would have similar traffic safety issues. Implementation of **MM T-1** would alert motorists and minimize traffic safety impacts. After implementation of **MM T-1**, traffic safety impacts associated with heavy-duty truck operations would be mitigated to a less than significant level.

**Mitigation Measures**

**MM T-1: Truck Entrance Signage**

**4.14.5 Cumulative Impacts Analysis**

Components 1 and 2

**Impact T-5: Contribution to Cumulative Transportation/Traffic Impacts**

Project-related vehicle trips would incrementally contribute to cumulative transportation/traffic impacts (**Less than Significant with Mitigation**).

**Impact Discussion**

Cumulative projects identified in Section 3.0 that could occur at the same time and affect the same roadways as the Proposed Project (excluding U.S. Highway 101) are limited to the Bacara Beach House Relocation. This project would generate short-term construction-related traffic on Hollister Avenue near the EOF. The proposed Project would incrementally contribute to transportation/traffic impacts associated with this project. However, with implementation of **MM T-1** the Project contribution would not be cumulatively considerable.

1 **4.14.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.14-2. Summary of Transportation/Traffic Impacts and Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>Impact T-1:</b> Decommissioning Vehicle Trip Generation (Component 1)	None required.
<b>Impact T-2:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 1)	<b>MM T-1:</b> Truck Entrance Signage
<b>Impact T-3:</b> Decommissioning Vehicle Trip Generation (Component 2)	None required.
<b>Impact T-4:</b> Traffic Safety Associated with Heavy-duty Truck Operations (Component 2)	<b>MM T-1:</b> Truck Entrance Signage
<b>Impact T-5:</b> Contribution to Cumulative Transportation/Traffic impacts (Components 1 and 2)	<b>MM T-1:</b> Truck Entrance Signage

## 1 4.15 UTILITIES AND SERVICE SYSTEMS

2 The Project does not include permanent components that would require or alter existing  
3 utilities or service systems. The Project is a short-term decommissioning activity and  
4 does not have any wastewater requirements. Wastewater flushed through the two  
5 pipelines would be captured within vacuum trucks and brought directly to a local  
6 wastewater receiving facility for disposal. Additionally, water recovered from the  
7 caissons during demolition would also be removed utilizing a vacuum truck that would  
8 be brought to a local wastewater receiving facility for disposal. The crew would utilize  
9 existing restroom facilities located at the EOF during construction.

10 Soil and related material would be analyzed for chemical profile prior to appropriate  
11 manifest and disposal. Soil material would be disposed of at a proper EPA approved  
12 Treatment, Storage, and Disposal (TSD) Facility. For the purposes of this analysis,  
13 Clean Harbors' landfill in Buttonwillow, California, has been chosen as a representative  
14 worst-case scenario receiving facility based on distance from the Project site  
15 (approximately 330 miles) and ability to accept hydrocarbon impacted soil or wooden  
16 debris along with other non-hazardous oil field debris material. Recovered steel would  
17 likely be recycled at Standard Industries located in Saticoy, California. Concrete waste  
18 would likely be taken to State Ready Mix in Oxnard, California. Non-hazardous  
19 contaminated soils would be transported to Waste Management's Simi Valley Landfill.  
20 Permitted waste receiving capacity for these facilities is further described below.

### 21 4.15.1 Environmental Setting

#### 22 4.15.1.1 Landfill Capacity and Solid Waste

23 **Clean Harbors, Buttonwillow.** Hydrocarbon impacted soil or wooden debris along with  
24 other non-hazardous oil field debris material (as applicable) may be transported by truck  
25 to Clean Harbors Buttonwillow Landfill Facility located at 2500 West Lokern Road in  
26 Buttonwillow, California. Clean Harbors Buttonwillow landfill is a fully permitted  
27 hazardous waste facility, permitted by various regulatory agencies in the State of  
28 California to receive, store, treat, and landfill a variety of hazardous and non-hazardous  
29 waste streams. Permitted landfill capacity is approximately 13,250,000 cubic yards, and  
30 the maximum permitted throughput per day is approximately 10,500 tons (CalRecycle  
31 2021).

32 **Waste Management, Simi Valley Landfill.** Non-hazardous contaminated soils would  
33 be transported by truck to the Simi Valley Landfill located at 2801 Madera Road in Simi  
34 Valley, California. The Simi Valley Landfill provides approximately 60 percent of Ventura  
35 County's daily refuse disposal needs, and 75 percent of all tons accepted at the facility  
36 originate in Ventura County. The facility is permitted to accept up to 3,000 tons per day  
37 of refuse and can accept 6,250 tons of recyclable materials (WM 2021).

1 **Standard Industries, Saticoy.** Recyclable steel material generated during facility  
2 demolition would be transported by truck to Standard Industries located at 1905 Lirio  
3 Avenue in Saticoy, California. Standard Industries is a private, 10-acre recycling facility  
4 in Ventura County. Standard Industries has the capacity to receive and handle the  
5 anticipated volume of the scrap materials generated by the Project.

6 **State Ready Mix Recycling, Oxnard.** Demolished concrete that has been pressure  
7 washed and cleaned would be transported by truck to State Ready Mix located at 3127  
8 Los Angeles Avenue in Oxnard, California, for recycling. State Ready Mix accepts all  
9 types of demolition concrete and asphalt and recycles it into road base material that can  
10 be reused in future road pavement construction. This facility is one of the largest  
11 certified asphalt and concrete recyclers in Ventura County and can accept any amount  
12 and type of concrete and asphalt (State Ready Mix 2021).

#### 13 **4.15.2 Regulatory Setting**

14 There are no federal, state, or local regulations, authorities, or administering agencies  
15 that regulate utilities and service systems that are specifically applicable to the Project.

#### 16 **4.15.3 Significance Criteria**

17 The Project does not have the potential to impact water or wastewater utility services.  
18 Therefore, a significant impact would occur if the proposed Project resulted in the  
19 following:

- 20 • Would generate solid waste in excess of State or local standards, in excess of  
21 the capacity of local infrastructure, or otherwise impair the attainment of solid  
22 waste reduction goals
- 23 • Does not comply with federal, state, and local management and reduction  
24 statutes and regulations related to solid waste
- 25 • According to the County of Santa Barbara (1993), any construction, demolition,  
26 or remodeling project of a commercial, industrial, or residential development that  
27 is projected to create more than 350 tons of construction and demolition debris is  
28 considered to have a significant impact on public services. The Project must also  
29 comply with AB939, requiring a minimum of 50 percent of all waste to be diverted  
30 from landfills
- 31 • Projects with a specific impact of 196 tons per year or more would also be  
32 considered cumulatively significant. Additionally, Projects which generate less  
33 than 40 tons per year of solid waste would not be considered significant

1 **4.15.4 Impact Analysis and Mitigation**

2 The proposed Project would generate solid waste in the form of wooden and steel pier  
 3 components, steel, concrete, and contaminated soil within each well caisson, rock and  
 4 wooden revetment materials, clean soil and gravel, and piping. All steel and related  
 5 metal materials would be recycled at Standard Industries. Concrete and gravel would be  
 6 recycled at State Ready Mix. Non-hazardous contaminated soils would be transported  
 7 to the Simi Valley Landfill. Hazardous contaminated soils or other materials would be  
 8 taken to Buttonwillow.

9 Component 1

10 **Impact US-1: Generation of Project Waste During Decommissioning Activities**  
 11 **(Component 1)**  
 12 Project decommissioning would generate various waste streams that would be taken to  
 13 local waste receiving/recycling facilities for disposal (**Less than Significant**).

14 **Impact Discussion**

15 During Component 1, removal of the 421-1 and 421-2 piers and caissons/wells would  
 16 generate the following solid waste streams (Table 4.15-1).

**Table 4.15-1. Solid Waste Disposal During Component 1  
 (Pier and Caisson/Well Removal)**

Material	Estimated Volume/Length	Estimated Truckloads	Anticipated Disposal Facility	Remaining Capacity at Disposal Facility
Soil – Caisson Fill	3,550 cubic yards	175	Buttonwillow	10,500 tons per day
Steel – Caisson and Pier	4,800 linear feet	30	Standard Industries	Adequate capacity (as indicated by Standard Industries)
Concrete – Caisson	926 cubic yards	240	State Ready Mix	Adequate capacity (as indicated by State Ready Mix)
Wood – Pier Decking and Joist Stringers	7,800 linear feet	7	Buttonwillow	10,500 tons per day

1 Truck trips would occur over the approximately 5 month timeframe of demolition  
 2 anticipated to complete Component 1. Additionally, approximately 60 percent of the  
 3 estimated truckloads would be taken to recycling facilities, which is in compliance with  
 4 AB 939 (California Integrated Waste Management Act 1989) requiring that 50 percent of  
 5 all waste be diverted from landfills. Based on remaining available capacity and  
 6 permitted processing throughput at these facilities, in addition to location of these  
 7 facilities outside of Santa Barbara County, a less than significant impact to solid waste  
 8 service systems would result.

9 **Mitigation Measures**

10 None required.

11 Component 2

12 **Impact US-2: Generation of Project Waste During Decommissioning Activities**  
 13 **(Component 2)**

14 Project decommissioning would generate various waste streams that would be taken to  
 15 local waste receiving/recycling facilities for disposal (**Less than Significant**).

16 **Impact Discussion**

17 During Component 2, removal of the two pipelines, pier abutments, rock and wooden  
 18 revetments, and access roadway would generate the following solid waste streams  
 19 (Table 4.15-2).

**Table 4.15-2. Solid Waste Disposal During Component 2  
 (Access Roadway and Seawall/Revetment Removal)**

<b>Material</b>	<b>Estimated Volume/Length</b>	<b>Estimated Truckloads</b>	<b>Anticipated Disposal Facility</b>	<b>Remaining Capacity at Disposal Facility</b>
Soil from Road and Slope Grading	4,500 cubic yards	300	WM Simi Valley	3,000 tons per day of refuse and 6,250 tons per day of recyclable materials
Rock Revetment	6,000 tons	333	State Ready Mix	Adequate capacity (as indicated by

Material	Estimated Volume/Length	Estimated Truckloads	Anticipated Disposal Facility	Remaining Capacity at Disposal Facility
				State Ready Mix)
Wood – Wooden seawall and Abutments	17,000 linear feet	5	Buttonwillow	10,500 tons per day
Steel-H-Piles, Pipelines, Tieback Rods	8 tons	11	Standard Industries	Adequate capacity (as indicated by Standard Industries)

1 These trips would occur over the approximately 3 month timeframe of demolition  
 2 anticipated to complete Component 2. Based on remaining available capacity and  
 3 permitted processing throughput at these facilities, in addition to location of these  
 4 facilities outside of Santa Barbara County, a less than significant impact to solid waste  
 5 service systems would result. Additionally, approximately 52 percent of the estimated  
 6 truckloads would be taken to recycling facilities, which is in compliance with AB 939  
 7 requiring that 50 percent of all waste to be diverted from landfills. A less than significant  
 8 impact would result.

9 **Mitigation Measures**

10 None required.

11 **4.15.5 Cumulative Impacts Analysis**

12 **Impact Discussion**

13 Components 1 and 2

14 The proposed Project would not include the addition of any permanent components that  
 15 would require or alter existing utilities or service systems. A short-term increase in  
 16 construction waste would occur during each Project component; however, over 50  
 17 percent of these wastes would be recycled. The remaining volumes would be brought to  
 18 facilities with sufficient remaining capacity and permitted throughput to accept the  
 19 waste. No impacts would result that would have the potential to contribute to cumulative  
 20 impacts to utilities or service systems.

1 **4.15.6 Summary of Impacts and Proposed Mitigation Measures**

**Table 4.15-3. Summary of Utilities and Service Systems Impacts and Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>Impact US-1:</b> Generation of Project Waste During Decommissioning Activities (Component 1)	None required.
<b>Impact US-2:</b> Generation of Project Waste During Decommissioning Activities (Component 2)	None required.

## 5.0 PROJECT ALTERNATIVES ANALYSIS

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### 1 5.1 INTRODUCTION

2 This section of the EIR provides a comparative analysis of the merits of alternatives to  
3 the proposed Project pursuant to State CEQA Guidelines section 15126.6. According to  
4 the State CEQA Guidelines, the discussion of alternatives should focus on alternatives  
5 to a project or its location that would feasibly meet the basic objectives of the project  
6 while avoiding or substantially lessening the significant effects of the project. The State  
7 CEQA Guidelines indicate that the range of alternatives included in this discussion  
8 should be sufficient to allow decision-makers a reasoned choice between alternatives  
9 and a proposed project. The alternatives discussion should provide decision-makers  
10 with an understanding of the environmental merits and disadvantages of various project  
11 alternatives.

12 The range of alternatives in an EIR is governed by a “rule of reason” that requires the  
13 EIR to set forth only those alternatives necessary to make a reasoned choice. The  
14 alternatives shall be limited to ones that would avoid or substantially lessen any of the  
15 significant effects of the project (State CEQA Guidelines, § 15126.6, subd. (f)). Of those  
16 alternatives, the EIR need examine in detail only the ones that the lead agency  
17 determines could feasibly attain most of the basic objectives of the project. The range of  
18 feasible alternatives shall be selected and discussed in a manner to foster meaningful  
19 public participation and informed decision-making. When addressing feasibility, the  
20 State CEQA Guidelines state that “among the factors that may be taken into account  
21 when addressing the feasibility of alternatives are site suitability, economic viability,  
22 availability of infrastructure, general plan consistency, other plans or regulatory  
23 limitations, jurisdictional boundaries (projects with a regionally significant impact should  
24 consider the regional context), and whether the proponent can reasonably acquire,  
25 control or otherwise have access to the alternative site (or the site is already owned by  
26 the proponent).” The State CEQA Guidelines also state that the alternatives discussion  
27 need not be presented in the same level of detail as the assessment of the proposed  
28 project.

29 Therefore, based on the State CEQA Guidelines, several factors need to be considered  
30 in determining the range of alternatives to be analyzed in an EIR and the level of detail  
31 of analysis that should be provided. These factors include:

- 32 • The extent to which the alternative would accomplish most of the basic objectives  
33 of the project
- 34 • The extent to which the alternative would avoid or lessen any of the identified  
35 significant adverse environmental effects of the project

- 1       • The feasibility of the alternative, taking into account site suitability, economic  
2       viability, availability of infrastructure, consistency with regulatory limitations, and  
3       the reasonability of the Applicant controlling the site
- 4       • The appropriateness of the alternative in contributing to a “reasonable range” of  
5       alternatives necessary to permit a reasoned choice

## 6   **5.2   ALTERNATIVES SELECTION**

7   The proposed Project entails the decommissioning and removal of existing facilities.  
8   Therefore, the selection of alternatives is extremely limited. Types of alternatives to be  
9   considered are variations in decommissioning/removal methods, elimination of some  
10   components, modified timing of Project components, and the No Project Alternative.

11   As required by the State CEQA Guidelines, this analysis focuses on alternatives that  
12   could avoid or substantially reduce significant effects of the Project. Alternatives that  
13   would not reduce impacts overall or may not be feasible given the difficulty in working in  
14   intertidal areas were considered but eliminated from further analysis (see Section 5.3).

15   The environmentally superior alternative is discussed in Section 6.6 as required by the  
16   State CEQA Guidelines.

## 17   **5.3   ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION**

### 18   **5.3.1   Steel Sheet Pile Cofferdam Alternative**

19   Construction of a cofferdam from sheet pile is a standard approach for dewatering and  
20   protecting construction areas from wave action and tidal fluctuations and enabling  
21   longer work periods in intertidal areas. For these reasons, along with the added  
22   potential benefit of minimizing the potential for incidental discharge of the caisson fill  
23   material, a steel sheet pile cofferdam around each of the caissons was considered.

24   However, because the sand cover that overlays the bedrock in the area is minimal,  
25   sheet pile installation would require driving steel beams into the underlying bedrock. As  
26   discussed in Section 4.8.1.1, there are numerous hydrocarbon seeps that are known to  
27   exist throughout this area emanating from the local strata. The PRC 421 piers are  
28   located at the axis of a tightly folded and steeply dipping geologic structure with mapped  
29   faults in the immediate area. The tectonic conditions that created the structure are likely  
30   to have fractured and folded, creating the presence of oil and gas seeps. Driving sheet  
31   pile into the underlying bedrock could conceivably disturb preexisting fractures that have  
32   been sealed or create new pathways for hydrocarbons to escape to the surface.

33   This possibility of exacerbating local seeps was a leading argument against the use of  
34   sheet piles. However, there are additional reasons for dismissing this Alternative which  
35   include:

- 1 • Sheet piles would need to extend up to the access roadway to exclude high tide  
2 waters from the caisson work areas, making a cofferdam installation extensive.  
3 Accomplishing this in winter months when high tides extend to the rock  
4 revetment along the access roadway would be extremely difficult.
- 5 • The sheet pile cofferdam would completely block public access through this  
6 corridor for a considerable length of time.
- 7 • Pile driving activity would create additional noise, potentially impact nearshore  
8 marine mammals, and extend the project duration for the period required to  
9 install and remove (an addition of approximately 4 to 6 weeks).

10 Upgrading of the piers would likely be required to accommodate the cranes large  
11 enough to complete a cofferdam installation. Removal logistics would add additional  
12 challenges. Since the Sheet Pile Cofferdam Alternative would not result in lesser  
13 impacts than the proposed Project overall and would create logistical challenges, it was  
14 eliminated from further consideration.

### 15 **5.3.2 Portable Cofferdam Alternative**

16 Temporary cofferdams utilizing inflatable bladders or impermeable membranes were  
17 evaluated for their effectiveness in consideration of wave action and tidal fluctuations  
18 present at the PRC 421 caissons. These systems have been successful in lakes and  
19 estuaries providing dewatering barriers. Two products were considered, the Portadam  
20 and Aquadam. Both products can only safely accommodate water holding heights of up  
21 10 feet or less. Winter high tides at the PRC 421 Project site easily reach these heights,  
22 while winter storms would produce additional height and dynamics. While these  
23 products work well in static water conditions, neither have been used in dynamic ocean  
24 surf conditions. For these reasons, the Portable Cofferdam Alternative was not  
25 considered feasible and was eliminated from further consideration.

### 26 **5.3.3 Alternative Beach Access Ramp**

27 An alternative beach access ramp located between the piers was initially considered  
28 because it would allow heavy equipment to use the existing access roadway to reach  
29 the pier/caisson locations instead of traversing the beach. Construction of such a beach  
30 access ramp would involve building a ramp out of riprap and additional material, or  
31 alternatively adding a steel ramp structure to the PRC 421-1 pier. However, a riprap  
32 ramp at this location would require double the rock material compared to that of the  
33 proposed location because it has a higher vertical drop. It would also require double the  
34 truck trips, time to construct and deconstruct, and double the equipment use to build a  
35 serviceable structure at that location. Building a temporary steel ramp structure between  
36 the piers would require structural modification to the PRC 421-1 pier, and installation of  
37 anchor points on the beach, which would need to be removed at Project completion.

1 The small reduction in equipment activity on the beach associated with this alternative  
2 would be offset by the loss of coastal bluff scrub/ESHA at the ramp location that would  
3 not occur at the proposed ramp location, and increased air pollutant and greenhouse  
4 gas emissions associated with ramp construction and removal. Since the Alternative  
5 Beach Access Ramp alternative would not reduce impacts overall and would be  
6 challenging to construct, this alternative was not considered further.

## 7 **5.4 ALTERNATIVES EVALUATED IN THIS EIR**

### 8 **5.4.1 No Project Alternative**

#### 9 5.4.1.1 Description

10 The No Project Alternative consists of no action, such that all PRC 421 facilities would  
11 be left in their current location and condition. Natural processes would continue to  
12 degrade these existing facilities including corrosion of the pipelines, piers, and caisson  
13 sheet pile, deterioration of the concrete caissons due to wave action and internal  
14 corrosion, and deterioration of the wooden seawall due to wave action and wood  
15 decomposition. The No Project Alternative does not meet the purpose of the Project or  
16 any of the Project objectives.

#### 17 5.4.1.2 Impact Analysis

##### 18 Aesthetics

19 Since the PRC 421 facilities would be left in place, adverse impacts (degradation of  
20 public views) associated with decommissioning activities (Impacts AES-1, AES-3, and  
21 AES-4) would be avoided. However, the beneficial impact to public views at Haskell's  
22 Beach (Impact AES-2) associated with removal of the piers and caissons would not be  
23 realized. In addition, as the structures would further degrade and corrode due to natural  
24 processes, the visual character of the beach area would become even more unsightly.

##### 25 Air Quality

26 Adverse impacts to air quality (air pollutant emissions) generated by decommissioning  
27 activities (Impacts AQ-1, AQ-2, and AQ-3) would be avoided.

##### 28 Biological Resources

29 Adverse impacts to biological resources associated with decommissioning activities  
30 would be avoided, including disturbance of nesting birds, loss of a bat roost, loss of  
31 coastal wetlands, disturbance of terrestrial and aquatic special-status wildlife species,  
32 disturbance of intertidal ESHA, disturbance of marine special-status species, loss of  
33 terrestrial ESHA/sensitive natural communities, and loss of special-status plant species  
34 (Impacts BIO-1 through BIO-11).

1 However, ongoing deterioration of the caissons as well as the access roadway and  
2 wooden seawall by natural processes would ultimately lead to discharge of  
3 hydrocarbons to the marine environment (contaminated fill material and possibly free oil  
4 in the caissons, petroleum hydrocarbons in artificial fill material within the access  
5 roadway, and wood preservatives in the seawall). The resulting discharge and related  
6 impacts to marine organisms would be greater than the proposed Project, which  
7 includes procedures to remove hydrocarbons from the caissons to the extent feasible  
8 prior to caisson demolition to minimize any discharge.

### 9 Cultural Resources

10 Adverse impacts to cultural resources associated with decommissioning activities would  
11 be avoided, including potential impacts to previously undiscovered cultural resources  
12 (Impacts CR-1 and CR-2), the potential for unauthorized collection of artifacts (Impact  
13 CR-3), and potential contribution to cumulative impacts to cultural resources (Impact  
14 CR-4).

### 15 Tribal Cultural Resources

16 Adverse impacts to tribal cultural resources associated with decommissioning activities  
17 would be avoided, including potential impacts to previously undiscovered tribal cultural  
18 resources (Impacts TCR-1 and TCR-2), the potential for unauthorized collection of  
19 artifacts (Impact TCR-3), and potential contribution to cumulative impacts to tribal  
20 cultural resources (Impact TCR-4).

### 21 Geology, Soils and Paleontological Resources

22 Less than significant impacts to littoral transport and beach width associated with  
23 removal of the pier and caissons, rock revetment, and seawall would be avoided  
24 (Impacts GEO-1 and GEO-3). Additionally, impacts to bluff erosion, bluff retreat, and  
25 stability (Impacts GEO-2 and GEO-4) would be avoided as the caissons, piers, access  
26 roadway, rock revetment, and seawall would remain in place. However, the geologic  
27 benefits of removing this hardscape and revetments and returning this section of  
28 coastline to a natural condition would also not result.

### 29 Greenhouse Gas Emissions

30 Potentially adverse impacts to global climate change associated with greenhouse gas  
31 emissions generated by decommissioning activities (Impacts GHG-1, GHG-2, and  
32 GHG-3) would be avoided.

### 33 Hazards and Hazardous Materials

34 Adverse impacts associated with Project-related and cumulative public exposure to

1 hazardous materials encountered during decommissioning activities (Impacts HAZ-1,  
2 HAZ-3, and HAZ-5) would be avoided. The potential for discharge of fuel and lubricants  
3 used in decommissioning-related equipment and vehicles to the environment (Impacts  
4 HAZ-2 and HAZ-4) would be avoided. However, if left in-place, ongoing deterioration of  
5 the caissons as well as the access roadway and wooden seawall by natural processes  
6 would ultimately lead to discharge of hydrocarbons to the ocean (contaminated fill  
7 material and possibly free oil in the caissons, petroleum hydrocarbons in artificial fill  
8 material within the access roadway, and wood preservatives in the seawall). The  
9 resulting discharge and related risk of hazardous materials impacts would be greater  
10 than the proposed Project.

#### 11 Hydrology and Water Quality

12 Water quality impacts associated with incidental discharge of hydrocarbons, lead-based  
13 paint, and wood preservatives to the ocean (Impacts HWQ-1 and HWQ-3) would be  
14 avoided. Erosion and sedimentation impacts associated with heavy equipment activity  
15 would be avoided (Impacts HWQ-2, HWQ-4, and HWQ-5).

16 However, ongoing deterioration of the caissons as well as the access roadway and  
17 wooden seawall by natural processes would ultimately lead to discharge of  
18 hydrocarbons to the ocean (contaminated fill material and possibly free oil in the  
19 caissons petroleum hydrocarbons in artificial fill material within the access roadway, and  
20 wood preservatives in the seawall). The resulting discharge and related water quality  
21 impacts would be greater than the proposed Project, which includes procedures to  
22 remove hydrocarbons from the caissons to the extent feasible prior to caisson  
23 demolition to minimize any discharge.

#### 24 Land Use and Planning

25 Temporary conflicts with State and local policies (Impacts LU-1 and LU-2) would be  
26 avoided. However, policies requiring the timely decommissioning of these facilities  
27 would be violated.

#### 28 Noise

29 As proposed decommissioning activities would not be implemented, noise generation  
30 and related less than significant impacts (Impacts N-1, N-2, and N-3) would not occur.

#### 31 Public Services

32 As proposed decommissioning activities would not be implemented, no increase in the  
33 need for public services would occur (Impact PS-1). However, leaving the structures in  
34 place would ultimately result in hydrocarbon spills, which would increase the need for  
35 public services with respect to spill response and protection of public safety.

1 Recreation

2 As proposed decommissioning activities would not be implemented, temporary loss of  
3 beach access (Impacts REC-1 and REC-3) would be avoided. However, the beneficial  
4 long-term increase in beach area associated with removal of the caissons and piers  
5 (Impact REC-2) would not be realized. The deteriorating facilities would ultimately  
6 represent public safety hazards and reduce available public recreational area.

7 Transportation and Traffic

8 As proposed decommissioning activities would not be implemented, temporary traffic  
9 congestion (Impacts T-1 and T-3) and potentially significant traffic safety impacts  
10 (Impacts T-2, T-4, and T-5) would be avoided.

11 Utilities and Service Systems

12 As proposed decommissioning activities would not be implemented, solid waste would  
13 not be generated and less than significant impacts on landfill capacity (Impacts US-1  
14 and US-2) would be avoided in the short-term. Disposal of the deteriorated structures  
15 would still be required if left in-place if weathered or eroded pieces were to break off or  
16 represent a public hazard.

17 **5.4.2 Single Component Abandonment Alternative**

18 5.4.2.1 Description

19 The Single Component Abandonment Alternative consists of the elimination of  
20 Component 2 as described in Section 2.3.3 as part of the Project. Instead, the pipelines  
21 (flushed and isolated), access roadway, pier abutments, rock revetment, and wooden  
22 seawall would be left in place following the completion of Component 1. This Alternative  
23 meets the Project objectives, as former oil and gas production facilities would be  
24 decommissioned, and the beach area would be restored and appropriate for safe public  
25 access and use.

26 Aesthetics

27 Adverse impacts (degradation of public views) associated with Component 2  
28 decommissioning activities (Impact AES-3) would be avoided, and the incremental  
29 Project contribution to cumulative aesthetic impacts would be reduced (Impact AES-4).  
30 Overall, aesthetics impacts associated with the Single Component Abandonment  
31 Alternative would be less than the proposed Project. Retention of the access roadway,  
32 rock revetment and wooden seawall would be consistent with the other seawall  
33 components located to the east of the Project site.

1 Air Quality

2 Adverse impacts to air quality (air pollutant emissions) generated by Component 2  
3 decommissioning activities (Impact AQ-2) would be avoided, and the incremental  
4 Project contribution to cumulative air quality impacts would be reduced (Impact AQ-3).  
5 Overall, air quality impacts associated with the Single Component Abandonment  
6 Alternative would be less than the proposed Project.

7 Biological Resources

8 Adverse impacts to biological resources associated with Component 2  
9 decommissioning activities would be avoided including:

- 10 • Potential impacts to globose dune beetle, tidewater goby, California red-legged  
11 frog, brown pelican, double-crested cormorant, western snowy plover, snowy  
12 egret, long-billed curlew, Cooper's hawk, and yellow warbler (Impact BIO-5)  
13 would be reduced because equipment and vehicle use on the beach, access  
14 routes, and staging areas would be reduced.
- 15 • Disturbance of intertidal areas and impacts to invertebrates and fish associated  
16 with equipment activity would be reduced (Impact BIO-6).
- 17 • Disturbance of intertidal areas and potential impacts to grunion associated with  
18 equipment activity would be reduced (Impact BIO-7).
- 19 • Loss of 0.105 acre of coastal wetlands within Component 2 work areas would be  
20 avoided, and 0.117 acre of adjacent wetlands would be retained (Impact BIO-8).
- 21 • Loss of 0.3 acres of coastal bluff scrub/ESHA along the access roadway would  
22 be avoided (Impact BIO-9).
- 23 • Loss of special-status plant species (cliff malacothrix) would be avoided (Impact  
24 BIO-10).
- 25 • The incremental Project contribution to cumulative impacts to biological  
26 resources would be reduced (Impact BIO-11).

27 Overall, impacts to biological resources associated with the Single Component  
28 Abandonment Alternative would be less than the proposed Project.

29 Cultural Resources

30 Potential impacts to previously undiscovered cultural resources within Component 2  
31 work areas (Impact CR-2) would be avoided. The potential for unauthorized collection of  
32 artifacts (Impact CR-3) and potential incremental Project contribution to cumulative  
33 impacts to cultural resources (Impact CR-4) would be reduced. Overall, impacts to

1 cultural resources associated with the Single Component Abandonment Alternative  
2 would be less than the proposed Project.

3 Tribal Cultural Resources

4 Potential impacts to previously undiscovered tribal cultural resources within Component  
5 2 work areas (Impact CR-2) would be avoided. The potential for unauthorized collection  
6 of artifacts (Impact CR-3) and potential incremental Project contribution to cumulative  
7 impacts to tribal cultural resources (Impact CR-4) would be reduced. Overall, impacts to  
8 tribal cultural resources associated with the Single Component Abandonment  
9 Alternative would be less than the proposed Project.

10 Geology, Soils and Paleontological Resources

11 Naturally occurring geologic impacts to bluff erosion, bluff retreat, and stability (Impacts  
12 GEO-2 and GEO-4) associated with implementation of Component 2 would be avoided  
13 as the access roadway, rock revetment and seawall would remain in place. However,  
14 geologic benefits that would result by returning this area to a natural condition would  
15 also not occur.

16 Greenhouse Gas Emissions

17 Potentially adverse impacts to global climate change associated with greenhouse gas  
18 emissions generated by Component 2 decommissioning activities (Impact GHG-2)  
19 would be avoided, and the incremental Project contribution to cumulative global climate  
20 change would be reduced (Impact GHG-3). Overall, the potential for impacts to global  
21 climate change associated with the Single Component Abandonment Alternative would  
22 be less than the proposed Project.

23 Hazards and Hazardous Materials

24 Adverse impacts associated with public exposure to hazardous materials encountered  
25 during Component 2 decommissioning activities (Impact HAZ-3) and the potential for  
26 discharge of fuel and lubricants used in Component 2 decommissioning-related  
27 equipment and vehicles to the environment (Impact HAZ-4) would be avoided. The  
28 incremental Project contribution to cumulative impacts related to potential for discharge  
29 of fuel and lubricants to the environment (Impact HAZ-5) would be reduced. Although  
30 residual hydrocarbons are present within the access roadway artificial fill, these  
31 materials would remain subsurface and in place since Component 2 removal of the rock  
32 revetment and wooden seawall would not occur, and therefore erosion potential of the  
33 access roadway would be limited. Overall, the potential for public exposure to  
34 hazardous materials associated with the Single Component Abandonment Alternative  
35 would be less than the proposed Project.

1 Hydrology and Water Quality

2 Water quality impacts associated with incidental discharge of hydrocarbons and wood  
3 preservatives to the ocean (Impact HWQ-3) and erosion and sedimentation impacts  
4 (Impact HWQ-4) associated with Component 2 heavy equipment activity would be  
5 avoided. In addition, the incremental Project contribution to cumulative erosion and  
6 sedimentation impacts associated with heavy equipment activity would be reduced  
7 (Impact HWQ-5). Overall, water quality impacts associated with the Single Component  
8 Abandonment Alternative would be less than the proposed Project.

9 Land Use and Planning

10 Temporary conflicts with State and local policies (Impacts LU-1 and LU-2) associated  
11 with Component 2 would be avoided. Overall, temporary policy conflicts (primarily  
12 related to environmental impacts) associated with the Single Component Abandonment  
13 Alternative would be less than the proposed Project.

14 Noise

15 Component 2 noise generation and related less than significant impacts (Impact N-2)  
16 would be avoided. In addition, the incremental Project contribution to cumulative noise  
17 associated with heavy equipment activity would be reduced (Impact N-3). Overall, noise  
18 impacts associated with the Single Component Abandonment Alternative would be less  
19 than the proposed Project.

20 Public Services

21 As Component 2 decommissioning activities would not be implemented, the need for  
22 public services (Impact PS-1) would be reduced. Overall, impacts to public services  
23 associated with the Single Component Abandonment Alternative would be less than the  
24 proposed Project.

25 Recreation

26 As Component 2 decommissioning activities would not be implemented, temporary loss  
27 of beach access (Impact REC-3) would be avoided. Overall, impacts to recreation  
28 (beach access) associated with the Single Component Abandonment Alternative would  
29 be less than the proposed Project.

30 Transportation and Traffic

31 As Component 2 decommissioning activities would not be implemented, temporary  
32 traffic congestion (Impact T-3) and potentially significant traffic safety impacts (Impact T-  
33 4) would be avoided. In addition, the incremental Project contribution to cumulative  
34 traffic safety impacts would be reduced (Impact T-5). Overall, impacts related to traffic

1 congestion and safety associated with the Single Component Abandonment Alternative  
2 would be less than the proposed Project.

3 Utilities and Service Systems

4 As Component 2 decommissioning activities would not be implemented, solid waste  
5 would not be generated and less than significant impacts on landfill capacity (Impact  
6 US-2) would be avoided. Overall, impacts to landfill capacity associated with the Single  
7 Component Abandonment Alternative would be less than the proposed Project.

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## 6.0 OTHER REQUIRED CEQA SECTIONS AND ENVIRONMENTALLY SUPERIOR ALTERNATIVE

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1 As lead agency under the California Environmental Quality Act (CEQA), the California  
2 State Lands Commission (CSLC) has prepared this Environmental Impact Report (EIR)  
3 to evaluate the potential significant environmental effects of the PRC 421  
4 Decommissioning Project (Project). The State CEQA Guidelines<sup>16</sup> state that an EIR  
5 shall:

- 6 • Identify and mitigate any significant impacts related to wasteful, inefficient, or  
7 unnecessary use of energy (§ 15126.2, subd. (b))
- 8 • Describe any significant impacts, including those that can be mitigated but not  
9 reduced to a level of insignificance (§ 15126.2, subd. (c))
- 10 • Identify significant irreversible environmental changes that would be caused by a  
11 proposed project should it be implemented (§ 15126.2, subd. (d))
- 12 • Identify any growth-inducing impacts of a proposed project such as the ways in  
13 which the proposed project could foster economic or population growth, or the  
14 construction of additional housing, either directly or indirectly, in the surrounding  
15 environment (§ 15126.2(e))
- 16 • Identify any known areas of controversy or unresolved issues (§ 15123, subd.  
17 (b))
- 18 • Identify the environmentally superior alternative (§ 15126.6, subd. (e)(2))

19 Compliance with the above sections of the State CEQA Guidelines is addressed in  
20 Sections 6.1 through 6.5 below.

### 21 6.1 ENERGY USE

22 If analysis of a project's energy use reveals that the project may result in significant  
23 environmental effects due to wasteful, inefficient, or unnecessary consumption of  
24 energy, or wasteful use of energy resources, the EIR shall provide mitigation to address  
25 such energy use. Project-related energy use would be limited to fossil fuels used in  
26 equipment and vehicles used to conduct decommissioning activities. This energy use  
27 would be focused on specific tasks and would not be wasteful, inefficient, or  
28 unnecessary or result in significant energy-related impacts. The Project would not  
29 conflict with any State or local plan for renewable energy or energy efficiency, including  
30 the city's Climate Action Plan.

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<sup>16</sup> The State CEQA guidelines are found in California Code of Regulations, title 14, sections 15000 et seq.

1    **6.2    SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED**

2    Significant environmental impacts anticipated as a result of the Project and mitigation  
3    measures identified to reduce impacts are discussed in Section 4.0, Environmental  
4    Impact Analysis. The State CEQA Guidelines section 15126.2(c) require that an EIR  
5    describe any significant impacts that cannot be avoided, even with the implementation  
6    of feasible mitigation measures. There are no Project impacts that have been identified  
7    that cannot be avoided following implementation of recommended mitigation measures  
8    that will reduce potential impacts to a less than significant level.

9    **6.3    SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES CAUSED BY**  
10   **THE PROJECT IF IMPLEMENTED**

11   Significant irreversible environmental changes that may occur with implementation of a  
12   proposed project are addressed in Sections 6.3.1 through 6.3.3 below (State CEQA  
13   Guidelines §15126.2, subd. (d)).

14   **6.3.1    Non-renewable Resources**

15   Use of non-renewable resources during the initial and continued phases of a project  
16   may be irreversible since a large commitment of such resources makes removal or  
17   nonuse thereafter unlikely. Project-related use of non-renewable resources would be  
18   limited to fossil fuels used in equipment and vehicles used to conduct decommissioning  
19   activities. The Project would not involve any future phases beyond Components 1 and 2  
20   or other components or features that would involve a large commitment of non-  
21   renewable resources. Therefore, the Project would not result in any significant  
22   irreversible environmental changes related to non-renewable resources.

23   **6.3.2    Commit Future Generations to Similar Uses**

24   Primary impacts and, in some cases, secondary impacts generally commit future  
25   generations to similar uses. The Project is limited to decommissioning of an existing  
26   land use (oil and gas production facilities) and would not provide access to previously  
27   inaccessible areas or result in a new land use that may commit future generations to  
28   similar uses. Therefore, the Project would not result in any significant irreversible  
29   environmental changes related to committing future generations to similar uses.

30   **6.3.3    Environmental Accidents**

31   Irreversible damage can result from environmental accidents associated with a project.  
32   Project implementation has the potential to result in an oil spill, should free oil occur  
33   within the caissons and be released to the marine environment during caisson removal.  
34   However, the amount of free oil (if present) that could be released is anticipated to be  
35   very small and would not result in irreversible damage. This EIR identifies caisson

1 removal methods to minimize the potential for an oil spill, and mitigation to minimize the  
2 effects should it occur (implementation of the facilities' existing Oil Spill Contingency  
3 Plan, **MM HAZ-1c**). Therefore, the Project would not result in any significant irreversible  
4 environmental changes related to environmental accidents.

#### 5 **6.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT**

6 This section discusses whether the proposed Project would foster economic growth or  
7 population growth in the surrounding area. A project may foster economic or population  
8 growth in a geographic area if it would meet any of the following criteria:

- 9 • The project would result in the urbanization of land in a remote location, creating  
10 an intervening area of open space which then experiences pressure to be  
11 developed
- 12 • The project removes an impediment to growth through the establishment of an  
13 essential public service or the provision of new access to an area
- 14 • Economic expansion, population growth or the construction of additional housing  
15 occurs in the surrounding environment in response to economic characteristics of  
16 the project
- 17 • The project establishes a precedent-setting action, such as a change in zoning or  
18 general plan amendment approval that makes it easier for future projects to gain  
19 approval

20 Should a project meet any one of these criteria, it may be considered growth-inducing.  
21 An increase in population may require construction of new facilities which could cause  
22 significant environmental impacts. State CEQA Guidelines section 15126.2(e) states that  
23 growth in an area is not necessarily beneficial, detrimental, or of little significance to the  
24 environment.

25 The Project would not result in urbanization of land, removal of an impediment to  
26 growth, would not produce an economic expansion or changes in revenue base,  
27 housing, or employment, and would not establish a precedent-setting action (e.g., no  
28 changes in zoning). Therefore, the Project would not be growth-inducing or result in  
29 environmental impacts associated with such growth.

#### 30 **6.5 KNOWN AREAS OF CONTROVERSY OR UNRESOLVED ISSUES**

##### 31 **6.5.1 Known Areas of Controversy**

32 Pursuant to State CEQA Guidelines section 15123, the EIR shall identify "areas of  
33 controversy known to the lead agency including issues raised by agencies and the  
34 public." In response to the Notice of Preparation, a letter from Brownstein, Hyatt, Farber  
35 & Schreck dated July 9, 2021, expressed the Sandpiper Golf Course's concern about

1 the potential adverse effects on their property associated with removal of the access  
2 roadway and rock revetment.

### 3 **6.5.2 Unresolved Issues**

4 An unresolved issue known to the CSLC, as the lead agency, is the scope of the Project  
5 that the CSLC can itself undertake, as the administrator of State sovereign lands. This  
6 EIR analyzes the entirety of the Project, which includes both Component 1 and  
7 Component 2. As explained in Section 1.2 of this EIR, the area waterward of the mean  
8 high tide line (MHTL) was within the boundary of former State Oil and Gas Lease PRC  
9 421, which was at one point leased to Mobil Exploration and Producing, Inc. (now  
10 ExxonMobil). After Venoco, the last lessee of PRC 421, dissolved in bankruptcy, the  
11 CSLC and ExxonMobil entered into an agreement for ExxonMobil to undertake the  
12 plugging and abandonment of the two PRC 421 wells (completed in 2019) and  
13 decommissioning and removal of the PRC 421 caissons and piers (the elements of  
14 Component 1). The CSLC understands that the pipelines and access roadway between  
15 the piers and 12<sup>th</sup> hole of the Sandpiper Golf course exist on private uplands and reside  
16 outside the bounds of lease PRC 421. Additionally, as of fiscal year 2021/2022, the  
17 CSLC does not have authorized funding to undertake the removal of the pipelines or  
18 roadway (elements of Component 2). However, Component 2 is analyzed as part of the  
19 Project because it remains feasible and foreseeable that funding could be allocated to  
20 undertake Component 2, at some time, whether by the California Legislature, an agency  
21 of the State of California, or a local agency.

## 22 **6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

23 Two alternatives were analyzed in detail in this EIR: the No Project Alternative and the  
24 Single Component Abandonment Alternative. Table ES-2 compares the environmental  
25 impacts associated with implementation of the proposed Project with those of the other  
26 alternatives. As discussed in Section 5.4.1, the No Project Alternative would not result in  
27 any new direct impacts to the environment.

28 However, ongoing deterioration of the caissons by natural processes would ultimately  
29 lead to discharge of hydrocarbons to the ocean (contaminated fill material and possibly  
30 free oil in the caissons). The resulting discharge and related impacts to water quality  
31 and marine organisms would be greater than the proposed Project which includes  
32 procedures to remove hydrocarbons from the caissons to the extent feasible prior to  
33 caisson demolition to minimize any discharge. In addition, the gradual deterioration of  
34 these facilities will result in the public exposure to steel and concrete debris within the  
35 beach and intertidal zone. Because of these ongoing environmental impacts if the  
36 decommissioning Project is not implemented, the No Project Alternative is not  
37 considered the environmentally superior alternative.

1 The State CEQA Guidelines section 15126.6, subdivision (e)(2) states, in part, that an  
2 EIR shall identify an environmentally superior alternative among the other alternatives if  
3 the “environmentally superior alternative is the ‘no project’ alternative.” Because the No  
4 Project Alternative is not considered the environmentally superior alternative, the State  
5 CEQA Guidelines do not require identification of an environmentally superior alternative  
6 among the remaining alternatives.

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## 7.0 MITIGATION MONITORING PROGRAM

1 As the lead agency under the California Environmental Quality Act (CEQA), the  
2 California State Lands Commission (CSLC) is required to adopt a program for reporting  
3 or monitoring regarding the implementation of mitigation measures (MMs). As  
4 proponent for the PRC 421 Decommissioning Project (Project), the CSLC will also  
5 ensure the implementation of the adopted MMs defined in this Environmental Impact  
6 Report (EIR). This lead agency responsibility originates in Public Resources Code  
7 section 21081.6, subdivision (a) (Findings), and the State Guidelines for Implementing  
8 CEQA sections 15091, subdivision (d) (Findings), and 15097 (Mitigation Monitoring or  
9 Reporting).

### 10 7.1 MONITORING AUTHORITY

11 The purpose of a Mitigation Monitoring Program (MMP) is to ensure that measures  
12 adopted to mitigate or avoid significant impacts are implemented. A MMP can be a  
13 working guide to facilitate the implementation of the MMs and associated monitoring,  
14 compliance and reporting activities. The CSLC staff may delegate duties and  
15 responsibilities for monitoring to environmental monitors or consultants as deemed  
16 necessary, and some monitoring responsibilities may be assumed by responsible  
17 agencies, such as affected jurisdictions and cities. The number of construction monitors  
18 assigned to the Project will depend on the number of concurrent construction activities  
19 and their locations. The CSLC staff will ensure that appropriate agency reviews and  
20 approvals are obtained, that each person delegated any duties or responsibilities is  
21 qualified to monitor compliance, and that it is aware of and has approved any deviation  
22 from the MMP.

### 23 7.2 ENFORCEMENT RESPONSIBILITY

24 The CSLC, as lead agency, is responsible for enforcing the procedures adopted for  
25 monitoring through the environmental monitor. Any assigned environmental monitor  
26 shall note problems with monitoring, notify appropriate agencies or individuals about  
27 any problems, and report the problems to the CSLC staff or its designee.

### 28 7.3 MITIGATION COMPLIANCE RESPONSIBILITY

29 The CSLC is responsible for successfully implementing all the MMs in the MMP and  
30 shall ensure that these requirements are met by all construction contractors and field  
31 personnel. Standards for successful mitigation also are implicit in many MMs that  
32 include such requirements as obtaining permits or avoiding a specific impact entirely.  
33 Other MMs include detailed success criteria. Additional mitigation success thresholds  
34 may be established by applicable agencies with jurisdiction through the permit process  
35 and through the review and approval of specific plans for the implementation of MMs.

1 **7.4 MONITORING PROCEDURES**

2 CSLC staff may delegate duties and responsibilities for monitoring to other  
3 environmental monitors or consultants as necessary. Some monitoring responsibilities  
4 may be assumed by other agencies, such as affected jurisdictions (i.e., city of Goleta or  
5 California Coastal Commission). The CSLC or its designee shall ensure that qualified  
6 environmental monitors are assigned to the Project.

7 **Environmental Monitors.** To confirm implementation and success of the MMs, an  
8 environmental monitor must be on-site during all Project activities with the potential to  
9 create significant environmental impacts or impacts for which mitigation is required.  
10 Along with CSLC staff, the environmental monitor(s) are responsible for:

- 11 • Confirming that CSLC has obtained all applicable agency reviews and approvals
- 12 • Coordinating with CSLC to integrate the mitigation monitoring procedures during  
13 Project implementation
- 14 • Confirming that the MMP is followed

15 The environmental monitor shall immediately report any deviation from the procedures  
16 identified in this MMP to CSLC staff or its designee. CSLC staff or its designee shall  
17 approve any deviation and its correction.

18 **Workforce Personnel.** Implementation of the MMP requires the full cooperation of  
19 Project personnel and supervisors. Many of the MMs require action from site  
20 supervisors and their crews. To facilitate successful implementation, relevant mitigation  
21 procedures shall be written into contracts between CSLC, ExxonMobil, and the  
22 demolition contractors.

23 **General Reporting Procedures.** A monitoring record form shall be submitted CSLC,  
24 and once the Project is complete, a compilation of all the logs shall be submitted to  
25 CSLC staff. CSLC staff or its designated environmental monitor shall develop a  
26 checklist to track all procedures required for each MM and shall confirm that the timing  
27 specified for the procedures is followed. The environmental monitor shall note any  
28 issues that may occur and take appropriate action to resolve them.

29 **Public Access to Records.** Records and reports are open to the public and are to be  
30 provided upon request.

31 **7.5 MITIGATION MONITORING TABLE**

32 This section presents the mitigation monitoring table (Table 7-1) for each environmental  
33 discipline that requires MMs. Impacts that do not require mitigation are not included  
34 (see Executive Summary for summary description of all Project impacts). Each table  
35 lists the following information, by column:

- 1 • Potential Impact
- 2 • Mitigation Measure (full text of the measure)
- 3 • Location (where impact occurs and where MM should be applied)
- 4 • Monitoring/Reporting Action (action to be taken by monitor or lead agency)
- 5 • Timing (before, during, or after construction, during operation, etc.)
- 6 • Responsible Party (entity responsible to ensure MM compliance)
- 7 • Effectiveness Criteria (how the agency can know if the measure is effective)

8 The following provides MMs that apply to the two Project components.

**Component 1**

MM AES-1a. Overnight Storage of Equipment

MM AES-1b. Material Removal at Construction Completion

MM AES-1c. Minimize Night Lighting

MM AQ-1a. Fugitive Dust Control Measures

MM AQ-1b. Equipment Exhaust Emissions Reduction Measures

MM BIO-1. Avoidance of Active Cliff Swallow Nests

MM BIO-2. Transitional Bat Habitat

MM BIO-3a. Avoidance of Estuarine Waters/Tidewater Goby Relocation

MM BIO-3b. CRLF Fencing at the EOF

MM BIO-3c. Environmental Awareness Training

MM BIO-3d. Biological Pre-activity Surveys and Monitoring

**Component 2**

MM AES-1a. Overnight Storage of Equipment

MM AES-1b. Material Removal at Construction Completion

MM AQ-1a. Fugitive Dust Control Measures

MM AQ-1b. Equipment Exhaust Emissions Reduction Measures

MM BIO-3a. Avoidance of Estuarine Waters/Tidewater Goby Relocation

MM BIO-3b. CRLF Fencing at the EOF

MM BIO-3c. Environmental Awareness Training

MM BIO-3d. Biological Pre-activity Surveys and Monitoring

MM BIO-3e. Delineation of Work Limits

MM BIO-4. Grunion Spawning Avoidance

MM BIO-5a. Coastal Wetlands Mitigation

**Component 1**

- MM BIO-3e. Delineation of Work Limits
- MM BIO-4. Grunion Spawning Avoidance
- MM BIO-6b. Southern Foredunes Avoidance
- MM CUL-2/TCR-2. Cultural Resources Sensitivity Training
- MM CUL-3/TCR-3. Discovery of Previously Unknown Cultural or Tribal Resources
- MM CUL-4/TCR-4. Unanticipated Discovery of Human Remains
- MM CUL-5/TCR-5. Cultural Resources Protective Fencing (CA-SBA-71)
- MM HAZ-1a. Remedial Action Plan Implementation
- MM HAZ-1b. Hydrocarbon Contaminated Soil Notification(s) and BMPs
- MM HAZ-1c. Oil Spill Contingency Plan Implementation
- MM HAZ-2. Hazardous Materials Management and Contingency Plan
- MM HWQ-1. Storm Water Pollution Prevention Plan
- MM REC-1. Maximize Beach Access
- MM T-1. Truck Entrance Signage

**Component 2**

- MM BIO-5b. Retain Coastal Wetlands Adjacent to Pier 421-2
- MM BIO-6a. Coastal Bluff Scrub Replacement
- MM BIO-6b. Southern Foredunes Avoidance
- MM CUL-1/TCR-1. Cultural Resources Monitoring
- MM CUL-2/TCR-2. Cultural Resources Sensitivity Training
- MM CUL-3/TCR-3. Discovery of Previously Unknown Cultural or Tribal Resources
- MM CUL-4/TCR-4. Unanticipated Discovery of Human Remains
- MM CUL-5/TCR-5. Cultural Resources Protective Fencing (CA-SBA-71)
- MM HAZ-1b. Hydrocarbon Contaminated Soil Notification(s) and BMPs
- MM HAZ-1c. Oil Spill Contingency Plan Implementation
- MM HWQ-1. Storm Water Pollution Prevention Plan
- MM REC-1. Maximize Beach Access
- MM T-1. Truck Entrance Signage

Table 7-1. Mitigation Monitoring Program

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
<b>Aesthetics</b>					
Short term effects on public views from decommissioning activities (Component 1)	<b>MM AES-1a. Overnight Storage of Equipment.</b> Equipment utilized shall be returned to the staging areas at the end of each workday, both for public safety and aesthetic considerations	Observe equipment returned to laydown areas	Obstructed views minimized	CSLC, contractors	Following completion of each workday
	<b>MM AES-1b. Material Removal at Construction Completion.</b> All materials, equipment, and debris shall be removed from the site upon completion of each Project component	Observe all materials and equipment removed from Project work areas	Project areas restored	CSLC, contractors	Following completion Project Component 1
	<b>MM AES-1c. Minimize Night Lighting.</b> When required, lighting shall use the minimum number of fixtures and intensity needed for decommissioning activities. Fixtures shall be focused on work areas and fully shielded to minimize visibility from public viewing areas, wildlife habitats, migration routes, and other sensitive receptors	Observe nighttime lighting for compliance	Lighting and glare minimized	CSLC, contractors	During any nighttime work

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
Short term effects on public views from decommissioning activities (Component 2)	<b>Implement MM AES-1a: Overnight Storage of Equipment</b> (see above) <b>Implement MM AES-1b: Material Removal at Construction Completion</b> (see above) <b>Implement MM BIO-5a: Coastal Wetlands Mitigation</b> (see below) <b>Implement MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2</b> (see below)				
Cumulative aesthetic impacts to public views	<b>Implement MM AES-1a: Overnight Storage of Equipment</b> (see above) <b>Implement MM AES-1b: Material Removal at Construction Completion</b> (see above) <b>Implement MM AES-1c: Minimize Night Lighting</b> (see above)				
<b>Air Quality</b>					
Decommissioning-related air pollutant emissions (Component 1)	<b>MM AQ-1a. Fugitive Dust Control Measures.</b> The contractors used to conduct decommissioning activities shall implement the following measures when applicable and feasible. <ul style="list-style-type: none"> <li>Water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is</li> </ul>	Documentation in compliance monitoring sheets	Reduction in fugitive dust	CSLC, contractors	Throughout Component 1 decommissioning activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.</p> <ul style="list-style-type: none"> <li>• Minimize amount of disturbed area and reduce on-site vehicle speeds to 15 miles per hour or less.</li> <li>• If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.</li> <li>• Gravel pads shall be installed at all access points</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>to prevent tracking of mud onto public roads.</p> <ul style="list-style-type: none"> <li>• After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.</li> <li>• The contractor shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	Barbara County Air Pollution Control District (SBCAPCD) prior to Project initiation.				
	<p><b>MM AQ-1b. Equipment Exhaust Emissions Reduction Measures.</b>                      The contractors used to conduct decommissioning activities shall implement the following measures when applicable and feasible.</p> <ul style="list-style-type: none"> <li>• All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program OR shall obtain a SBCAPCD permit.</li> <li>• Mobile construction equipment shall comply with the State Regulation for In-Use Off-Road Diesel Vehicles (Cal. Code of Regs., tit. 13, § 2449) to reduce NOx, diesel particulate matter, and other criteria pollutant emissions.</li> </ul>	Documentation in compliance monitoring sheets	Reduction in emissions	CSLC, contractors	Throughout decommissioning activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<ul style="list-style-type: none"> <li>• On-road vehicles shall comply with the State Regulation for In-Use (On-Road) Heavy-Duty Diesel-Fueled Vehicles (Cal. Code of Regs., tit. 13, § 2025), to reduce diesel particulate matter, NOx and other criteria pollutants.</li> <li>• Off-road and on-road diesel vehicles shall comply with California Code of Regulations, title 13, sections 2449(d)(3) and 2485, limiting engine idling time.</li> <li>• Diesel equipment meeting the California Air Resources Board (CARB) Tier 3 or higher emission standards for off-road heavy-duty diesel engines should be used to the maximum extent feasible.</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<ul style="list-style-type: none"> <li>• On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.</li> <li>• Diesel powered equipment should be replaced by electric equipment whenever feasible.</li> <li>• Equipment/vehicles using alternative fuels, such as compressed natural gas, liquefied natural gas, propane or biodiesel, should be used on-site where feasible.</li> <li>• Catalytic converters shall be installed on gasoline-powered equipment, if feasible.</li> <li>• All construction equipment shall be maintained in tune per the manufacturer's specifications.</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<ul style="list-style-type: none"> <li>• The engine size of construction equipment shall be the minimum practical size.</li> <li>• The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.</li> <li>• Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.</li> </ul>				
Decommissioning-related air pollutant emissions (Component 2)	<p><b>Implement MM AQ-1a: Fugitive Dust Control Measures</b> (see above)</p> <p><b>Implement MM AQ-1b: Equipment Exhaust Emissions Reduction Measures</b> (see above)</p>				
Cumulative air quality impacts (Components 1 and 2)	<p><b>Implement MM AQ-1a: Fugitive Dust Control Measures</b> (see above)</p> <p><b>Implement MM AQ-1b: Equipment Exhaust Emissions Reduction Measures</b> (see above)</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
<b>Biological Resources</b>					
Disturbance to nesting birds	<p><b>MM BIO-1: Avoidance of Active Cliff Swallow Nests.</b> A cliff swallow protection plan shall be developed prior to Project implementation. The plan shall specify how protection of the species will be implemented, including methods, timing, and monitoring requirements. Requirements shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>Inactive cliff swallow nests shall be removed during the non-breeding season (August 16th through February 14th) prior to the initiation of pier and caisson removal.</li> <li>Bird exclusion netting shall be installed on the underside of Pier 421-1 to prevent nesting prior to the initiation of pier and caisson removal. The netting shall remain in place, maintained, and not</li> </ul>	Adherence to cliff swallow protection plan, including field monitoring requirements	Avoidance of impacts to cliff swallows	CSLC, contractors	During Component 1 Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	removed more than 24 hours before the initiation of removal of Pier 421-1.				
Disturbance to bats using the 421-2 caisson structure	<b>MM BIO-2: Transitional Bat Habitat.</b> A bat preclusion plan shall be prepared and implemented prior to and during the 421-2 caisson demolition activities. The plan shall include confirmation surveys of either seasonal or ongoing bat use of the structure and recommendations regarding the timing for installation of preclusion netting at the caisson roost.	Adherence to bat preclusion plan	Avoidance of <u>impacts to bats</u>	CSLC, contractors	Prior to and during 421-2 caisson demolition
Temporary effects of potential hydrocarbon discharge	<b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see below)				
Disturbance of terrestrial and aquatic special-status wildlife species	<b>MM BIO-3a: Avoidance of Estuarine Waters/Tidewater Goby Relocation.</b> Use of the alternative beach access route shall be scheduled during periods when the estuary mouth is closed (not outflowing to the Pacific Ocean). If this is not feasible, fish netting (0.25	Biological monitoring during required crossings	Avoidance of impacts to tidewater goby in Bell Canyon Creek	CSLC, contractors	During all Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>inch mesh size) shall be installed across the estuary mouth immediately upstream of the beach access route to isolate the estuary from the beach. A qualified biologist approved by the USFWS to handle tidewater goby shall use seines and dip nets to capture and relocate tidewater gobies from the beach area to upstream of the fish nets. Fish nets shall be removed by the biologist within 24 hours following termination of use of the alternative beach access route</p>				
	<p><b>MM BIO-3b: CRLF Fencing at the EOF.</b> CRLF exclusion fencing (48 inch Ertec e-Fence, or equivalent) shall be installed along the entire western boundary of the EOF, adjacent to the margin of the riparian vegetation prior to use of the proposed staging area at this location. The bottom of the exclusion fencing shall be secured to the ground by trenching or other means to prevent CRLF from</p>	<p>Documentation and monitoring of fence installation</p>	<p>Avoidance of impacts to CRLF</p>	<p>CSLC, contractors</p>	<p>Prior to and throughout all Project activities</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	crawling under the fence. The CRLF exclusion fencing shall remain in place and maintained during all Project-related use of the EOF staging area.				
	<b>MM BIO-3c Environmental Awareness Training.</b> A CSLC-approved biological monitor(s) shall conduct environmental awareness training for all Project personnel to familiarize workers with surrounding common and special-status species and their habitats, applicable regulatory requirements, and measures that must be implemented to avoid or minimize potential impacts to biological resources.	Documentation of Environmental Awareness Training Sign-In Sheet	Training of Project crews	CSLC, contractors	Prior to each Project Component
	<b>MM BIO-3d: Biological Pre-activity Surveys and Monitoring.</b> A CSLC-approved biological monitor shall survey the work areas and access routes for sensitive species or other wildlife that may be present no more than 24 hours prior to the commencement of	Pre-activity survey report(s) Daily Monitoring reports	Avoidance of impacts to special status species during decommissioning activities	CSLC, contractors	Prior to each Project Component

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>Project activities. In addition, the biological monitor shall provide daily biological clearance prior to the start of work and shall always be on-site during Project operations. If at any time during the Project any wildlife species are observed within the Project area, work around the animal's immediate area shall be stopped until the animal leaves on its own volition or work shall be redirected to an area within the Project site that would not impact these species. Work shall resume once the animal is clear of the work area. In the unlikely event special-status species are injured or killed by Project-related activities, the biological monitor shall stop work and notify CSLC and consult with the appropriate agencies to resolve the impact prior to re-starting work in the area.</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p><b>MM BIO-3e: Delineation of Work Limits.</b> Prior to the start of the Project, the Project work areas and access routes shall be clearly flagged to ensure heavy equipment and vehicles stay within the permitted disturbance areas and avoid native vegetation along the access route. Designated equipment staging and fueling areas shall also be delineated at this time.</p>	<p>Photo-documentation within Compliance sheets</p>	<p>Avoidance of areas outside of the designated Project worksite(s)</p>	<p>CSLC, contractors</p>	<p>Prior to each Project Component</p>
<p>Disturbance of marine special-status species</p>	<p><b>MM BIO-4: Grunion Spawning Avoidance.</b> A grunion protection plan shall be developed prior to Project implementation. The plan shall specify how protection of the species will be implemented, including methods, timing, and monitoring requirements. Requirements shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Project activities that involve equipment activity on the beach shall be scheduled to avoid grunion spawning</li> </ul>	<p>Compliance monitoring report and photo-documentation</p>	<p>Avoidance of impacts to grunion spawning area(s)</p>		<p>Prior to Project implementation and during all Project activities within Grunion spawning periods</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>season (March through August) if possible, given other scheduling constraints (winter storm waves, etc.).</p> <ul style="list-style-type: none"> <li>• If avoiding spawning season is not feasible, a qualified biologist shall conduct an initial presence/absence survey during grunion runs (open and closed season runs) as predicted by the CDFW to document that grunion have not used the site.</li> <li>• If the initial presence/absence survey determines that grunion are spawning at the Project site; a focused survey shall be conducted immediately following the spawning event. During the focused survey, trenching shall be conducted at 3 to 6 foot spacing to determine if grunion spawning was</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>successful and eggs were deposited within the intertidal work area. The trenches shall be excavated approximately 10 inches wide and 3 to 6 inches deep. The trenches shall be located perpendicular to the high-water mark and extend from the highest high tide mark to approximate mean low water. Excavations shall continue until grunion eggs are found or until all trenches are sampled. If grunion eggs are found during focused surveys at the Project site, intertidal work activities in that location shall cease for 10 days to allow for hatching of the eggs during the next high-tide cycle.</p> <ul style="list-style-type: none"> <li>• Subsequent presence/absence monitoring shall continue during the next spawning period to determine if</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	grunion continue to spawn at the Project site.				
Loss of coastal wetlands (Component 2)	<p><b>MM BIO-5a: Coastal Wetlands Mitigation.</b> A coastal wetlands mitigation plan shall be developed prior to Project implementation. The Plan shall specify how mitigation will be implemented, including site location description, wetland creation or enhancement methods, plant palette, propagule sources, irrigation methods (if needed), maintenance activities, success criteria and monitoring requirements. Requirements shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>Coastal wetlands removed from the access roadway as part of Component 2 shall be replaced at a minimum 3:1 ratio (at least 0.32 acre) through a combination of wetland replacement and off-site wetlands creation or enhancement.</li> </ul>	Coastal bluff scrub replacement plan documentation and monitoring	Replacement of coastal bluff scrub habitat	CSLC, contractors	Prior to Project implementation and following completion of Component 2

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<ul style="list-style-type: none"> <li>Coastal wetlands replacement shall be included in the coastal bluff scrub replanting area (see <b>MM BIO-6a</b>) within the abandoned access roadway and the remaining wetlands creation/enhancement needed to meet the 3:1 ratio shall be conducted off-site.</li> </ul>				
	<p><b>MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2.</b>                      A coastal wetlands retention plan shall be developed prior to Project implementation. The Plan shall specify how this measure will be implemented, including materials, methods and integration into the overall decommissioning schedule. The rock and road base fill material comprising the access roadway north of Pier 421-2 shall be left in place or other suitable material placed as needed to maintain the impoundment of golf course</p>	Coastal wetlands retention plan documentation and monitoring	Retention of wetlands	CSLC, contractors	Prior to and during implementation of Component 2

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	irrigation run-off which supports the existing wetlands at this location.				
Loss of terrestrial ESHA/sensitive natural communities	<b>MM BIO-6a: Coastal Bluff Scrub Replacement.</b> A coastal bluff scrub replacement plan shall be developed prior to Project implementation. The Plan shall specify how replacement will be implemented, including soil augmentation, planting site preparation, planting methods, plant palette, propagule sources, irrigation methods (if needed), maintenance activities, success criteria and monitoring requirements. Coastal bluff scrub removed along the seaward margin of the access roadway shall be replaced at a minimum 2:1 ratio (at least 0.6 acre) through soil augmentation and replanting the remaining surface of the abandoned access roadway with quail bush, coastal golden-bush and other native species characteristic of the bluffs.	Coastal Bluff Scrub Replacement Plan	Success criteria monitoring from Coastal Bluff Scrub Replacement Plan	CSLC, contractors	Prior to and during implementation of Component 2

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p><b>MM BIO-6b: Southern Foredunes Avoidance.</b> A CSLC-approved biological monitor shall be present when heavy equipment or vehicles transit the alternative beach access route and communicate with equipment/vehicle operators to ensure southern foredunes are avoided.</p>	<p>Daily Compliance documentation</p>	<p>Avoidance of southern foredune habitat areas</p>	<p>CSLC, contractors</p>	<p>Throughout Project activities (as utilized)</p>
<p>Cumulative impacts to biological resources (Components 1 and 2)</p>	<p><b>Implement MM BIO-1: Avoidance of Active Cliff Swallow Nests</b> (see above)  <b>Implement MM BIO-2: Transitional Bat Habitat</b> (see above)  <b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see below)  <b>Implement MM BIO-3a: Avoidance of Estuarine Waters/Tidewater Goby Relocation</b> (see above)  <b>Implement MM BIO-3b: CRLF Fencing at the EOF</b> (see above)  <b>Implement MM BIO-3c: Environmental Awareness Training</b> (see above)  <b>Implement MM BIO-3d: Biological Pre-activity Surveys and Monitoring</b> (see above)  <b>Implement MM BIO-3e: Delineation of Work Limits</b> (see above)  <b>Implement MM BIO-4: Grunion Spawning Avoidance</b> (see above)  <b>Implement MM BIO-5a: Coastal Wetlands Mitigation</b> (see above)  <b>Implement MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2</b> (see above)  <b>Implement MM BIO-6a: Coastal Bluff Scrub Replacement</b> (see above)  <b>Implement MM BIO-6b: Southern Foredunes Avoidance</b> (see above)</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
<b>Cultural Resources/Tribal Cultural Resources</b>					
Potential impacts to previously undiscovered Cultural or Tribal Cultural resources (Component 2)	<p><b>MM CUL-1/TCR-1: Cultural Resources Monitoring.</b> A Cultural Resources Monitoring Plan (Plan) shall be prepared prior to Component 2 ground disturbing activities. The Plan shall include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> <li>• CSLC shall retain a qualified archaeologist and a representative of a California Native American tribe that is culturally affiliated to the Project site to monitor all ground disturbing activities during Component 2.</li> <li>• CSLC shall provide a minimum 5-day notice to the archaeologist and tribal monitor prior to all activities requiring monitoring.</li> <li>• CSLC shall provide the archaeologist and tribal</li> </ul>	Cultural Resources Monitoring Plan	Avoidance of disturbance of any found cultural resources	CSLC, contractors	Prior to and throughout Component 2 Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>monitor safe and reasonable access to the Project site.</p> <ul style="list-style-type: none"> <li>The Plan shall include guidance on identification of potential cultural resources that may be encountered.</li> </ul>				
<p>Potential impacts to Cultural resources (Specifically CA-SBA-71)</p>	<p><b>MM CUL-2/TCR-2: Cultural Resources Sensitivity Training.</b> Prior to Project implementation, a pre-construction cultural resources sensitivity training shall be given by a qualified archaeologist and Native American representative. The purpose of the training will be to educate onsite construction personnel as to the sensitivity of archaeological resources in the area, and specifically avoidance of CA-SBA-71 when utilizing the Bacara Resort fire road access area. The training will also cover the requirements of the Plan identified in <b>MM CUL-1/TCR-1</b>, including the possibility of exposing cultural resources, guidance on</p>	<p>Documentation of training</p>	<p>Avoidance of cultural resources</p>	<p>CSLC, contractors</p>	<p>Prior to Project implementation</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>recognizing such resources, and direction on procedures if a find is encountered. CSLC and the Project contractor will instruct all Project personnel that touching, collecting, or removing cultural materials from the property is strictly prohibited. Evidence of compliance with this MM shall be documented within pre-Project compliance documentation materials prior to Project implementation.</p>				
	<p><b>MM CUL-3/TCR-3: Discovery of Previously Unknown Cultural or Tribal Resources.</b> In the event that potential cultural or tribal cultural resources are uncovered during Project implementation, all earth-disturbing work within 100 feet of the find shall be temporarily suspended or redirected until the approved archaeologist and tribal monitor have evaluated the nature and significance of the discovery. In the event that a potentially significant cultural or tribal cultural</p>	<p>Documentation of Notifications and Treatment Plan (if applicable)</p>	<p>Minimization of impact to discovered resources</p>	<p>CSLC, contractors</p>	<p>Throughout Project activities</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>resource is discovered, the Applicant, CSLC and any local, state, or federal agency with approval or permitting authority over the Project that has requested/required notification shall be notified within 48 hours. The location of any such finds must be kept confidential and measures shall be taken to secure the area from site disturbance and potential vandalism. Impacts to previously unknown significant cultural or tribal cultural resources shall be avoided through preservation in place if feasible. Damaging effects to tribal cultural resources shall be avoided or minimized following the measures identified in Public Resources Code section 21084.3, subdivision (b), if feasible, unless other measures are mutually agreed to by the lead archaeologist and culturally affiliated tribal monitor that would be as or more effective. A treatment plan, if needed to address a find, shall be developed</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>by the archaeologist and, for tribal cultural resources, the culturally-affiliated tribal monitor, and submitted to the appropriate tribal representatives and CSLC staff for review, input, and concurrence prior to implementation of the plan. Protection in place of tribal cultural resources shall be prioritized, if feasible; if the archaeologist or tribe determines that damaging effects on the cultural or tribal cultural resource can be avoided in place, then work in the area may resume provided the area of the find is clearly marked for no disturbance. If avoidance in place of tribal cultural resources is infeasible, the treatment plan shall include measures that place priority on Tribal self-determination over collection and curation, including the option to repatriate (rebury) materials nearby at a location of their choosing, and to transfer possession/ownership to the culturally-affiliated Tribe.</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>Title to all archaeological sites, historic or cultural resources, and tribal cultural resources on or in the tide and submerged lands of California is vested in the State and under CSLC jurisdiction. The final disposition of archaeological, historical, and tribal cultural resources recovered on State lands under CSLC jurisdiction must be approved by the CSLC</p>				
	<p><b>MM CUL-4/TCR-4: Unanticipated Discovery of Human Remains.</b> If human remains are encountered, all provisions provided in California Health and Safety Code section 7050.5 and California Public Resources Code section 5097.98 shall be followed. Work shall stop within 100 feet of the discovery, and both an archaeologist and CSLC staff must be contacted within 24 hours. The archaeologist shall consult with the County Coroner. If human remains are of Native American origin, the County</p>	<p>Documentation of Notifications</p>	<p>Minimization of impacts to human remains</p>	<p>CSLC, contractors</p>	<p>Throughout Project activities</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	Coroner shall notify the Native American Heritage Commission within 24 hours of this determination, and a Most Likely Descendent shall be identified. No work is to proceed in the discovery area until consultation is complete and procedures to avoid or recover the remains have been implemented				
Potential for unauthorized collection of artifacts (Components 1 and 2)	<b>Implement MM CUL-2/TCR-2: Cultural Resources Sensitivity Training</b> (see above)				
	<b>MM CUL-5/TCR-5: Cultural Resources Protective Fencing (CA-SBA-71).</b> Prior to Project implementation, protective fencing or flagging clearly marking the area surrounding CA-SBA-71 for avoidance shall be installed; this fencing or flagging shall be maintained for the duration of the use of the Bacara Resort fire road	Documentation of Fencing or flagging installation and avoidance of area	Minimization of impact CA-SBA-71	CSLC, contractors	Throughout Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	access area, and no personnel, equipment, refuse, or other materials shall be allowed into the avoidance area at any time.				
Cumulative impacts to cultural resources/ Tribal cultural resources (Components 1 and 2)	<p><b>Implement MM CUL-1/TCR-1: Cultural Resources Monitoring</b> (see above)</p> <p><b>Implement MM CUL-2/TCR-2: Cultural Resources Sensitivity Training</b> (see above)</p> <p><b>Implement MM CUL-3/TCR-3: Discovery of Previously Unknown Cultural or Tribal Resources</b> (see above)</p> <p><b>Implement MM CUL-4/TCR-4: Unanticipated Discovery of Human Remains</b> (see above)</p> <p><b>Implement MM CUL-5/TCR-5: Cultural Resources Protective Fencing</b> (see above)</p>				
<b>Hazards and Hazardous Materials</b>					
Exposure of public or environment to hazardous materials (Component 1)	<b>MM HAZ-1a: Remedial Action Plan Implementation.</b> The Remedial Action Plan submitted to the Santa Barbara County Public Health Department, Environmental Health Services Division shall be implemented during Component 1 Project decommissioning activities. The RAP will also be shared with California Department of Fish and	Remedial Action Plan Approval	Minimization of hazardous materials exposure	CSLC, contractors	Prior to and throughout Component 1 Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>Wildlife Office of Spill Prevention and Response (OSPR), RWQCB, and city of Goleta (as applicable) for review and approval prior to the initiation of construction activities. Final approval of the plan shall be under the purview of OSPR, RWQCB, and Santa Barbara County Public Health Department. Upon approval, all contaminated materials shall be removed and disposed of in accordance with procedures described in the RAP. All soil sampling results shall be provided to the Santa Barbara County Public Health Department and city of Goleta immediately upon receiving results.</p>				
	<p><b>MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs.</b> Prior to Project activities related to removal of contaminated soil, the Air Pollution Control District must be notified as an Air Pollution Control District Permit will be required. In addition,</p>	<p>Notification to APCD</p>	<p>Minimization of Air Quality Impacts</p>	<p>CSLC, contractors</p>	<p>During all Project activities</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>the following measures shall be implemented:</p> <ul style="list-style-type: none"> <li>• Covers on storage piles shall be maintained in place at all times in areas not actively involved in soil addition or removal</li> <li>• Contaminated soil shall be covered with at least 6 inches of packed uncontaminated soil or another TPH-non-permeable barrier such as plastic tarp. No headspace shall be allowed where vapors could accumulate</li> <li>• Covered piles shall be designed in such a way to eliminate erosion due to wind or water. No openings in the covers are permitted</li> <li>• The air quality impacts from the excavation and haul trips associated with removing the contaminated soil must be evaluated and mitigated if</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>total emissions exceed the Air Pollution Control District's construction phase thresholds</p> <ul style="list-style-type: none"> <li>• During soil excavation, odors shall not be evident to such a degree as to cause a public nuisance</li> <li>• Clean soil must be segregated from contaminated soil</li> </ul>				
	<p><b>MM HAZ-1c: Oil Spill Contingency Plan Implementation.</b> The EOF Facility's existing Oil Spill Contingency Plan (OSCP) and Addendum shall be implemented during all Project activities in the event of a release of oil or contaminants. The OSCP delineates prevention measures including daily inspection of equipment, refueling at designated stations, and secondary equipment containment for equipment to prevent spills. Additionally, the</p>	Copy of OSCP	Spill avoidance and response (if required)	CSLC, contractors	During all Project activities

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	onshore work sites shall maintain onsite response equipment to clean up minor spills. In the event of a major spill (greater than five barrels) the OSCP requires utilization of an independent oil spill response contractor (i.e. Marine Spill Response Corporation) to provide secondary cleanup.				
<b>Implement MM HWQ-1: Storm Water Pollution Prevention Plan</b> (see below)					
Use and transport of hazardous materials during decommissioning activities (Component 1)	<b>MM HAZ-2 Hazardous Materials Management and Contingency Plan.</b> A Hazardous Materials Management and Contingency Plan shall be developed and implemented. Measures shall include, but not be limited to, identification of appropriate fueling and maintenance areas for equipment, daily equipment inspection schedule, and reference to the facilities existing spill response plan, and spill response supplies to be maintained onsite.	Copy of Hazardous Materials Management and Contingency Plan.  Compliance documentation during construction	Avoidance of hazardous materials exposure to the environment	CSLC, contractors	During all Project activities
Exposure of the public or	<b>Implement MM HAZ-1a: Remedial Action Plan Implementation</b> (see above)				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
environment to hazardous materials (Component 2)	<b>Implement MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs</b> (see above) <b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see above) <b>Implement MM HWQ-1: Storm Water Pollution Prevention Plan</b> (see below)				
Use of hazardous materials during decommissioning activities (Component 2)	<b>Implement MM HAZ-2: Hazardous Materials Management and Contingency Plan</b> (see above)				
Potential cumulative hazardous materials impacts	<b>Implement MM HAZ-1a: Remedial Action Plan Implementation</b> (see above) <b>Implement MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs</b> (see above) <b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see above) <b>Implement MM HWQ-1: Storm Water Pollution Prevention Plan</b> (see below) <b>Implement MM HAZ-2: Hazardous Materials Management and Contingency Plan</b> (see above)				
<b>Hydrology and Water Quality</b>					
Potential water quality impacts during implementation of decommissioning Project (Component 1)	<b>Implement MM HAZ-1a: Remedial Action Plan Implementation</b> (see above) <b>Implement MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs</b> (see above) <b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see above) <b>Implement MM HAZ-2: Hazardous Materials Management and Contingency Plan</b> (see above)				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
<p>Construction-related erosion and sedimentation impacts to marine and onshore water quality (Component 1)</p>	<p><b>MM HWQ-1. Storm Water Pollution Prevention Plan.</b> CSLC shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), including:</p> <ul style="list-style-type: none"> <li>• All fueling and maintenance of vehicles and heavy equipment will occur in designated areas at least 50 feet from waterways. Designated areas will include spill containment devices (e.g., drain pans) and absorbent materials to clean up spills</li> <li>• Vehicles and equipment will be maintained properly to prevent leakage of hydrocarbons and other fluids</li> <li>• Any accidental spill of hydrocarbons or other fluids that may occur at the work site will be cleaned immediately. Spill containment devices and</li> </ul>	<p>Contractor submittal of the SWPPP to CSLC, observation reports</p>	<p>Minimize erosion, siltation, and turbidity</p>	<p>CSLC, contractors</p>	<p>During all Project activities</p>

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>absorbent materials will be maintained on the work site for this purpose. The Governor's Office of Emergency Services will be notified immediately in the event of a reportable quantity accidental spill to ensure proper notification, clean up, and disposal of waste</p> <ul style="list-style-type: none"> <li>• Waste and debris generated during construction will be stored in designated waste collection areas and containers away from drainage features, and will be disposed of regularly</li> <li>• Storm water pollution prevention best management practices will be used around the construction area perimeters during construction and around any construction operations that could</li> </ul>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>potentially degrade water quality</p> <ul style="list-style-type: none"> <li>• Erosion and sedimentation best management practices (e.g., silt fences straw wattles, mulching, and hydroseeding) will be installed properly and maintained regularly. Other best management practices will be installed as necessary and as required by Project permits</li> <li>• Runoff will be conveyed to prevent erosion from slopes and channels and directed to engineered drainage facilities</li> <li>• Disturbed slopes will be re-vegetated with appropriate native vegetation</li> </ul>				
<p>Potential water quality impacts during implementation of decommissioning</p>	<p><b>Implement MM HAZ-1a: Remedial Action Plan Implementation</b> (see above)  <b>Implement MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs</b> (see above)  <b>Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation</b> (see above)  <b>Implement MM HAZ-2: Hazardous Materials Management and Contingency Plan</b> (see above)</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
Project (Component 2)					
Construction-related erosion and sedimentation impacts to marine and onshore water quality (Component 2)	<b>Implement MM HWQ-1: Storm Water Pollution Prevention Plan</b> (see above)				
Potential for cumulative water quality impacts (Components 1 and 2)	<b>Implement MM HWQ-1: Storm Water Pollution Prevention Plan</b> (see above)				
<b>Land Use</b>					
Temporary conflicts with state and local policies	<b>Implement MM AES-1a. Overnight Storage of Equipment</b> (see above) <b>Implement MM AES-1b. Material Removal at Construction Completion</b> (see above) <b>Implement MM AES-1c. Minimize Night Lighting</b> (see above) <b>Implement MM AQ-1a: Fugitive Dust Control Measures</b> (see above) <b>Implement MM AQ-1b: Equipment Exhaust Emissions Reduction Measures</b> (see above) <b>Implement MM BIO-1: Avoidance of Active Cliff Swallow Nests</b> (see above) <b>Implement MM BIO-2: Transitional Bat Habitat</b> (see above) <b>Implement MM BIO-3a: Avoidance of Estuarine Waters/Tidewater Goby Relocation</b> (see above)				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	Implement MM BIO-3b: CRLF Fencing at the EOF (see above) Implement MM BIO-3c: Environmental Awareness Training (see above) Implement MM BIO-3d: Biological Pre-activity Surveys (see above) Implement MM BIO-3e: Delineation of Work Limits (see above) Implement MM BIO-4: Grunion Spawning Avoidance (see above) Implement MM BIO-5a: Coastal Wetlands Mitigation (see above) Implement MM BIO-5b: Retain Coastal Wetlands Adjacent to Pier 421-2 (see above) Implement MM BIO-6a: Coastal Bluff Scrub Replacement (see above) Implement MM BIO-6b: Southern Foredunes Avoidance (see above) Implement MM HAZ-1a: Remedial Action Plan Implementation (see above) Implement MM HAZ-1b: Hydrocarbon Contaminated Soil Notification(s) and BMPs (see above) Implement MM HAZ-1c: Oil Spill Contingency Plan Implementation (see above) Implement MM HWQ-1: Storm Water Pollution Prevention Plan (see above) Implement MM REC-1: Maximize Beach Access (see below)				
<b>Recreation</b>					
Temporary loss of recreational access during decommissioning activities (Component 1)	Implement MM AES-1a: Overnight Storage of Equipment (see above)				
	<b>MM REC-1: Maximize Beach Access.</b> Pier and caisson work	Compliance documentation	Beach access maintained	CSLC, contractors	Throughout Component 1

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
	<p>areas shall be made passable by the public walking along the beach by removing debris to staging/storage areas off the beach and backfilling or placing steel plates over any open excavations at the end of each workday. If these measures are not feasible during periods of high tides or storm conditions, signage and temporary fencing shall be provided to notify the public that passage is not allowed and that alternative beach access locations can be found nearby.</p>				decommissioning activities
<p>Temporary loss of recreational access during decommissioning activities (Component 2)</p>	<p><b>Implement MM AES-1a: Overnight Storage of Equipment</b> (see above)</p>				

Potential Impact	Mitigation Measure (MM)	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Party	Timing
<b>Transportation and Traffic</b>					
Component 1 Traffic Safety	<b>MM T-1. Truck Entrance Signage.</b> Easily visible signage shall be posted on Hollister Avenue at least 1,000 feet east and west of the EOF driveway to alert motorists of a truck entrance. This signage shall also be required at the Bacara Resort fire road entrance if this secondary access route is used by heavy-duty trucks.	Documentation of appropriate signage	Avoidance of traffic impacts	CSLC, contractors	Prior to Component 1 Project implementation
Component 2 Traffic Safety	<b>Implement MM T-1. Truck Entrance Signage</b> (see above)				
Contribution to Cumulative Transportation/Traffic impacts (Components 1 and 2)	<b>Implement MM T-1. Truck Entrance Signage</b> (see above)				

## 8.0 OTHER STATE LANDS COMMISSION CONSIDERATIONS

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1 In addition to the environmental review required pursuant to the California  
2 Environmental Quality Act (CEQA), a public agency may consider other information and  
3 policies in its decision-making process. This section presents information relevant to the  
4 California State Lands Commission's (CSLC's) consideration of the Project. The  
5 considerations addressed below are:

- 6 • Climate Change and Sea Level Rise (SLR)
- 7 • Commercial Fishing
- 8 • Environmental Justice
- 9 • Significant Lands Inventory

10 Other considerations may be addressed in the staff report presented at the time of the  
11 CSLC's consideration of the Project.

### 12 8.1 CLIMATE CHANGE AND SEA LEVEL RISE

13 While the scientific understanding and projections of climate change and sea level rise  
14 (SLR) are advancing at a rapid pace, impacts are already being felt in our oceans and  
15 along the California coast. Climate change has been found to have many effects on our  
16 oceans and coasts including, but not limited to, ocean acidification, hypoxia, increased  
17 storm surge, and SLR. Refer to Section 4.7, *Greenhouse Gas Emissions*, regarding  
18 Project emissions of greenhouse gases (GHGs). Additionally, Section 4.6, *Geology,*  
19 *Soils, and Paleontological Resources*, provides a discussion of the potential impacts of  
20 SLR on the Ellwood coastline following implementation of each Project component.

#### 21 8.1.1 Climate Change

22 High anthropogenic global carbon dioxide (CO<sub>2</sub>) emissions over the last 250 years have  
23 significantly altered atmospheric and oceanic chemistry, resulting in harmful ecological  
24 impacts. Underwater current and circulation patterns and processes are anticipated to  
25 change as a result of warmer water temperatures and changes in density and salinity.  
26 This atmospheric and oceanic interaction (i.e., storm-related water turbulence) could  
27 change the character of submerged lands in shallow nearshore environments, as the  
28 seafloor would be subjected to stronger energy forces as a results of inshore wave  
29 propagation during extreme storm events. Changes to nearshore currents and water  
30 chemistry in California are being monitored by the Southern California Coastal Ocean  
31 Observing System (SCCOOS).

32 Storm surges are anticipated to increase in both strength and frequency with climate  
33 change. The National Atmospheric and Space Administration (NASA) has determined  
34 that storm surges are being boosted from climate change, and that climate change may

1 lead to more frequent and severe storms. More frequent and intense storms can lead to  
 2 greater amounts of runoff, turbidity, decreased salinity, and direct physical damage to  
 3 submerged structures and habitats (CSLC 2019). The frequency and severity of El Niño  
 4 Southern Oscillation-related storm events may increase over time with climate change,  
 5 which could increase the speed of coastal erosion processes.

6 **8.1.2 Sea Level Rise**

7 Sea levels have risen between 4 and 10 inches during the past century and are  
 8 projected to be affected by climate change in the future. Global average sea level rose  
 9 at an average rate of 0.07 inch per year from 1961 through 2003 and at an average rate  
 10 of about 0.12 inch per year from 1993 to 2003 (Intergovernmental Panel on Climate  
 11 Change [IPCC] 2007). The California Ocean Protection Council (OPC) adopted the  
 12 2018 update of the State of California Sea Level Rise (SLR) Guidance, which provides  
 13 science-based guidance to help state and local governments analyze the risks  
 14 associated with SLR and incorporate SLR into planning, permitting, and investing  
 15 decisions. In this 2018 SLR Guidance, a range of potential SLR projections were  
 16 developed for a subset of active California tide gauges based on emission trajectories,  
 17 acknowledging that projected SLR has a significant range of variation as a result of  
 18 uncertainty in future greenhouse gas emissions and their geophysical effects, such as  
 19 the rate of land ice melt.

20 The probabilistic projections for the height of SLR over different time frames and  
 21 emission scenarios for the Santa Barbara tide gauge, the closest gauge to the Project  
 22 site, are summarized in Table 8-1. The Santa Barbara tide gauge was used for the  
 23 projected SLR scenario, and the Project site could see up to 0.4 foot SLR by 2030, 1  
 24 foot by 2050, and 2.0 to 3.1 feet by 2100 (Ocean Protection Council 2018). The range in  
 25 potential SLR indicates the complexity and uncertainty of projecting these future  
 26 changes, which depend on the rate and extent of ice melt, particularly in the second half  
 27 of the century.

**Table 8-1. Sea Level Rise Projections (Feet, from 2000)**

<b>Time Period (by)</b>	<b>High/Low Emissions Scenarios (as presented by OPC 2018)</b>	<b>Likely Range in Feet (66% probability)</b>	<b>Medium-High Rise Aversion in Feet (0.5% probability)</b>
2050	High Emissions	0.4-1.0	1.8
2070	Low Emissions	0.5-1.3	2.8
2070	High Emissions	0.7-1.7	3.3
2100	Low Emissions	0.6-2.0	5.3
2100	High Emissions	1.2-3.1	6.6

Source: NV5 2021

OPC = Ocean Protection Council

1 Higher water levels result in greater wave energy reaching higher on the shoreline and  
2 directly onto the face of cliffs. SLR of these magnitudes could potentially affect the  
3 upland areas behind the seawall and rock revetment because the loss of beaches  
4 would likely result in greater wave force on the bluff area resulting in increased  
5 weathering and erosion of the bluff.

#### 6 8.1.2.1 Waves Offshore of PRC 421

7 Waves (ocean swell and wind waves) along the southern California coast are mainly  
8 produced by six basic meteorological weather patterns. These include extratropical  
9 storm swells in the Northern Hemisphere (north or northwest swell), wind swells  
10 generated by northwest winds in the outer coastal waters (wind swell), westerly (west  
11 sea) and southeasterly (southeast sea) local seas, storm swells of tropical storms and  
12 hurricanes off the Mexican coast, and southerly swells originating in the Southern  
13 Hemisphere (southerly swell).

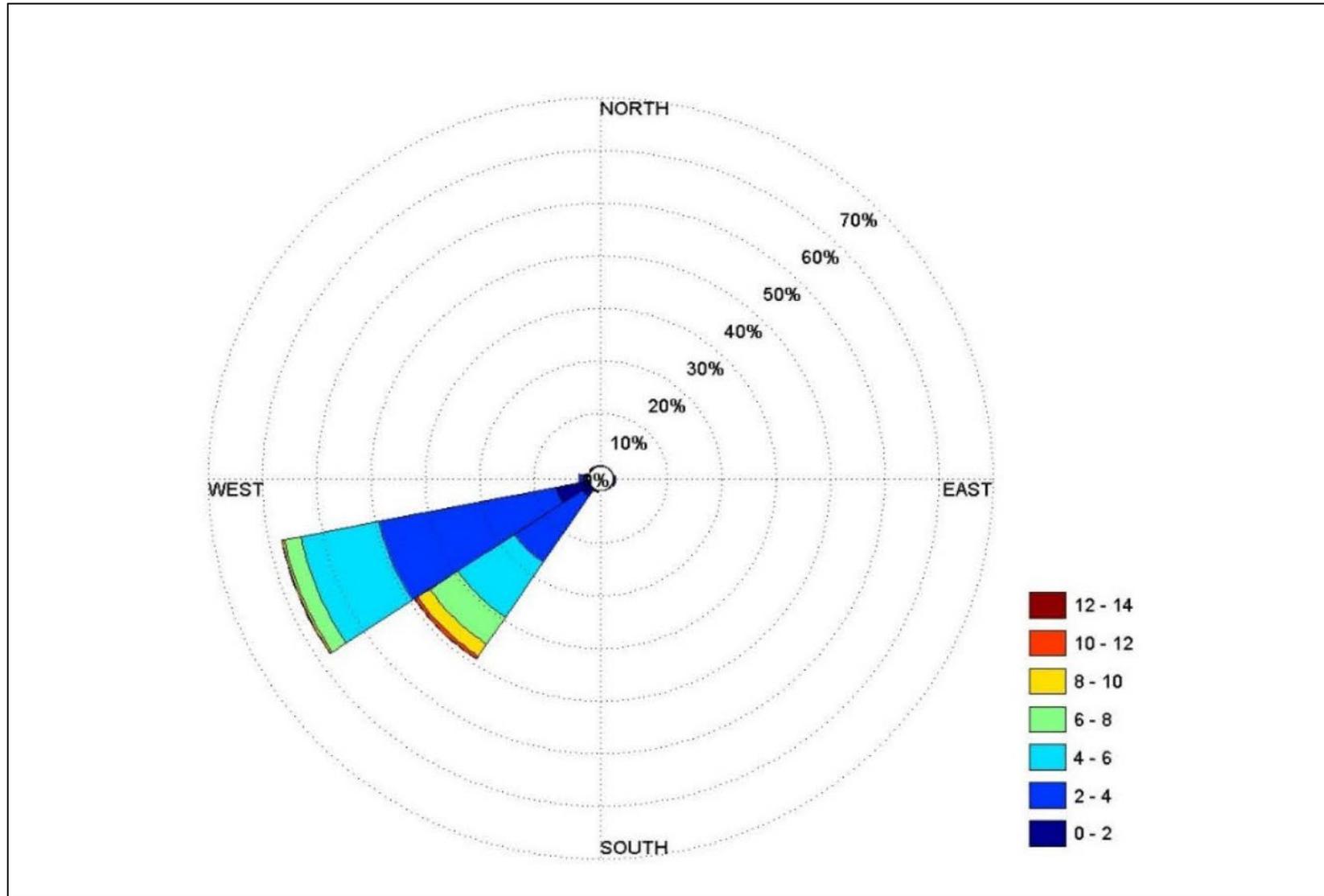
14 Because of blockage from Point Conception and Coal Oil Point, PRC 421 is only  
15 exposed to waves coming from the southeast and then clockwise to approximately the  
16 west, as shown in Figure 8-1. Furthermore, the offshore Channel Islands provide some  
17 sheltering for waves coming from the Pacific Ocean within this exposure angle and  
18 reduce the energy of many ocean swells before they reach Santa Barbara Channel.

19 As shown in Figure 8-1 and 8-2, the wave direction is from the southwest (SW) direction  
20 during approximately 40 percent of the time and from the west southwest (WSW)  
21 direction during approximately 58 percent of the time. The waves from other directions  
22 are negligible. The dominant SW to WSW wave directions is a combined result of the  
23 specific wave exposure angle, the sheltering effect of the Channel Islands, and the local  
24 nearshore plain/contour orientation that faces SW.

Figure 8-1. PRC 421 Exposure Angle to Pacific Storms



Figure 8-2. Joint Distribution of Wave Heights and Directions at -6 feet Mean Lower Low Water (MLLW)



1 **8.1.3 Coastal Impact Assessment**

2 A coastal impact analysis was conducted by NV5, Inc. (Appendix I, 2021) on behalf of  
3 the Project. As noted in the study, the 421-1 and 421-2 caissons sitting on the beach  
4 have provided a wave sheltering effect for the areas behind (landward of) the caissons  
5 during high tides, and thus have provided erosion protection for the beach and shoreline  
6 behind these caissons.

7 Additionally, the access roadway that runs along the bluff is currently armored with  
8 riprap revetment along the majority of the area. NV5 noted that this revetment provides  
9 erosion protection for the access roadway and protects the coastal bluff behind the  
10 roadway from wave-induced erosion.

11 As part of their analysis, NV5 documented nearshore oceanographic conditions  
12 including still water levels, wave heights, and anticipated SLR projections based on  
13 different timeframes and emissions scenarios for the Santa Barbara tide gauge (located  
14 closest to the Project site). Review of the historical conditions at the Project site  
15 supported their conclusions that the PRC 421 caissons have provided erosion  
16 protection for the beach and shoreline immediately behind the caissons during “winter”  
17 conditions; therefore, the removal of PRC 421 caissons would expose these sheltered  
18 areas to storm-induced erosion during the winter months, similar to the natural  
19 processes that occur to adjacent beach areas.

20 In addition, the removal of the caissons would expose the existing wooden sea wall that  
21 runs behind both PRC 421 piers and from the midpoint between the two piers to  
22 approximately 75 feet to the east of PRC 421-2. Much of this wooden sea wall has been  
23 compromised by storm and wave activity over many decades, and removal of PRC 421  
24 piers and caissons would expose the wooden seawall to direct and more intense wave  
25 action, further deteriorating or causing a failure of the wooden seawall.

26 Following the removal of the access roadway and riprap revetment, the new ground or  
27 bluffs behind the existing access roadway is anticipated to be exposed to direct wave  
28 action and coastal erosion, which would be further exacerbated by SLR. Storm and  
29 SLR-induced erosion at the toe of the bluff is anticipated to undercut the slope of high  
30 grounds, eventually leading to failure (slope failure, collapses, and landslides). While  
31 the eroded beach might be restored in the subsequent summer with calmer waves, the  
32 undercutting and failure of high grounds and bluffs is considered permanent loss and is  
33 not anticipated to naturally recover during the summer because these high grounds are  
34 above the active wave zones.

35 As indicated by NV5, after removal of the access roadway and revetment, the Project  
36 area would be returned to natural conditions and the erosion and failure of the high  
37 grounds and coastal bluffs is expected to continue for the foreseeable future. The

1 resulting bluff retreat rate and extent of erosion depends on the soil erodibility and  
2 intensity of future storms. In addition, future sea level rise would result in greater wave  
3 energy reaching higher on the shoreline and the face of bluffs with a longer duration of  
4 wave action. Although there will be no remaining structures present following  
5 completion of the Project, anticipated sea level rise would accelerate future shoreline  
6 and bluff retreat. This erosion would contribute to the long-term replenishment of the  
7 beach as part of the natural shoreline processes.

## 8 **8.2 COMMERCIAL FISHING**

9 This section describes commercial fishing activities surrounding the Project site,  
10 evaluates the potential impacts to those commercial fisheries in accordance with  
11 applicable California Coastal Act Policies 30234 and 30234.5, and, where appropriate,  
12 identifies mitigation measures related to implementation of the proposed Project.  
13 Recreational fishing is discussed within Section 4.13, *Recreation*, above. Commercial  
14 fishing is an important economic and cultural activity in California. Commercial fishing  
15 along the Santa Barbara coast uses several gear types that target a wide variety of fish  
16 and invertebrate species. The most common types of commercial gear types include  
17 trawls, trolling, longlines, and gillnets. In 2019, a total of 14,424,189 pounds of fish were  
18 landed in the Santa Barbara area, equivalent to \$24,142,390.00 (CDFW 2020).

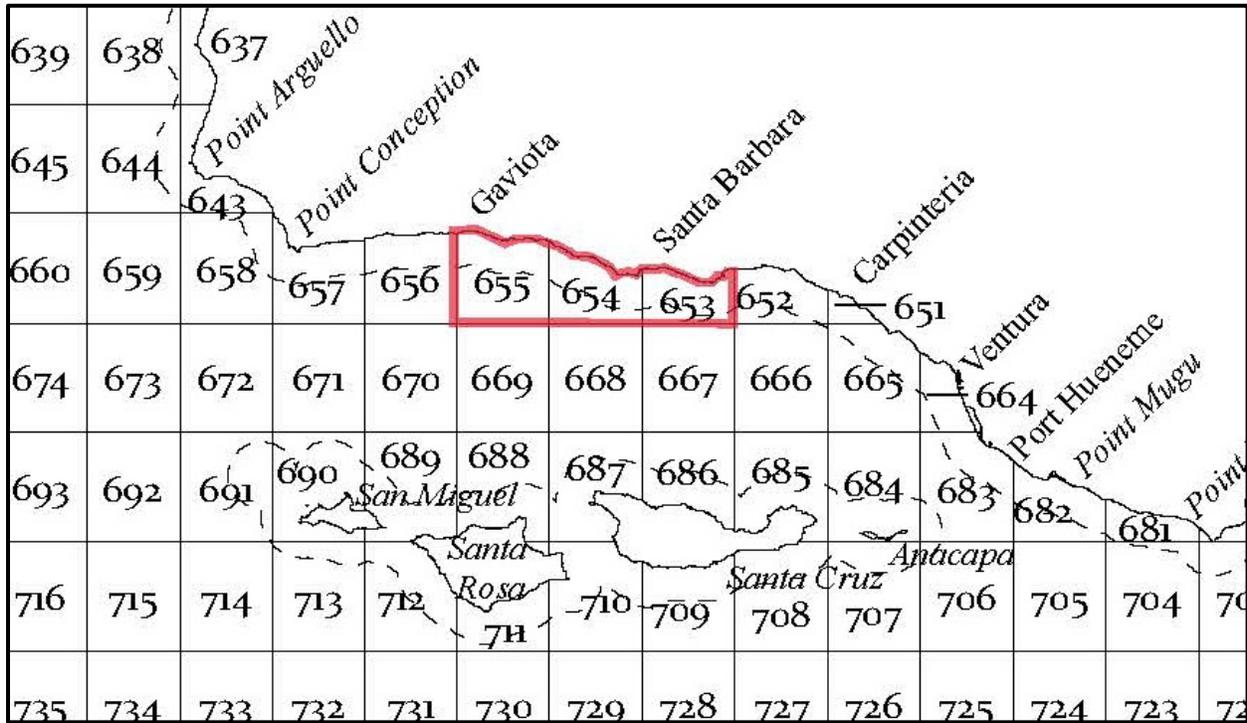
### 19 **8.2.1 Fish Block Information**

20 Information for commercial fisheries was taken from the CDFW California Fishery  
21 Information System that maintains data on where fish are caught and landed.  
22 Information is provided below for commercial catch data for CDFW Fish Blocks (FB)  
23 653, 654, and 655 (Figure 8-3). The entire Project is located within the tidelands of FB  
24 654; however, the adjacent fish blocks are included in this analysis to provide an  
25 indication of the types of commercial fishing activity likely to occur in the immediate  
26 vicinity of the proposed Project.

27 The top five ranked fisheries by catch value for Santa Barbara area harbors are listed in  
28 Table 8-2 below. However, commercial catch is not uniformly distributed across the  
29 Santa Barbara Channel and is weighted more towards FBs in the Channel Island area  
30 (FBs 684 through 690; Figure 8-3) (CSLC 2014). Based on the water depths and  
31 habitats available in FB 654, only a small percentage of the regional fishing reported in  
32 Table 8-2 is expected to occur within the Project area. Due to confidentiality policy  
33 outlined in Fish and Game Code, section 8022, disclosure of commercial fishing data is  
34 limited, and the specific percentage of FB 654 within the Santa Barbara harbor landings  
35 cannot be calculated at this time. An analysis of commercial fishing completed in the  
36 CSLC 2014 EIR for the Recommissioning of PRC 421 reported the Project area (FB  
37 654) accounted for 2 percent of the total value and 0.31 percent of the total biomass  
38 caught within the Santa Barbara Channel between 1999 and 2005. The total value for

- 1 catch landed from FB 654 was \$1.8M, which consisted primarily of lobster, prawns,
- 2 urchin, halibut, and sea cucumber (CSLC 2014).

**Figure 8-3. CDFW Fish Catch Blocks**



Source: CDFW 2001

Note: Red highlighted blocks are nearshore fishery blocks used in this analysis. Dashed line indicates 3 nautical miles from shoreline (state waters limit).

**Table 8-2. Total Poundage and Value of Commercial Landings in 2019 by Port for Santa Barbara Area**

Species	Pounds	Value
<b>Lobster, California spiny</b>		
Santa Barbara Harbor	274,696	\$3,847,676
Ventura Harbor	95,667	\$1,294,667
Oxnard	77,879	\$1,086,038
Port Hueneme	83	\$959
<b>Total</b>	<b>448,325</b>	<b>\$6,229,340</b>
<b>Market Squid</b>		
Santa Barbara Harbor	103	\$204
Ventura Harbor	5,895,721	\$2,849,714

<b>Species</b>	<b>Pounds</b>	<b>Value</b>
Port Hueneme	3,214,710	\$1,589,431
<b>Total</b>	<b>9,110,534</b>	<b>\$4,439,349</b>
<b>Prawn, spot</b>		
Santa Barbara Harbor	26,856	\$413,585
Ventura Harbor	108,553	\$1,564,603
Oxnard	6,518	\$98,933
Port Hueneme	61,287	\$918,671
<b>Total</b>	<b>203,214</b>	<b>\$2,995,792</b>
<b>Sea Urchin, Red</b>		
Santa Barbara Harbor	522,884	\$1,262,798
Ventura Harbor	21,334	\$11,825
Oxnard	483,562	\$772,170
<b>Total</b>	<b>1,027,780</b>	<b>\$2,046,793</b>
<b>Sablefish</b>		
Santa Barbara Harbor	436,327	\$1,240,824
Ventura Harbor	7,891	\$20,375
Oxnard	30,289	\$176,001
<b>Total</b>	<b>474,507</b>	<b>\$1,437,200</b>

Source: CDFW 2020

### 1 **8.2.2 Oil Spill Impacts to Commercial Fishing**

2 In addition to the species listed above, a wide variety of fish and shellfish species are  
3 commercially harvested offshore of the Project area, many of which are targeted in  
4 deep offshore waters (i.e., Sablefish, squid, and spot prawn); however, both adult and  
5 larval stages of commercially targeted species are known to occur in intertidal and  
6 shallow subtidal habitats near the Project area.

7 Among fishes, benthic (bottom dwelling) species are more sensitive to petroleum than  
8 pelagic (open ocean) species, and intertidal species are the most tolerant (CSLC 2009).  
9 Adult fish and mobile invertebrates (i.e., lobster and prawn) may be able to avoid or  
10 minimize exposure to oil or petroleum product in the water. Although deep-water  
11 species are a majority percentage of the commercial fisheries, several of those species  
12 lay eggs in benthic habitats that have pelagic and nearshore larval phases. The larval  
13 stages of fish life histories are imperative for survivorship and are highly dependent on  
14 the oceanic conditions at the water's surface (CSLC 2009). Egg and larval stages of fish

1 as well as immobile invertebrates (i.e., sea urchin and abalone) would not be able to  
2 avoid exposure to petroleum, if released, and therefore are the most vulnerable.

3 The potential for petroleum product to be released into marine waters during the Project  
4 is limited to the contact of marine waters with Project-related contaminated soils.

5 Because fish species are economically important and because long-term loss can result  
6 from an oil spill, potentially significant impacts could occur depending on the size and  
7 location of an incidental release of oil into marine waters. Implementation of **MMs HAZ-**  
8 **1a** through **MM HAZ-1c** as well as **MM HAZ-2** and **MM HWQ-2** will reduce impacts to  
9 less than significant by requiring implementation of measures intended to prevent or  
10 minimize the potential for exposure of hazardous materials to the marine environment,  
11 as well as planning and equipment to reduce the extent of a release, should it occur. A  
12 less than significant impact to commercial fishing would result.

### 13 **8.3 ENVIRONMENTAL JUSTICE**

14 “Environmental justice” is defined by California law as “the fair treatment and meaningful  
15 involvement of people of all races, cultures, incomes, and national origins, with respect  
16 to the development, adoption, implementation, and enforcement of environmental laws,  
17 regulations, and policies” (Gov. Code, § 65040.12, subd. (e)). This definition is  
18 consistent with the Public Trust Doctrine principle that the management of trust lands is  
19 for the benefit of all people. The CSLC adopted an Environmental Justice Policy in  
20 December 2018 ([Item 75, December 2018](#)) to ensure that environmental justice is an  
21 essential consideration in the CSLC’s processes, decisions, and programs.<sup>17</sup> Through  
22 its policy, the CSLC reaffirms its commitment to an informed and open process in which  
23 all people are treated equitably and with dignity, and in which its decisions are tempered  
24 by environmental justice considerations. Among other goals, the policy commits the  
25 CSLC to, “Strive to minimize additional burdens on and increase benefits to  
26 marginalized and disadvantaged communities resulting from a proposed project or  
27 lease.”<sup>18</sup>

28 This policy is consistent with the principals outlined in the California Coastal  
29 Commission’s Environmental Justice policy adopted in 2019<sup>19</sup>. As specified, California  
30 Public Resources Code Section 30604(h) states that “when active on a coastal  
31 development permit, the issuing agency, or the commission on appeal, may consider  
32 environmental justice, or the equitable distribution of environmental benefits throughout  
33 the state”.

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<sup>17</sup> See <https://www.slc.ca.gov/wp-content/uploads/2018/11/EJPolicy.pdf>

<sup>18</sup> Id.

<sup>19</sup> [https://documents.coastal.ca.gov/assets/env-justice/CCC\\_EJ\\_Policy\\_FINAL.pdf](https://documents.coastal.ca.gov/assets/env-justice/CCC_EJ_Policy_FINAL.pdf)

1 In keeping with its commitment to environmental sustainability and access to all,  
2 California was one of the first states to codify the concept of environmental justice in  
3 statute. Beyond the fair treatment principles described in statute, CSLC believes that it  
4 is critical to include individuals who are disproportionately affected by a proposed  
5 project's effects in the decision-making process. The goal is that, through equal access  
6 to the decision-making process, everyone has equal protection from environmental and  
7 health hazards and can live, learn, play, and work in a healthy environment.

8 In 2016, legislation was enacted to require local governments with disadvantaged  
9 communities, as defined in statute, to incorporate environmental justice into their  
10 general plans when two or more general plan elements (sections) are updated. The  
11 Governor's Office of Planning and Research (OPR) (the lead state agency on planning  
12 issues) is working with state agencies, local governments, and many partners to update  
13 the General Plan Guidelines to include guidance for communities on environmental  
14 justice (OPR 2020).

15 The available data revealed no significant environmental impact associated with the  
16 PRC 421 Decommissioning Project. The subject parcel is located within a  
17 predominantly recreational/open space area that shows a small degree of  
18 environmental burden as noted by quantitative data, at this time. Project activities are  
19 intended to return this portion of coastline to natural conditions, which would include a  
20 long-term benefit to aesthetics, recreation, and local land uses. Therefore, community  
21 outreach was not conducted.

### 22 **8.3.1 U.S. Census Bureau Statistics**

23 Table 8-3 presents income, employment, and race data of the regional and local study  
24 area in the Project vicinity, based on the most recently available information from U.S.  
25 Census 2019 American Community Survey 5-Year Estimates.<sup>20</sup> The Project is located  
26 within the city of Goleta in Santa Barbara County, but specifically falls within Census  
27 Tract No. 29.34 (previously reported within Tract No. 29.30 in the most recent Census  
28 data).

### 29 **8.3.2 Population and Economic Characteristics**

#### 30 8.3.2.1 Demographics

31 As indicated in Table 8-3, regionally the population in Santa Barbara County and the

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<sup>20</sup> U.S. Census 2019 American Community Survey estimates come from a sample population but are more current than the most recent full census of 2010. Because they are based on a sample of population, a certain level of variability is associated with the estimates. Supporting documentation on American Community Survey data accuracy and statistical testing can be found on the American Community Survey website in the Data and Documentation section available here: [census.gov/programs-surveys/acs](https://www.census.gov/programs-surveys/acs).

1 city of Goleta are comprised of an approximately 72.2 to 76.8 percent white and 23.2 to  
 2 27.8 percent non-white population. The population reported within Census Tract 29.34,  
 3 including the Project site, are also predominantly white (68.8 percent). It is important to  
 4 note that regionally, this area contains a significant number of persons who classify  
 5 themselves as being of Hispanic or Latino decent (46.0 percent in Santa Barbara  
 6 County, 32.5 percent in the city of Goleta, and 30.8 percent within the Project Census  
 7 Tract). However, the city of Goleta and Project Tract (including the Project site)  
 8 percentage of persons identified as being of Hispanic or Latino decent are lower than  
 9 the percentage for Santa Barbara County, and also for the State of California as a  
 10 whole (39.0 percent).

11 8.3.2.2 Socioeconomics

12 As shown in Table 8-3, from a regional standpoint, the city of Goleta has a higher-than-  
 13 average median household income level (\$98,005) compared to Santa Barbara County  
 14 (\$75,653) or the State of California (\$75,235). Similarly, Census Tract 29.30 (now  
 15 29.34) includes a median household income level of \$91,923, which is slightly lower  
 16 than the city of Goleta median, but much higher than the County of Santa Barbara or  
 17 State of California earnings. Santa Barbara County and city of Goleta residents are  
 18 primarily employed in professional, scientific, management, and educational services  
 19 (accounting for a total of 37.1 percent of jobs within the County and 46.2 percent of jobs  
 20 within the city). With respect to populations (all families) living below the established  
 21 poverty level, the city of Goleta is significantly lower (3.3 percent) than Santa Barbara  
 22 County (6.1 percent) or the State as a whole (9.6 percent). Census Tract 29.30 (now  
 23 29.34) includes 3.5 percent of all families below the established poverty level, which is  
 24 similar to the city of Goleta and lower than that reported for Santa Barbara County and  
 25 the State of California.

**Table 8-3. Environmental Justice Statistics**

Parameter	California	Santa Barbara County	City of Goleta	Census Tract 29.34 (formerly 29.30)
<b>Income and Population</b>				
Total population	39,283,497	446,499	30,975	8,421
Median household income	\$75,235	\$75,653	\$98,005	\$91,923
Percent (%) below the poverty level (all families) <sup>1</sup>	9.6%	6.1%	3.3%	3.5%

Parameter	California	Santa Barbara County	City of Goleta	Census Tract 29.34 (formerly 29.30)
<b>Employment Industry (percentage of total population)</b>				
Agriculture, forestry, fishing and hunting, mining	2.2%	10.0%	0.6%	0.0%
Construction	6.3%	6.8%	4.7%	6.0%
Manufacturing	9.1%	5.8%	9.4%	8.5%
Wholesale trade	2.8%	1.7%	2.0%	3.1%
Retail trade	10.5%	8.3%	8.6%	5.2%
Transportation and warehousing, and utilities	5.3%	3.1%	3.0%	3.3%
Information	2.9%	1.7%	2.8%	4.2%
Finance and insurance, and real estate and rental and leasing	6.0%	4.6%	4.8%	1.9%
Professional, scientific, and management, and administrative and waste management services	13.7%	13.6%	13.7%	14.6%
Educational services and health care and social assistance	21.0%	23.5%	32.5%	34.8%
Arts, entertainment, and recreation, and accommodation and food services	10.4%	12.5%	8.3%	7.9%
Other services, except public	5.2%	5.3%	6.2%	6.5%

Parameter	California	Santa Barbara County	City of Goleta	Census Tract 29.34 (formerly 29.30)
administration				
Public administration	4.4%	3.2%	3.3%	4.1%
<b>Race</b>				
White	59.7%	76.8%	72.2%	68.8%
Black or African American	5.8%	2.2%	3.3%	2.0%
American Indian and Alaska Native	0.8%	1.1%	0.7%	0.0%
Asian	14.5%	5.8%	9.8%	11.3%
Native Hawaiian	0.4%	0.1%	0.2%	0.0%
Some Other Race	14.0%	10.5%	8.6%	12.0%
Hispanic or Latino (of Any Race)	39.0%	46.0%	32.5%	30.8%

Notes:

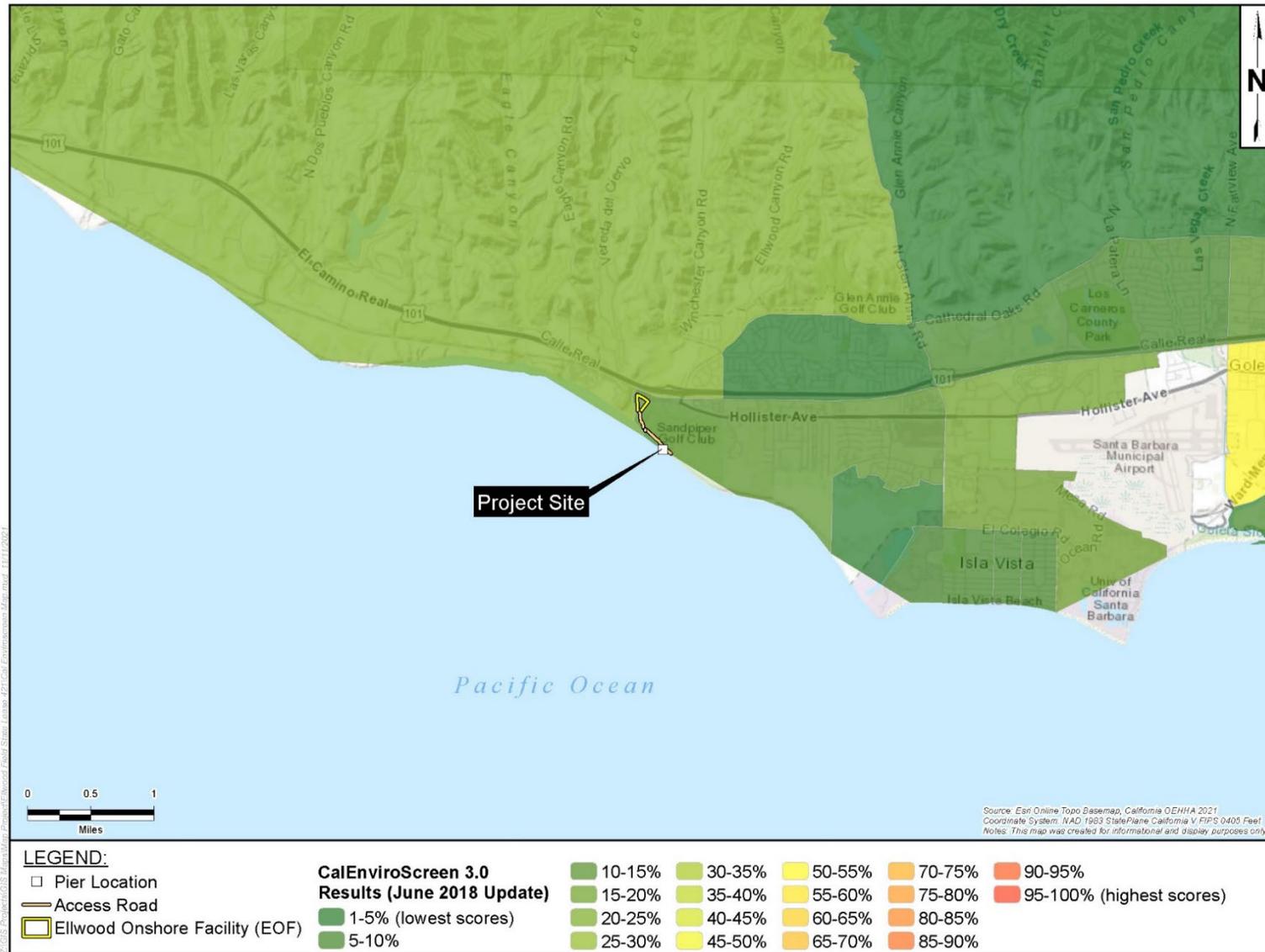
<sup>1</sup> Poverty threshold as defined in the ACS is not a singular threshold but varies by family size. Census data provides the total number of persons for whom the poverty status is determined and the number of people below the threshold. The percentage is derived from this data.

Source: U.S. Census Bureau American Fact Finder accessed August 2021 (DP05 – ACS Demographic and Housing Estimates and DP03 – Selected Economic Characteristics; 2019 ACS 5-Year Estimates.

1 **8.3.3 California Office Of Environmental Health Hazard Assessment (OEHHA)**  
 2 **CalEnviroScreen Results**

3 According to California Office of Environmental Health Hazard Assessment (OEHHA  
 4 2021) California Communities Environmental Health Screening Tool (CalEnviroScreen  
 5 4.0) data (accessed August 2021), the Project site is located within an area of low  
 6 existing environmental burden, scoring between 10 to 20 percent (pollution burden  
 7 percentile of 18 percent). This means that 80 to 90 percent of all census tracts in  
 8 California have greater population vulnerability or environmental burdens (Figure 8-4).  
 9 The exposures indicated at the Project site primarily include air quality hazards, with  
 10 diesel particulate matter scoring highest, which is attributed to the Project site’s  
 11 proximity to the U.S. 101 transportation corridor, as traffic exposure was noted as the  
 12 second highest concern. Environmental effects were indicated in relation to  
 13 groundwater threats and impaired waters, as well as generation of hazardous waste.

Figure 8-4. CalEnviroScreen Results



1 **8.3.4 Conclusion**

2 Project decommissioning activities would occur for approximately 143 days during  
3 Component 1 removal and 63 days for Component 2 removal. During this time, public  
4 access may be partially impeded along this stretch of beach to safely accommodate  
5 large construction equipment and work activities, however recreation and coastal  
6 access would not be significantly affected as the beach area outside of the work zone  
7 would remain open east and west of the Project site(s). As indicated in Section 4.0,  
8 *Environmental Impact Analysis*, during this time, the proposed Project would have the  
9 potential for short-term construction-related impacts to aesthetics, cultural resources,  
10 tribal cultural resources, hazards and hazardous materials, hydrology and water quality,  
11 and recreation that have the potential to contribute to existing circumstances affecting  
12 environmental justice communities. However, following incorporation of identified  
13 mitigation measures (including equal representation of English and Spanish languages  
14 in posted notices and other Project-related notifications), the proposed Project is not  
15 anticipated to create new burdens or add to existing pollution burdens felt by a  
16 vulnerable community; and there are no anticipated factors that would put any sensitive  
17 populations disproportionately at risk from this Project. No long-term or permanent  
18 structures or operations would result from incorporation of the proposed Project.

19 The Project site is located within an area that is comprised of a high percentage of white  
20 persons, with above-average wealth, and a low existing environmental burden. The  
21 Project purpose is removal of deteriorating structures that now represent a physical  
22 coastal obstruction, a potential public safety hazard, and a potential environmental  
23 hazard represented by the known presence of hydrocarbon-impacted soil and fill  
24 contained within the pier caissons. The removal of these structures would be a  
25 significant public benefit, would allow full use of the beach coastline by the public, and  
26 would eliminate an existing threat to public safety and the environment. No significant  
27 impacts to environmental justice communities would result.

28 **8.4 SIGNIFICANT LANDS INVENTORY**

29 The Project involves lands identified as possessing significant environmental values  
30 within CSLC's Significant Lands Inventory, pursuant to Public Resources Code section  
31 6370 et seq. The Project site is in the Significant Lands Inventory as parcel number 42-  
32 062-100 (Gaviota State Park to Coal Oil Point). The subject lands are classified as use  
33 category Class B, which authorizes limited use. Environmental values identified for  
34 these lands are mostly biological, including endangered species habitat and marine  
35 wildlife support, but also geological and recreational values.

36 Based on CSLC staff's review of the Significant Lands Inventory and the CEQA analysis  
37 provided in this EIR, the Project, as proposed, would not significantly affect those lands  
38 and is consistent with the use classification. As provided in Impact AES-2 and Impact

- 1 REC-2, with the removal of the piers and caissons there would be a beneficial impact to
- 2 recreational values by improving the visual quality and character of the beach and
- 3 increasing the beach area.

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## **9.0 REPORT PREPARATION SOURCES AND REFERENCES**

1 This Environmental Impact Report (EIR) was prepared by the staff of the California  
 2 State Lands Commission (CSLC) Division of Environmental Planning and Management  
 3 (DEPM), with the assistance of Padre Associates, Inc. The analysis in the EIR is based  
 4 on information identified, acquired, reviewed, and synthesized based on DEPM  
 5 guidance and recommendations.

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1 **9.3 REFERENCES CITED**

2 Arnold, J. E., 1992. Complex hunter-gatherer-fishers of prehistoric California: Chiefs,  
3 specialists, and marine adaptations of the Channel Islands. *American Antiquity*  
4 (57):60-84.

5 Bartsch, E.C., L.D. Gurrola, R.D. Francis, D.C. Quigley, J.S. Hornafius, B.P. Luyendyk.  
6 1999. Structural Control of the Spatial Distribution of Hydrocarbon Seeps in the  
7 Northern Santa Barbara Channel, California. American Geophysical Union Fall  
8 Meeting 1999. OS31A-02 POSTER.

9 BeaconWest. 2020. Oil Spill Contingency Plan – Ellwood Facilities, including Ellwood  
10 Onshore Facility. January 2020.

11 Bean, L. J., 1974. Social Organization in Native California. In *Antap: California Indian*  
12 *Political and Economic Organization*. Anthropological Papers 2:93-110. Ballena  
13 Press, Ramona.

14 Bean, W., 1968. *California: An Interpretive History*. McGraw Hill Book Company, New  
15 York.

16 California Air Resources Board. 2017. OFFROAD ORION 2017 web database:  
17 arb.ca.gov/orion.

- 1 California Air Resources Board. 2021. EMFAC 2021 web database:  
2     arb.ca.gov/emfac/project-analysis.
- 3 California Air Resources Board. 2021a. EMFAC 2021 web data base  
4     (<https://arb.ca.gov/emfac/project-analysis>). Accessed July 2021.
- 5 \_\_\_\_\_. 2021b. OFFROAD 2017-ORION web data base ([arb.ca.gov/orion](http://arb.ca.gov/orion)). Accessed July  
6     2021.
- 7 \_\_\_\_\_. 2021c. iADAM: Air Quality Data Statistics  
8     (<https://www.arb.ca.gov/adam/index.html>). Accessed July 2021.
- 9 \_\_\_\_\_. 2021d. California's AB 32 Scoping Plan Update. November 2, 2021.
- 10 California Climate Change Center. 2009. Final Paper – The Impacts of Sea-Level Rise  
11     on the California Coast.
- 12 California Coastal Records Project. 2021. [www.californiacoastline.org](http://www.californiacoastline.org). Website  
13     accessed October 2021.
- 14 California Department of Fish and Wildlife (CDFW). 2020. Final California Commercial  
15     Landings for 2019. State of California Natural Resources Agency. February 2020.
- 16 \_\_\_\_\_. 2021. California Natural Diversity Database (CNDDDB) Rarefind application  
17     (<https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>). Accessed August 2021.
- 18 California Emergency Management Agency. 2009. Tsunami Inundation Map for  
19     Emergency Planning. State of California, County of Santa Barbara – Dos Pueblos  
20     Canyon Quadrangle. January 31, 2009.
- 21 California Fish and Game Commission. 2019. Petition for regulation change: file 2019-  
22     014.
- 23 California State Lands Commission (CSLC). 2009. Final Environmental Impact Report  
24     for the Venoco Ellwood Marine Terminal Lease Renewal Project. State  
25     Clearinghouse No. 2004071075. CSLC EIR No. 743. April 2009.
- 26 \_\_\_\_\_. 2014. Final Environmental Impact Report for the Revised PRC 421  
27     Recommissioning Project. State Clearinghouse No. 2005061013. CSLC EIR No.  
28     732. November 2014.
- 29 \_\_\_\_\_. 2016. Tribal Consultation Policy Document. [www.slc.ca.gov/tribal-consultation](http://www.slc.ca.gov/tribal-consultation).
- 30 \_\_\_\_\_. 2021. Addendum to the Ellwood Facilities Oil Spill Contingency Plan. ExxonMobil  
31     PRC 421 Piers Decommissioning Project. May 2021.

- 1 CalRecycle. 2021. Solid Waste Information System (SWIS) Facility/Site Summary –  
2 Clean Harbors Buttonwillow LLC 915-AA-0257).
- 3 Chartkoff, J. L., and K. K. Chartkoff, 1984. *The Archaeology of California*. Stanford  
4 University Press, Stanford, California.
- 5 City of Goleta. 1997. Coastal Zoning Code. Division 4 - Zoning Districts.
- 6 \_\_\_\_\_. 2004. General Plan EIR, Background Report No. 16 – Geology/Geologic  
7 Hazards. March 19, 2004.
- 8 \_\_\_\_\_. 2006. City of Goleta General Plan/Coastal Land Use Plan – Conservation  
9 Element. September 2006.
- 10 \_\_\_\_\_. 2006b. City of Goleta General Plan/Coastal Land Use Plan – Open Space  
11 Element. September 2006.
- 12 \_\_\_\_\_. 2006c. City of Goleta General Plan/Coastal Land Use Plan – Land Use Element.  
13 September 2006.
- 14 \_\_\_\_\_. 2006d. City of Goleta Final General Plan/Coastal Land Use Plan – Environmental  
15 Impact Report. September 2006.
- 16 \_\_\_\_\_. 2006e. City of Goleta's State Lease 421-1 Caisson Wall Repair Project. Draft  
17 Mitigated Negative Declaration: 06-MND-01. Prepared by the City of Goleta Case  
18 05-132-DP (follow up to 04-EMP-001). July 18, 2006.
- 19 \_\_\_\_\_. 2006f. City of Goleta General Plan/Coastal Land Use Plan – Land Use Element.  
20 September 2006.
- 21 \_\_\_\_\_. 2006f. City of Goleta General Plan/Coastal Land Use Plan – Safety Element.  
22 September 2006.
- 23 \_\_\_\_\_. 2009. City of Goleta General Plan/Coastal Land Use Plan – Scenic and Visual  
24 Resources Map. November 2009.
- 25 \_\_\_\_\_. 2009b. City of Goleta General Plan/Coastal Land Use Plan – Geologic Hazards  
26 Map. November 2009.
- 27 \_\_\_\_\_. 2014. Final Climate Change Action Plan. July 2014.
- 28 \_\_\_\_\_. 2016. General Plan/Coastal Land Use Plan. Figure 6-2. Fire, Flood, and Tsunami  
29 Hazards Map. June 2016.
- 30 \_\_\_\_\_. 2020. City of Goleta Zoning Map. February 2020.

- 1 \_\_\_\_\_. 2021. City of Goleta Cumulative Projects List (Updated February 25, 2021).  
2 Accessed online August 2021.
- 3 Consortium of California Herbaria. 2021. Herbarium record search  
4 (<https://ucjeps.berkeley.edu/consortium/search.html>). Accessed August 2021.
- 5 County of Santa Barbara Planning and Development. 2008. Environmental Thresholds  
6 and Guidelines Manual. October 2008.
- 7 \_\_\_\_\_. 2015. Seismic Safety and Safety Element. Adopted 1979, Republished May  
8 2009, Amended February 2015.
- 9 \_\_\_\_\_. 2021. Cumulative Projects List for the Entire County. March 5, 2021. Access  
10 online August 2021.
- 11 Department of Toxic Substances Control (DTSC). 2021. Envirostor Hazardous Waste  
12 and Substances Site List, Accessed August 2021.
- 13 Dieter, B., H. Greene, C. Endris, M. Erdey and N. Golden. 2014. *Potential Marine*  
14 *Benthic Habitats, Offshore Coal Oil Point Map Area, California*. U.S.G.S Scientific  
15 Investigation Map 3302.
- 16 eBird.org. 2021. Haskell's Beach hotspot data (<https://ebird.org/hotspot/L1075907>).  
17 Accessed August 2021.
- 18 Federal Highway Administration. 2006. Roadway Construction Noise Model User's  
19 Guide.
- 20 GHD. 2020. VMT Threshold Study for the City of Goleta.
- 21 Glassow, Michael A., Lynn H. Gamble, Jennifer E. Perry, and Glenn S. Russell, 2007.  
22 Prehistory of the Northern California Bight and the Adjacent Transverse Ranges.  
23 *California Prehistory*. T. L. Jones and K. A. Klar, eds., AltaMira Press, Lanham,  
24 Maryland.
- 25 Grant, C., 1978. Chumash: Introduction in Handbook of the North American Indian,  
26 Volume 8, *California*, edited by Robert F. Heizer. Smithsonian Institution.  
27 Washington D.C.
- 28 Greenwood, R.S., 1972. 9,000 Years of Prehistory at Diablo Canyon. San Luis Obispo  
29 County Archaeological Society Occasional Papers 7. Paso Robles, California.
- 30 \_\_\_\_\_. 1978. Obispeño and Purisimeño Chumash. In Volume 8, California, Handbook of  
31 North American Indians. Edited by Robert F. Heizer. Smithsonian Institution,  
32 Washington.

- 1 Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on  
2 Evaluating Transportation Impacts in CEQA.
- 3 Gurrola, L.D. 2004. Geologic map of the Western Santa Barbara Fold Belt, Santa  
4 Barbara, California.
- 5 Helix, M. 2006. Biological Communities Near Natural Oil and Gas Seeps. Minerals  
6 Management Service. [www.mms.gov/omm/pacific/enviro/seeps2.htm](http://www.mms.gov/omm/pacific/enviro/seeps2.htm). Accessed:  
7 September 22, 2006.
- 8 Holland, R.F. 1986. Preliminary Description. of the Terrestrial Natural Communities of  
9 California.
- 10 Hoover, R. 1986. Archaeological Survey Report for the Proposed Shell-Union Oil  
11 Pipeline Connection, Price Canyon Facility. On file, Central Coast Information  
12 Center, Department of Anthropology, University of California, Santa Barbara.
- 13 Hornafius, J.S., D. Quigley, and B.P. Luyendyk. 1999. The World's Most Spectacular  
14 Marine Hydrocarbon Seeps (Coal Oil Point, Santa Barbara Channel, California):  
15 Quantification of Emissions. *Journal of Geophysical Research*, vol. 104, no. C9, pp.  
16 20, 703-720, September 15.
- 17 Interact, 2020. Remedial Action Plan – PRC 421 Piers Soil Removal, Prepared for  
18 California State Lands Commission and ExxonMobil. August 2020.
- 19 \_\_\_\_\_. 2021. Draft Project Description and Environmental Assessment. PRC 421  
20 Decommissioning Project. February 2021.
- 21 \_\_\_\_\_. 2021. Supplemental Project Description – Access Road, Revetment, and Seawall  
22 Removal. June 2021.
- 23 Intergovernmental Panel on Climate Change (IPCC). 2007. Synthesis Report.
- 24 \_\_\_\_\_. 2021. Climate Change 2021-The Physical Science Basis.
- 25 Jones, T. L. and J. A. Ferneau, 2002. Prehistory at San Simeon Reef: Archaeological  
26 Data Recovery at CA-SLO-179 and -267, San Luis Obispo County, California. San  
27 Luis Obispo County Archaeological Society Occasional Paper 16.
- 28 Jones, T. L., K. Davis, G. Farris, S. D. Grantham, T. W. Fung, and B. Rivers, 1994.  
29 Toward a Prehistory of Morro Bay: Phase II Archaeological Investigations for the  
30 Highway 41 Widening Project, San Luis Obispo County, California. Prepared for the  
31 Department of Transportation, District 05, San Luis Obispo, California.

- 1 Keller, E.A. and L.D. Gurrola. 2000. Final Report, July, 2000. Earthquake Hazard of the  
2 Santa Barbara Fold Belt, California. Institute for Crustal Studies, UCSB.
- 3 Kimley-Horn. 2021. A Traffic Safety Study for the City of Goleta (draft).
- 4 King, C., 1990. The Evolution of Chumash Society: A Comparative Study of Artifacts  
5 Used in Social System Maintenance in the Santa Barbara Channel Region before  
6 A.D. 1804. Garland, New York.
- 7 Kroeber, A. L., 1925. Handbook of the Indians of California. Bulletin 78 of the Bureau of  
8 American Ethnology of the Smithsonian Institution, Government Printing Office,  
9 Washington. Republished in 1976 by Dover Publications, Inc., New York.
- 10 Landberg, L. C. W., 1965. The Chumash Indians of Southern California. Southwest  
11 Museum Papers No. 19. Southwest Museum, Los Angeles.
- 12 Lehman, P. 1994 (updated 2019). The Birds of Santa Barbara County, California.
- 13 Lemieux-Labonté V, Dorville NAS-Y, Willis CKR and Lapointe F-J (2020) Antifungal  
14 Potential of the Skin Microbiota of Hibernating Big Brown Bats (*Eptesicus fuscus*)  
15 Infected With the Causal Agent of White-Nose Syndrome. *Front. Microbiol.* 11:1776.  
16 doi: 10.3389/fmicb.2020.01776.
- 17 Lorenson, T.D., J.A. Dougherty, F.D. Hostettler, and R.J. Rosenbauer. 2004. Natural  
18 Seep Inventory and Identification for the County of Santa Barbara, California, Final  
19 Report, March 25, 2004. Prepared for Santa Barbara County, by the U.S.  
20 Geological Survey (USGS), Western Coastal and Marine Geology Team.
- 21 Moyle, P.B., R.M. Quinones and J.V. Katz. Fish Species of Special Concern in  
22 California.
- 23 Ocean Protection Council. 2018. California Sea-level Rise Guidance Document.  
24 [www.opc.ca.gov/](http://www.opc.ca.gov/). Accessed November 2021.
- 25 OEHHA. 2021. CalEnviroScreen ([oehha.ca.gov/calenviroscreen](http://oehha.ca.gov/calenviroscreen)). Accessed August  
26 2021.
- 27 Office of Planning and Research. 2017. Technical Advisory, AB52 and Tribal Cultural  
28 Resources in CEQA. June 2017.
- 29 \_\_\_\_\_. 2020. General Plan Guidelines ([www.opr.ca.gov/docs/20200706-](http://www.opr.ca.gov/docs/20200706-GPG_Chapter_4_EJ.pdf)  
30 [GPG\\_Chapter\\_4\\_EJ.pdf](http://www.opr.ca.gov/docs/20200706-GPG_Chapter_4_EJ.pdf)).

- 1 Padre Associates. 2019. Report of Findings - Site Assessment Activities, Ellwood Field  
2 State Lease PRC 421, Wells 421 1 and 421-2, Ellwood Oil Field, Ellwood Beach,  
3 Goleta, Santa Barbara County, California.
- 4 \_\_\_\_\_. 2021. Bluff Retreat Evaluation Report. PRC 421 Decommissioning Project,  
5 Goleta, Santa Barbara County, California. August 2021.
- 6 Quigley, D.C. et al. 1999. "Decrease in natural hydrocarbon seepage offshore Coal Oil  
7 Point, California, associated with oil production." (1999 AAPG PACIFIC SECTION  
8 MEETING; ABSTRACTS; AAPG Bulletin; Vol. 83, no. 4; p. 699).
- 9 Recreational Fisheries Information Network (RecFin). 2021. <https://www.recfin.org/>  
10 query for data 2016-2020, Subregion: Southern California, County: Santa Barbara,  
11 Water Area(s): Ocean <= 3 miles, All Species groups, All Species. Accessed: July  
12 30, 2021.
- 13 Ruhge, Justin. 2016. California and World War II – The Japanese Attack on the Central  
14 Coast, 23 February 1942.
- 15 RWQCB. 2019. Central Coast Basin Plan. Accessed at:  
16 [https://www.waterboards.ca.gov/centralcoast/publications\\_](https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin)  
17 [\\_plan/](https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin).
- 18 Santa Barbara Botanic Garden. 2012. Rare Plants of Santa Barbara County.
- 19 Santa Barbara Coastal Long-term Ecological Research Project. 2003. Three Year  
20 Progress Report – Volume 1. Prepared for the National Science Foundation Site  
21 Review Team. June 2 and 3.
- 22 Santa Barbara County Air Pollution Control District. 2017. Scope and Content of Air  
23 Quality Sections in Environmental Documents.
- 24 \_\_\_\_\_. 2019. 2019 Ozone Plan, December 2019 – Final.
- 25 Santa Barbara County Association of Governments (SBCAG). 2017. Fast Forward  
26 2040: Regional Transportation Plan and Sustainable Communities Strategy.
- 27 Santa Barbara County Fire Department. 2021. [www.sbCFire.com](http://www.sbCFire.com). Website accessed  
28 October 2021.
- 29 Santa Barbara County Planning and Development Department. 2002. Environmental  
30 Thresholds and Guidelines Manual.
- 31 \_\_\_\_\_. 2001. Final Proposed Mitigated Negative Declaration 01-ND-34: Venoco, Inc. -  
32 State Lease 421 Well Stabilization Project 01DVP-00000-00040. October.

- 1 \_\_\_\_\_. 2003. Project Clean Water, Water Quality Analysis Report – Rain Year 2002/2003.  
2 December 2003.
- 3 Santa Barbara County Public Works. 2011. Engineering Design Standards. September  
4 2011.
- 5 Sawyer, J.O., T. Keeler-Wolf and J.M. Even. A Manual of California Vegetation (online  
6 version: [vegetation.cnps.org/search?](http://vegetation.cnps.org/search?)).
- 7 Shuford, W.D. and T. Gardali. 2008. California Bird Species of Special Concern.
- 8 Southern California Earthquake Center (SCEC). 1995. Seismic Hazards in Southern  
9 California: Probable Earthquakes, 1994 to 2024.
- 10 State Ready Mix Recycling. 2021. [www.statereadymix.com](http://www.statereadymix.com) Accessed online August  
11 2021.
- 12 State Water Resources Control Board. 2010. Integrated Report (Clean Water Act  
13 Section 303(d) List / 305(b) Report) – Statewide.
- 14 \_\_\_\_\_. 2021. Geotracker online database accessed August 2021.
- 15 Thompson, B., J. Dixon, S. Schroeter, and D. Reish. 1993. Benthic Invertebrates In:  
16 Ecology of the Southern California Bight; A Synthesis and Interpretation.
- 17 Thomson, R.P., A.N. Wright and H.B. Shaffer. California Amphibian and Reptile Species  
18 of Special Concern.
- 19 University of California, Santa Barbara. 2020. UCSB Hydrocarbon Seeps Project.  
20 <http://seeps.geol.ucsb.edu/>. Accessed: December 23, 2020.
- 21 U.S. Bureau of Land Management. 1986. Visual Resource Management System, U.S.  
22 Bureau of Land Management Manual 8431: Visual Resource Contrast Rating.
- 23 U.S. Census Bureau. 2021. ([data.census.gov](http://data.census.gov)). Accessed August 2021.
- 24 \_\_\_\_\_. 2021a. DP05-ACS Demographic and Housing Estimates and DP03 – Selected  
25 Economic Characteristics; 2019 ACS 5-Year Estimates.
- 26 \_\_\_\_\_. 2021b. 2020 Census Tract Map – Santa Barbara County (083).
- 27 U.S. Department of Agriculture (USDA). 1981. Soil Survey of Santa Barbara County,  
28 California, South Coast Part.

- 1 U.S. Department of the Air Force (USAF). 2011. Final Programmatic Environmental  
2 Assessment for the 2011-2015 Integrated Natural Resources Management Plan.  
3 Vandenberg Air Force Base, California. August 16, 2011.
- 4 U.S. Fish and Wildlife Service (USFWS). 2017. Biological Opinion on the Venoco Line  
5 96 Bell Creek “Frac-out” Event and Associated Cleanup Activities that Occurred  
6 from October to December 2011 Near the City of Goleta, Santa Barbara County,  
7 California.
- 8 U.S. Geologic Survey. 2009. Geologic Map and Description of the Santa Barbara  
9 Coastal Plain Area, Santa Barbara County, California.
- 10 U.S. Geological Survey (USGS). 2009. Open File Report 2009-1225. Natural Offshore  
11 Oil Seepage and Related Tarball Accumulation on the California Coastline – Santa  
12 Barbara Channel and the Southern Santa Maria Basin: Source Identification and  
13 Inventory. T.D. Lorenson, et. al.
- 14 \_\_\_\_\_. 2009.b Coastal Processes Study of Santa Barbara and Ventura Counties,  
15 California. Final Report to the Beach Erosion Authority for Clean Oceans and  
16 Nourishment (BEACON).
- 17 \_\_\_\_\_. 2021. U.S. Quaternary Faults – National Database.  
18 [https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a168456](https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf)  
19 [1a9b0aadf88412fcf](https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf). Accessed August 2021.
- 20 Waste Management (WM). 2021. Simi Valley Landfill online statistics.  
21 <https://www.wm.com/location/california/ventura-county/landfill/index.jsp>. Accessed  
22 August 2021.
- 23 Williams, D.F. 1986. Mammalian Species of Special Concern in California.
- 24 Winant, C.D., D.J. Alden, E.P. Dever, K.A. Edwards and M.C. Hendershott. 1999. Near  
25 surface trajectories off central and southern California. *Journal of Geophysical*  
26 *Research* 104(C7): 15713–15726.
- 27 Xerces Society. 2020. Western Monarch Thanksgiving Count 1997-2020.
- 28 Zembal, R., S. Hoffman and R. Patton. 2015. A Survey of the Belding’s Savannah  
29 Sparrow in California, 2015.