INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

CALIFORNIA RESOURCES CORPORATION
GRUBB LEASE (PRC 3913.1) INTAKE/OUTFALL STRUCTURES DECOMMISSIONING PROJECT

December 2019

Lead Agency:
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Applicant:
California Resources Corporation (CRC)
900 Old River Road
Bakersfield, CA 93311
MISSION STATEMENT

The California State Lands Commission provides the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care through preservation, restoration, enhancement, responsible economic development, and the promotion of public access.

CEQA DOCUMENT WEBSITE

www.slc.ca.gov/ceqa/

Geographic Location (Point at Mean High Water Line)

Latitude: 34°19’2.52” N
Longitude: 119°21’58.53” W
WGS84 Datum

Cover Photo:
(Photo courtesy of Padre Associates, Inc.)
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# LIST OF ABBREVIATIONS AND ACRONYMS

°F  
Degrees Fahrenheit

**A**  
AADT  
Annual Average Daily Traffic

AB  
Assembly Bill

API  
American Petroleum Institute

AQMP  
Air Quality Management Plan

AWOIS  
Automated Wreck and Obstruction Information System

**B**  
BSA  
Biological Study Area

CalRecycle  
California Department of Resources Recycling and Recovery

CalEEMod  
California Emissions Estimator Model

CalEnviroScreen  
California Communities Environmental Health Screening Tool

CAL FIRE  
California Department of Forestry and Fire Protection

Caltrans  
California Department of Transportation

CAP  
Coastal Area Plan

CARB  
California Air Resources Board

CCC  
California Coastal Commission

CDFW  
California Department of Fish and Wildlife

CEQA  
California Environmental Quality Act

CESA  
California Endangered Species Act

CFR  
Code of Federal Regulations

CH₄  
Methane

CHP  
California Highway Patrol

CNDDB  
California Natural Diversity Database

CNEL  
Community noise equivalent level

CNPS  
California Native Plant Society

CNTCCP  
Construction Noise Threshold Criteria and Control Plan

CO  
Carbon monoxide

CO₂  
Carbon Dioxide

CO₂ₑ  
Carbon Dioxide Equivalent

COS  
Coastal Open Space

CRC  
California Resources Corporation

CRPR  
California Rare Plant Rank

CSLC  
California State Lands Commission

CTCVGM  

cu ft  
cubic foot

cu yd  
cubic yard

**D**  
dB  
Decibel

dBA  
A-weighted Decibel

DEPM  
Division of Environmental Planning and Management

DOGGR  
Division of Oil, Gas, and Geothermal Resources

DPM  
Diesel Particulate Matter

DSV  
Dive Support Vessel
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<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
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<td>FESA</td>
<td>Federal Endangered Species Act</td>
</tr>
<tr>
<td>FR</td>
<td>Federal Register</td>
</tr>
<tr>
<td>ft</td>
<td>Foot</td>
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</tr>
<tr>
<td>L_eq</td>
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<tr>
<td>L_eq(h)</td>
<td>A-weighted Equivalent Sound Level</td>
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<tr>
<td>L_max</td>
<td>Maximum Sound Level</td>
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<td>LOS</td>
<td>Level of Service</td>
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<td>m</td>
<td>Meter</td>
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<tr>
<td>MHWM</td>
<td>mean high water mark</td>
</tr>
<tr>
<td>μg</td>
<td>Microgram</td>
</tr>
<tr>
<td>MM</td>
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</tr>
<tr>
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<td>MMPA</td>
<td>Marine Mammal Protection Act</td>
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<td>Mineral Reserve Protection</td>
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<td>MTCO$_{2e}$</td>
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<td>Native American Heritage Commission</td>
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<td>OEHHA</td>
<td>California Office of Environmental Health Hazard Assessment</td>
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<td>Abbreviation</td>
<td>Definition</td>
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<td>OSRCP</td>
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<td>PCH</td>
<td>Pacific Coast Highway</td>
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<td>ppm</td>
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<td>Peak Particle Velocity</td>
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<td>PVC</td>
<td>polyvinyl chloride</td>
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<td>PWSP</td>
<td>Project Work and Safety Plan</td>
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<td>ROG</td>
<td>Reactive Organic Gases</td>
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<td>RPS</td>
<td>Renewables Portfolio Standard</td>
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<td>SB</td>
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<td>SCE</td>
<td>Southern California Edison</td>
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<td>SLOAPCD</td>
<td>San Luis Obispo County Air Pollution Control District</td>
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<td>California State Marine Reserves</td>
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<td>Sulfur dioxide</td>
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<td>SPL</td>
<td>Sound Pressure Level</td>
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<td>sq ft</td>
<td>square foot</td>
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<td>SWRCB</td>
<td>State Water Resources Control Board</td>
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<td>Toxic Air Contaminant</td>
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<td>UPRR</td>
<td>Union Pacific Railroad</td>
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<td>U.S. 101</td>
<td>U.S. Highway 101</td>
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<td>USEPA</td>
<td>U.S. Environmental Protection Agency</td>
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<td>USFWS</td>
<td>U.S. Fish and Wildlife Service</td>
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<td>VCAPCD</td>
<td>Ventura County Air Pollution Control District</td>
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<td>Ventura County Fire Department</td>
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<td>VCREA</td>
<td>Ventura County Regional Energy Alliance</td>
</tr>
<tr>
<td>VUSD</td>
<td>Ventura Unified School District</td>
</tr>
<tr>
<td>Yr</td>
<td>Year</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California State Lands Commission (Commission or CSLC), as lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), to analyze and disclose the environmental effects associated with the proposed Grubb Lease (PRC 3913.1) Intake/Outfall Structures Decommissioning Project (Project). The Project would authorize California Resources Corporation (CRC or Applicant) to decommission Project-related facilities located within Lease No. PRC 3913.1 in accordance with lease requirements. The lease agreement requires that CRC plan for replacement and rehabilitation of the pipelines or plan for full removal of the pipelines. The Project objective is the removal of the pipelines and appurtenant facilities to fulfill the existing lease requirements and quitclaim the lease.

The CSLC prepared an MND because it determined that, while the IS identifies potentially significant impacts related to the Project, mitigation measures (MMs) incorporated into the Project proposal and agreed to by the Applicant would avoid or mitigate those impacts to a point where no significant impacts occur.

PROPOSED PROJECT

The Project would require the following primary components:

- Pre-Project Preparation Activities and Surveys (Section 2.2.1)
  - Construction of a temporary equipment access ramp
- Removal of the Intake/Outfall facilities within PRC 3913.1 (Section 2.2.2) including:
  - Recovery of the 6-foot by 6-foot by 1-foot concrete lattice structures at the offshore end of each of the intake pipelines
  - Recovery of the two 12-inch-diameter steel intake pipelines
  - Recovery of the 12-inch-diameter steel outfall pipeline
- Demolition and removal of existing concrete vault (Section 2.2.3) including:
  - Removal of outer sheet piles
  - Removal of all internal water pumps, piping, two levels of grating, and other ancillary equipment
- Abandon-in-place the 36-inch-diameter casing (and internal pipelines) on the onshore side of the beach vault (Section 2.2.4), including:
  - Removal or grouting of internal pipeline segments
  - Filling the casing between the onshore side of the beach vault and valve box on CRC’s lower Grubb lease property with slurry
1. Ramp demolition and reconstruction of the armor rock seawall at the gap created by removal of the concrete vault (Section 2.2.5)
2. Demobilization of equipment and disposal/recycling of recovered pipelines and appurtenant facility components (fencing, foundation piling, concrete)
3. Post-Project survey to confirm removal of pipelines and any associated seafloor anomalies, as compared to the Pre-Project survey (Section 2.2.6)

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

The environmental issues checked below in Table ES-1 would be potentially affected by this Project; a checked box indicates that at least one impact would be a “potentially significant impact.” The Applicant has agreed to Project revisions, including the implementation of MMs, that would reduce the potential impacts to “less than significant with mitigation,” as detailed in Section 3.0, Environmental Checklist and Analysis, of this MND. Table ES-2 lists the proposed MMs designed to reduce or avoid potentially significant impacts. With implementation of the proposed MMs, all Project-related impacts would be reduced to less than significant levels.

Table ES-1. Environmental Issues and Potentially Significant Impacts

| ☒ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Cultural Resources – Tribal |
| ☐ Energy | ☒ Geology, Soils, and Paleontological Resources | ☐ Greenhouse Gas Emissions |
| ☒ Hazards and Hazardous Materials | ☒ Hydrology and Water Quality | ☐ Land Use and Planning |
| ☐ Mineral Resources | ☐ Noise | ☐ Population and Housing |
| ☐ Public Services | ☒ Recreation | ☒ Transportation |
| ☒ Utilities and Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |
Figure ES-1. Project Site Location
Figure ES-2. Existing Facilities Site Map
Table ES-2. Summary of Proposed Project Mitigation Measures

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
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<tbody>
<tr>
<td><strong>Aesthetics</strong></td>
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</tr>
<tr>
<td>MM AES-1</td>
<td>Nighttime Illumination Shielding</td>
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<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
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<tr>
<td>MM BIO-1</td>
<td>Marine Wildlife Contingency and Training Plan Implementation</td>
</tr>
<tr>
<td>MM BIO-2</td>
<td>Environmental Awareness Training</td>
</tr>
<tr>
<td>MM BIO-3</td>
<td>Onshore Biological Pre-activity Survey and Monitoring</td>
</tr>
<tr>
<td>MM BIO-4</td>
<td>Delineation of Work Limits</td>
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<tr>
<td>MM BIO-5</td>
<td>Marine Safety and Anchoring Plan Implementation</td>
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<td>MM HAZ-1</td>
<td>Oil Spill Response and Contingency Plan Implementation</td>
</tr>
<tr>
<td><strong>Cultural Resources</strong></td>
<td></td>
</tr>
<tr>
<td>MM CUL-1/TCR-1</td>
<td>Discovery of Previously Unknown Cultural or Tribal Cultural Resources</td>
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<tr>
<td>MM CUL-2/TCR-2</td>
<td>Unanticipated Discovery of Human Remains</td>
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<tr>
<td><strong>Cultural Resources – Tribal</strong></td>
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<tr>
<td>MM CUL-1/TCR-1</td>
<td>Discovery of Previously Unknown Cultural or Tribal Cultural Resources</td>
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<td>MM CUL-2/TCR-2</td>
<td>Unanticipated Discovery of Human Remains</td>
</tr>
<tr>
<td><strong>Hazards and Hazardous Materials</strong></td>
<td></td>
</tr>
<tr>
<td>MM HAZ-1</td>
<td>Oil Spill Response and Contingency Plan Implementation</td>
</tr>
<tr>
<td>MM HAZ-2</td>
<td>Hazardous Materials Management and Contingency Plan Implementation</td>
</tr>
<tr>
<td>MM REC-1</td>
<td>Advanced Notice to Mariners</td>
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<tr>
<td><strong>Hydrology and Water Quality</strong></td>
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<td>MM HAZ-2</td>
<td>Hazardous Materials Management and Contingency Plan Implementation</td>
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<tr>
<td><strong>Recreation</strong></td>
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<td>MM REC-1</td>
<td>Advanced Notice to Mariners</td>
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<td>MM T-1</td>
<td>Traffic Control Plan</td>
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<td><strong>Utilities and Service Systems</strong></td>
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<tr>
<td>MM HAZ-2</td>
<td>Hazardous Materials Management and Contingency Plan Implementation</td>
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</table>
1.0 PROJECT AND AGENCY INFORMATION

1.1 PROJECT TITLE
California Resources Corporation (CRC) Grubb Lease (PRC 3913.1) Intake/Outfall Structures Decommissioning Project (Project).

1.2 LEAD AGENCY AND PROJECT SPONSOR

<table>
<thead>
<tr>
<th>Lead Agency</th>
<th>Contact Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State Lands Commission</td>
<td>Alexandra Borack, Senior Environmental Scientist</td>
</tr>
<tr>
<td>100 Howe Avenue, Suite 100-South</td>
<td>Environmental Planning and Management Division</td>
</tr>
<tr>
<td>Sacramento, CA 95825</td>
<td><a href="mailto:Alexandra.Borack@slc.ca.gov">Alexandra.Borack@slc.ca.gov</a></td>
</tr>
<tr>
<td></td>
<td>(916) 574-2399</td>
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<table>
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<tr>
<th>Applicant</th>
<th>Contact Person</th>
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</thead>
<tbody>
<tr>
<td>California Resources Corporation</td>
<td>Zachary Dransoff</td>
</tr>
<tr>
<td>900 Old River Road</td>
<td>Environmental Project Manager</td>
</tr>
<tr>
<td>Bakersfield, CA 93311</td>
<td><a href="mailto:Zachary.Dransoff@crc.com">Zachary.Dransoff@crc.com</a></td>
</tr>
<tr>
<td></td>
<td>(661) 529-4306</td>
</tr>
</tbody>
</table>

1.3 PROJECT LOCATION
The Project is located approximately 4.4 miles northwest of Ventura, California, on the shoreline of the Pacific Ocean approximately 1.3 miles east-southeast of Pitas Point in Ventura County (Figure 1-1). The Project site consists of onshore and offshore facilities. The offshore portions of the Project are located within the California State Lands Commission (Commission or CSLC) Lease No. PRC 3913.1 and include three 12-inch-diameter seawater intake and discharge pipelines. The onshore portions of the Project include a shoreline vault structure and a 36-inch-diameter steel casing consisting of three pipelines that runs from the vault to CRC’s onshore facilities on the north side of U.S. 101 (Figure 1-2 and Figure 1-3).

1.4 ORGANIZATION OF THE MITIGATED NEGATIVE DECLARATION
This Initial Study/Mitigated Negative Declaration (IS/MND) is intended to provide the CSLC, as lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), and other responsible agencies with the information required to exercise their discretionary responsibilities with respect to the proposed Project. The document is organized as follows:

- **Section 1** provides the Project location and background, agency and Applicant information, Project objectives, anticipated agency approvals, and a summary of the public review and comment process.
- **Section 2** describes the proposed Project including its location, layout, equipment, facilities, operations, and schedule.
• **Section 3** provides the IS, including the environmental setting, identification and analysis of potential impacts, and discussion of various Project changes and other measures that, if incorporated into the Project, would mitigate or avoid those impacts such that no significant effect on the environment would occur. The CSLC prepared this IS pursuant to State CEQA Guidelines section 15063.¹

• **Section 4** presents the Mitigation Monitoring Program.

• **Section 5** discusses other Commission considerations relevant to the Project, such as climate change, sea-level rise, and environmental justice that are in addition to review required pursuant to CEQA.

• **Section 6** presents information on report preparation and references.

• **Appendices** include specifications, technical data, and other information supporting the analysis presented in this MND:
  
  o Appendix A: Abridged List of Major Federal and State Laws, Regulations, and Policies Potentially Applicable to the Project
  o Appendix B: Project Plans
  o Appendix C: Photo Documentation
  o Appendix D: Air Quality and Greenhouse Gas Emission Calculations and Summary of Best Management Practices
  o Appendix E: Biological Resources Information
    ▪ E1: Special-Status Species Tables
    ▪ E2: 2018 Pre-Construction Marine Biological Dive Survey Report
    ▪ E3: Biological Assessment
  o Appendix F: Marine Wildlife Contingency and Training Plan
  o Appendix G: Essential Fish Habitat Assessment
  o Appendix H: Oil Spill Response and Contingency Plan
  o Appendix I: Hazardous Materials Management and Contingency Plan
  o Appendix J: Traffic Control Plan
  o Appendix K: Subsea Survey Information
  o Appendix L: Marine Safety and Anchoring Plan
  o Appendix M: Noise and Vibration Modeling

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¹ The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.
Figure 1-1. Project Site Location
Figure 1-2. Existing Facilities Site Map
Figure 1-3. Onshore Site Map
1.5 PROJECT BACKGROUND AND OBJECTIVES

The Project facilities were originally constructed by Continental Oil in 1967. Occidental Petroleum Corporation (Oxy) acquired the Grubb lease in 2005 from Vintage Petroleum. On November 30, 2014, Oxy restructured its California operations, including the Grubb lease, into California Resources Corporation (CRC), an independent, publicly traded company.

The Grubb lease intake/discharge facility was used to bring seawater for oil-field related water flood operations and on occasion for discharge of the inlet seawater filter backwash to the ocean. At no time were hydrocarbons present in the backwash sent through the outfall. According to operational records, the western (up coast) pipeline was the last of the three pipelines to be in use and was used as a seawater intake suction pipeline until Project facilities were idled in 2003 or 2005.

The Project objective is the removal of the three pipelines and appurtenant facilities and removal of the shoreline vault structure to 5 feet below ground surface to fulfill the existing Lease No. PRC 3913.1 requirements, satisfy other public agencies with jurisdictional authority over Project elements, and quitclaim the lease. The Project also proposes decommissioning of a 36-inch-diameter steel casing containing three pipelines that leads from the vault to the CRC onshore facility by removing the internal pipelines and grouting the casing.

1.6 PUBLIC REVIEW AND COMMENT

Pursuant to State CEQA Guidelines sections 15072 and 15073, a lead agency must issue a proposed MND for a minimum 30-day public review period. Agencies and the public will have the opportunity to review and comment on the document. Responses to written comments received by CSLC during the 30-day public review period will be incorporated into the MND, if necessary, and provided in the Commission's staff report. In accordance with State CEQA Guidelines section 15074, subdivision (b), the Commission will review and consider the MND, together with any comments received during the public review process, prior to taking action on the MND and Project at a noticed public hearing.

1.7 APPROVALS AND REGULATORY REQUIREMENTS

1.7.1 California State Lands Commission

All tidelands and submerged lands granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust. The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust.
purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space.

On tidal waterways, the state’s sovereign fee ownership extends landward to the ordinary high-water mark, which is generally reflected by the mean high-tide line, except for areas of fill or artificial accretion. CSLC’s authority is set forth in division 6 of the Public Resources Code and the agency is regulated by the California Code of Regulations, title 2, sections 1900–2970. CSLC has authority to issue leases or permits for the use of sovereign lands held in the Public Trust, including all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways, and retains certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). The CSLC must comply with CEQA when it undertakes an activity defined by CEQA as a “project” that must receive discretionary approval (i.e., CSLC has the authority to approve or deny the requested lease, permit, or other approval) and that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment. CEQA requires CSLC to identify the significant environmental impacts of its actions and to avoid or mitigate those impacts, if feasible.

The Applicant has submitted an application to amend the existing lease (PRC 3913.1) for the Project and requested a quitclaim of the lease.

1.7.2 Other Agencies

In addition to CSLC, the Project is subject to the review and approval of other local, state, and federal entities with statutory or regulatory jurisdiction over various aspects of the Project (Table 1-1). As part of the Project, all permits required for the Project would be obtained before starting decommissioning activities.

<table>
<thead>
<tr>
<th>Permitting Agency</th>
<th>Anticipated Approvals/Regulatory Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local</strong></td>
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<td>Union Pacific Railroad</td>
<td>Utilities Installation Modification</td>
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<td><strong>State</strong></td>
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<tr>
<td>California State Lands Commission</td>
<td>Lease Amendment and Quitclaim</td>
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<tr>
<td>California Coastal Commission</td>
<td>Coastal Development Permit²</td>
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<tr>
<td>California Office of Historical Preservation</td>
<td>National Historic Preservation Act; Section 106 Compliance</td>
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</table>

² Ventura County has deferred their Coastal Development Permit review/approval (Local Agency Review Form) to the California Coastal Commission.
## Project and Agency Information

<table>
<thead>
<tr>
<th>Permitting Agency</th>
<th>Anticipated Approvals/Regulatory Requirements</th>
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<tr>
<td>California Department of Transportation</td>
<td>Encroachment Permit</td>
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<tr>
<td>Regional Water Quality Control Board, Los Angeles Regional Board</td>
<td>Section 401 Water Quality Certification (Rivers and Harbors Act)</td>
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<tr>
<td>California Department of Fish and Wildlife</td>
<td>Marine Protected Areas Consultation</td>
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### Federal

<table>
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<td>U.S. Army Corps of Engineers, Los Angeles District</td>
<td>Section 404 Nationwide Permit</td>
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<td>Section 10 Permit (Rivers and Harbors Act)</td>
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<td>U.S. Fish and Wildlife Service</td>
<td>Section 7 Consultation (federal Endangered Species Act (FESA))</td>
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<tr>
<td>National Marine Fisheries Service</td>
<td>Section 7 Consultation (FESA); Marine Mammal Protection Act and Essential Fish Habitat Assessment</td>
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<tr>
<td>U.S. Coast Guard</td>
<td>Notice to Mariners</td>
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</table>
2.0 PROJECT DESCRIPTION

California Resources Corporation (CRC) is proposing to decommission Project-related facilities located within Lease No. PRC 3913.1 in accordance with lease requirements. The lease agreement requires that CRC plan for replacement and rehabilitation of the pipelines or plan for full removal of the pipelines. The Project objective is the removal of the pipelines and appurtenant facilities to fulfill the existing lease requirements and quitclaim the lease.

2.1 PROJECT WORK AREAS AND OVERVIEW

For planning purposes, all Project activities are based on their locations in one of three segments. Table 2-1 identifies and provides a summary description of each segment.

<table>
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<th>Segment</th>
<th>Description</th>
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</thead>
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<td>Offshore Intake and Outfall Pipelines</td>
<td>The Offshore Intake and Outfall Pipelines Segment consists of three 12-inch-diameter steel submarine pipelines with two intake pipelines and one outfall pipeline. The two intake pipelines measure 680 and 630 feet in length. The outfall pipeline measures 500 feet in length. Each of the two intake pipelines has an approximately 6-foot by 6-foot by 1-foot reinforced concrete lattice box structure at the offshore end. This segment is below the Mean High Water Mark (MHWM).</td>
</tr>
<tr>
<td>Shoreline Vault</td>
<td>The Shoreline Vault Segment consists of a shoreline vault that is a reinforced concrete and steel sheet pile structure set in the armor rock seawall between the Pacific Coast Highway (PCH) and the intertidal zone. The vault measures approximately 20 feet wide by 14 feet long and 27 feet deep. The entire 20-foot by 42-foot vault enclosure is surrounded by a chain link fence. The two intake pipelines and one outfall pipeline were originally connected to the seaward side of the vault. A 36-inch-diameter pipeline casing consisting of three pipelines exits the vault on the landward side of the vault. The vault contains water pumps, piping, two levels of grating, and other ancillary equipment. This segment is at and above the MHWM.</td>
</tr>
<tr>
<td>Onshore Pipelines</td>
<td>The Onshore Pipelines Segment consists of a 36-inch-diameter steel casing containing one 14-inch-diameter steel pipeline, one 12-inch-diameter steel pipeline and one 8-inch-diameter polyvinyl chloride (PVC) pipe liner inside of a second 12-inch-diameter steel pipeline. This segment is above the MHWM.</td>
</tr>
</tbody>
</table>
The following sections provide additional information regarding each segment.

2.1.1 Offshore Intake and Outfall Pipelines

The offshore portion of the facility consists of three 12-inch-diameter steel submarine pipelines with two intake pipelines and one outfall pipeline. The Grubb lease intake/discharge facility was used to bring in seawater for oil-field-related water flood operations and on occasion for discharge of the inlet seawater filter backwash to the ocean. Hydrocarbons were not present in the backwash sent through the outfall. The two intake pipelines measure approximately 680 and 630 feet in length, and the outfall pipeline measures approximately 500 feet in length. All lengths are measured from the seaward side of the concrete vault to the offshore terminations of each pipeline, which are located in water depths ranging from 12 to 14 feet of water. The original materials specification and wall thickness of these pipelines are unknown. The pipelines appear to be coated with an external anti-corrosive coating or weight coating of unknown composition, but most likely a mastic filler/sealer. The external coatings would be sampled prior to removal and tested for the presence of any hazardous materials.

The shoreline consists of a narrow sand beach that is exposed during low tide events and inundated at high tide events. The beach is bordered on the northeast side by a steep armor rock covered slope. All three pipelines run southwest, spaced at approximately ten-degree increments from the vault structure on the beach. There are two reinforced concrete lattice box structures located on the seafloor at the offshore ends of the intake pipelines each measuring approximately 6 square feet and 1 foot in height. Both the pipelines and lattice box structures are gravity based and no anchoring system has been used to secure them to the seafloor.

All three pipelines are fully severed, as a result of corrosion, just south of the seaward side of the vault in the surf zone area (Figure 2-1). At the severance points all three pipelines appear to be double walled within an inner and outer wall of steel or plastic pipe and mastic filler between the walls. The seaward pipeline sections cross the shoreline just below the beach sand line and the remaining stubs north of the severance points enter the reinforced concrete vault above the sand line but below the high tide.

Offshore, the pipelines appear to be intact and buried through the surf zone. The length and depth of cover appears to vary with the season and associated annual sand migration. This approximately 200-foot long surf zone segment has not been surveyed due to the difficulties of working in the surf zone. Further offshore, the remaining 300 to 500 feet of pipeline are exposed and laying on a bedrock and sand seafloor. The exposure of the pipelines was identified in a 2012 and 2019 geophysical survey and confirmed visually in a 2018 biological survey by divers (Fugro 2012, eTrac 2019, and Padre 2018).
Figure 2-1. Photograph of Severed Pipelines

Photo taken on January 21, 2019
2.1.2 Shoreline Vault

The shoreline vault is a reinforced concrete and steel sheet pile structure set in the armor rock seawall between PCH and the intertidal zone. The vault’s seaward side is inaccessible during periods of high tide (Figures 2-2 and 2-3). The vault measures approximately 20 feet wide by 14 feet long and 27 feet deep. The two intake pipelines and one outfall pipeline were originally connected to the seaward side of this vault, and there are pipeline remnants within the armor rock seawall.

A 36-inch-diameter pipeline steel casing with three pipelines exits the vault on the north side (landward side). The vault interior is partially filled with water, at a depth of approximately 16 feet, and still contains one, possibly two water pumps, piping, two levels of grating, and other ancillary equipment, much of it submerged. The interior water level does not change with the tides and so appears to be isolated from the ocean. Due to the flooded condition, the vault interior has only been partially surveyed.

The vault is approximately 27 feet deep and terminates approximately 12 feet below the surrounding sand beach level. Large pumps and equipment appear to be fastened to the floor of the vault and the floor is assumed to be concrete. The interior vault walls and ceiling are concrete, and the exterior walls are sheathed with steel sheet pile (Figure 2-4). The northern wall of the vault is separated from PCH by a 28-foot-wide section of compacted soil covered with asphalt layer and then a thin layer of dirt. Armor rock surrounds the vault on the other three sides.

The top of the extended vault area is approximately 20 feet wide by 42 feet long and includes three approximately 3-foot by 3-foot pump caisson openings on the southern end and an access hatch with ladder on the southwest side. The entire 20-foot by 42-foot vault enclosure is surrounded by chain link fencing with access through a locked gate on the north side (Figures 2-4 and 2-5).
Figure 2-2. Onshore Project Components at Low Tide (South Elevation)

Figure 2-3. Steel Sheet Piling Foundation at Concrete Vault
Figure 2-4. View of Vault Entrance and Staging Area Looking Southwest

Figure 2-5. View of Inside the Vault Enclosure
2.1.3 Onshore Pipelines

The onshore facilities consist of a 36-inch-diameter steel casing that spans between the northern side of the vault (landward) and the valve pit located in the CRC onshore facilities north of the Ventura Freeway – U.S. Highway 101 (U.S. 101). Exiting the interior wall on the north side of the vault is a 36-inch-diameter steel casing containing one 14-inch-diameter steel pipeline, one 12-inch-diameter steel pipeline and one 8-inch-diameter PVC pipe liner inside of a second 12-inch-diameter steel pipeline. The annulus between the pipelines within the 36-inch steel casing is filled with a grout material where the pipelines enter the side of the vault. The extent of this grout fill is unknown and would have to be field verified during decommissioning (Figure 2-6).

Figure 2-6. View of the 36-Inch Casing Inside the Vault Enclosure

Based on pipeline tracking data, the 36-inch-diameter steel casing appears to run underground approximately 220 feet to the northeast and terminate approximately 80 feet north of the Union Pacific Railroad (UPRR) easement (Figure 1-3) (Continental Oil Company 1968). The tracking data suggests that at least one pipeline exits the 36-inch-diameter casing and extends underground via the “A” Lease Canyon Road, underneath the U.S. 101 overpass for approximately 310 feet and terminates in a valve box on CRC onshore property. Depth of burial to the top of the 36-inch-diameter casing varies from approximately 9 feet at the southern side of PCH to over 11 feet while running under the UPRR easement and U.S. 101 dirt frontage road.
2.2 PROJECT COMPONENTS

The Project would require the following primary components:

- Pre-Project Preparation Activities and Surveys (Section 2.2.1)
  - Construction of a temporary equipment access ramp

- Removal of the Intake/Outfall facilities within PRC 3913.1 (Section 2.2.2) including:
  - Recovery of the 6-foot by 6-foot by 1-foot concrete lattice structures at the offshore end of each of the intake pipelines
  - Recovery of the two 12-inch-diameter steel intake pipelines
  - Recovery of the 12-inch-diameter steel outfall pipeline

- Demolition and removal of existing concrete vault (Section 2.2.3) including:
  - Removal of outer sheet piles
  - Removal of all internal water pumps, piping, two levels of grating, and other ancillary equipment

- Abandon-in-place the 36-inch-diameter casing (and internal pipelines) on the onshore side of the beach vault (Section 2.2.4), including:
  - Removal or grouting of internal pipeline segments
  - Fill the casing between the onshore side of the beach vault and valve box on CRC’s lower Grubb lease property with slurry

- Ramp demolition and reconstruction of the armor rock seawall at the gap created by removal of the concrete vault (Section 2.2.5)

- Demobilization of equipment and disposal/recycling of recovered pipelines and appurtenant facility components (fencing, foundation piling, concrete)

- Post-Project survey to confirm removal of pipelines and any associated seafloor anomalies, as compared to the Pre-Project survey (Section 2.2.6)

2.2.1 Pre-Project Preparation Activities and Surveys

2.2.1.1 Plans and Surveys

Once all regulatory permits are received, but prior to commencement of Project activities, the following technical plans and surveys to perform the work safely and in compliance with all regulatory permits and permissions, California Occupational Safety and Health Administration safety regulations, U.S. Coast Guard safety regulations, and owner’s safety requirements would be completed, as applicable:
a. A Project Work and Safety Plan (PWSP) would be submitted to all pertinent agencies for review and approval prior to the start of site work. The PWSP would include contact information, an updated Project schedule, emergency action plans, and other contractor work plans required for Project implementation.

b. Conduct a pre-project topographic survey of the armor rock seawall on each side of the vault to determine the pre-construction contours and conditions of the seawall. This would serve as the baseline for reconstructing the seawall after removal of the vault and the construction access ramp and restoration of the site to existing contours.

c. Conduct an 811 utility location survey (DigAlert) from the northern wall of the vault to the valve pit on the CRC property to ensure that all utilities are identified and located on the survey maps.

2.2.1.2 Work Area Preparation and Ramp Construction

Prior to the start of offshore and onshore decommissioning activities, the work area would be staged in accordance with the pre-approved Traffic Control Plan (Appendix J). This would include setting up equipment and materials staging areas along the southern shoulder of PCH; most likely the closure of the eastbound bicycle and vehicle lane of PCH and the temporary rerouting of both eastbound and westbound traffic into the existing center divider and westbound lanes of PCH. While occasional traffic stops on PCH may be needed during equipment ingress and egress, no long-term full closure of PCH is anticipated (Figure 2-7). Signs would also be posted on-site to alert visiting recreational users of the timing and nature of short-term work activities in the Project area. Adjacent residents would be given advanced written notification of proposed Project activities, scheduling, and hours of work.

A temporary equipment access ramp would be constructed across the existing armor rock seawall approximately 50 feet south of the concrete vault to provide equipment access to the Project site. An excavator would remove and relocate the existing armor rock as needed to create the foundation for the equipment access ramp. All rock removed would be stored for replacement upon completion of decommissioning activities (Figure 2-7). An excavator and loader would place smaller rock and cobble on top of the existing armor rock seawall to create a ramp of sufficient density and strength to allow tracked decommissioning equipment to travel across it to the beach. The equipment access ramp would be approximately 30 feet wide and 60 feet long.
Figure 2-7. Project Facilities

CRC Grubb Lease Intake/Outfall Structures
Decommissioning Project MND

December 2019
2.2.2 Offshore Intake and Outfall Pipelines

The proposed final disposition of the offshore facilities is to remove the two reinforced concrete lattice intake structures and all three 12-inch-diameter submarine pipelines in their entirety.

Offshore work would be initiated by anchoring the dive support vessel (DSV) over the terminus of the intake and outfall structures in accordance with the Marine Safety and Anchoring Plan (Appendix L). Divers would be deployed to cut and remove the intake lattice structures from each intake pipeline. A guillotine saw with a hydraulic power pack would be used to make the cut. Once cut, the intake lattice structures would be winched vertically to the surface and recovered onboard the vessel.

The proposed primary submarine pipeline removal methodology consists of mounting a winch on top of the existing reinforced concrete shoreline vault and pulling the submarine pipeline segments to shore along their existing alignments. Recovery operations have been scheduled when beach and surf zone sand cover is the lowest due to winter and early spring storm conditions. If the onshore ends of each pipeline are not already exposed, they would be exposed by an excavator operating on the beach. The ends of each pipeline would be cut and prepared for rigging of a pull wire or bridle. Tension would be slowly increased on the pipeline pulling wire allowing the pipelines to be pulled both vertically and horizontally until the pipeline is completely free of the surf zone sand cover. The pipelines would then be pulled along their existing alignments up onto the beach where they would be cut into lengths capable for trucking off-site (Figure 2-8). Once cut, the segments would be lifted from the beach, placed on a flatbed truck and trucked to an approved off-site recycler or disposal facility. This use of the vault and associated recovery of the offshore pipelines to shore would be performed prior to decommissioning the shoreline vault and armor rock.

Although engineering calculations have determined that pulling forces needed to free the pipeline segments from the surf zone do not exceed the tensile strength of the pipeline (Thomas and Beers 2019), there would be a possibility a portion of the pipelines cannot be recovered from shore if unanticipated site conditions or unknown pipeline factors are present. Should the onshore pipeline recovery operation be unable to recover all of the offshore pipeline segments to shore, the Project alternative for offshore recovery of the pipelines would use the existing anchored offshore DSV and divers to recover the remaining offshore pipeline segments. Work would be limited to the existing pipeline corridor, and pipeline segments would be cut into manageable segments and lifted vertically to the surface for recovery on the DSV using an onboard winch or crane. The dive vessel would be positioned over the cut point using the existing three-point anchoring points.
Figure 2-8. Pipeline Recovery Illustration
In the event the unrecovered pipeline is located within the surf zone, recovery efforts would have to be limited to periods of low wave action and extreme low tides. These recovery efforts would also be timed during the winter and early spring beach profile conditions when the least amount of sand would be over the pipelines. If the remaining section is on the ocean side of the surf zone, divers would be deployed from the DSV to expose the pipeline using a jet pump and then rig the exposed section for pulling to the vessel. Alternatively, if the remaining section is on the landward side of the surf zone, an excavator would be used during a period of extreme low tide to expose the remaining segment and rig the section for recovery to the beach using the vault mounted winch.

### 2.2.3 Shoreline Vault

The proposed final disposition of the shoreline vault is to remove all equipment and appurtenances from inside the vault and then remove the entire vault structure down to 5 feet below the existing beach contours and abandon the remaining 7 feet in place. CRC would require the decommissioning contractor to prepare an Excavation and Grading Plan that would be reviewed and approved by responsible agencies prior to decommissioning activities.

The decommissioning of the vault would begin once the submarine pipelines have been removed. The reinforced concrete vault ceiling would be saw cut and removed to allow access to the interior of the vault. The water in the vault, which was sampled in early 2019 and found to be contaminate free, would be re-sampled, pumped out, and shipped off-site for appropriate disposal (OEC 2019). Once the water has been removed, the internal water pumps, piping, two levels of grating, and other ancillary equipment would be removed and trucked off-site for recycling or disposal.

To facilitate vault removal, all armor rock currently surrounding the vault would be removed to expose the vault walls down to the beach elevation (Figure 2-9). Sand would also be excavated from the vault exterior in order to facilitate vault removal. The perimeter around the open excavation would be fenced off. Lower portions of the existing riprap around the perimeter of the vault would be left in place to inhibit backfill from surrounding sand during high tide periods.

Once the armor rock has been relocated from the outside of the vault, the four vault walls would be cut into removable sections with the use of a hydraulically powered rotary demolition saw (cuts both concrete and steel) attached to an excavator boom (Figure 2-10). The excavator would make a horizontal cut around the base of the walls at an elevation at least 5 feet below the existing sand grade or at a lower elevation if conditions permit. Horizontal cuts may also be made from the exterior as well. After the base cut has been completed, the saw would be used to cut the walls into vertical sections for removal.
Figure 2-9. Armor Rock Removal Illustration
Figure 2-10. Vault Removal Illustration
An excavator would be used to grasp the cut wall pieces and place them in trucks for off-site disposal or recycling at approved facilities. The vault removal process would likely result in several days during which the vault would fill with water at high tide periods. During low tide work periods, the water would be pumped back out and sand that has migrated back into the vault would be removed, as needed.

The 36-inch-diameter steel casing that connects into the shoreward side of the vault, and pipes contained in that casing, would be excavated and cut back approximately even with the existing earth slope of the armor rock seawalls that exist on either side of the vault. The casing and pipes contained in the casing would have been decommissioned in accordance with the description in Section 2.2.4, Onshore Pipelines, below.

Once all walls are cut at least 5 feet below the local sand level, the void resulting from removal of the vault walls and equipment would be backfilled with native sand. Depending on the amount of natural sand movement, it is estimated that approximately 125 cubic yards of sand would be used to fill voids within the seawall. The site would then be recontoured and the armor rock repositioned over the project site to match pre-decommissioning contours. CRC would ensure that all engineering designs require use of current industry standards with respect to seismic considerations for the armor rock replacement.

2.2.4 Onshore Pipelines

The final disposition of the onshore facilities is to fill the 36-inch-diameter casing and associated internal pipelines with cement slurry and abandon it in place, except as detailed below. This work would be performed prior to the vault removal detailed in Section 2.2.3, Shoreline Vault.

In order to access the casing, two potholes would be excavated along the casing and pipeline route between the vault and the CRC facilities (Figure 2-11). The first pothole would be just north of the UPRR right-of-way where, based on the results of the pipeline tracking, the casing appears to terminate. This would provide visual and quantifiable evidence on the conditions inside the casing, the pipelines within the casing and the level of cementing in the casing annulus and internal pipeline between the southern end of the casing in the vault and the northern end of the casing at the pothole. The second pothole would be at the valve pit inside the CRC facilities on the north side of the U.S. 101. The excavations would use trench boxes to limit cut volumes and the disturbed areas surrounding the potholes (Figure 2-12). No traffic impacts to PCH, U.S. 101, or the access road to the CRC facilities are anticipated.
Figure 2-11. Pothole Locations
If the pipelines inside the casing between the vault and the first pothole are not cemented in place and can be removed, they would either be pulled to the vault structure or to the pothole where they can be saw-cut into sections and recovered. The casing would then be filled with cement slurry and abandoned in place. If the pipelines carried inside the 36-inch casing are found to be already cemented into the 36-inch casing, the pipelines would be filled with cement slurry and abandoned in place inside the 36-inch casing between the vault and the first pothole. A cement pumping unit would be used to pump slurry from the pothole downslope to the vault.

If the internal pipelines inside the casing continue to extend between the northern end of the 36-inch casing (the first pothole) and their termination in the valve box located inside CRC facilities (the second pothole) they would be filled with cement slurry and abandoned in place. As before the cement slurry would be pumped from the upper pothole downslope to the first pothole location.

After completing the pipeline removal and the cement slurry pumping, the trench boxes would be removed, and the potholes backfilled and compacted. The surrounding areas would be contoured to pre-Project conditions.
2.2.5 Ramp Demolition and Armor Rock Reconstruction

Once pipeline and vault removal activities are complete, work activities would occur from the shoulder of the road to deconstruct the equipment access ramp and construct the armor rock seawall at the removed vault location using original armor rock from the vault perimeter. The reconstructed armor rock seawall would conform to Caltrans specifications.

2.2.6 Post-Project Survey

Upon completion of the offshore decommissioning work, a second offshore geophysical debris survey would be performed, and the results compared to the initial baseline seafloor debris survey. Any anomalous seafloor objects located in the survey would be positively identified by divers and any remaining objects related to the decommissioning would be removed. A Project close-out report with drawings and coordinates of any facilities abandoned in place would be submitted to the Commission within approximately 60 days of work completion.

2.3 SITE ACCESS AND STAGING

There is only pedestrian access to the Project site, via a concrete stairway located approximately 325 feet to the southeast or down the existing riprap revetment from the shoulder of PCH. Therefore, a temporary equipment access ramp would be constructed across the existing armor rock approximately 50 feet south of the concrete vault to provide equipment access to the Project site. Equipment would need to be moved off the beach with each tidal cycle, as the Project site becomes inundated at high tide.

Project equipment staging would primarily occur adjacent to the Project site along PCH. The staging area would be approximately 25 feet by 150 feet. Additional staging may occur within the fenced CRC lower Grubb Lease facilities adjacent to the existing vault during potholing activities.

2.4 ESTIMATED AREAS AND VOLUMES

The estimated disturbed areas and volumes of Project materials are provided in Table 2-2.
**Table 2-2. Estimated Areas and Volumes of Project Materials**

<table>
<thead>
<tr>
<th>Project Component/Description</th>
<th>Material</th>
<th>Length (ft)</th>
<th>Area of Disturbance (sq ft)</th>
<th>Excavation Volume (cu ft)</th>
<th>Excavation Volume (cu yd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Below Mean High Water Mark</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Offshore Intake and Outfall Pipelines Segment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake Pipeline (North)</td>
<td>Sand/Rock</td>
<td>680</td>
<td>680</td>
<td>400</td>
<td>15 ¹</td>
</tr>
<tr>
<td>Intake Pipeline (South)</td>
<td>Sand/Rock</td>
<td>630</td>
<td>630</td>
<td>400</td>
<td>15 ¹</td>
</tr>
<tr>
<td>Outfall Pipeline</td>
<td>Sand/Rock</td>
<td>500</td>
<td>500</td>
<td>400</td>
<td>15 ¹</td>
</tr>
<tr>
<td>Moorings (5 at 50 ft diameter)</td>
<td>Beach Sand</td>
<td>--</td>
<td>9,813</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Concrete Lattice Box Structures (2 at 6 ft x 6 ft x 1 ft)</td>
<td>Concrete</td>
<td>--</td>
<td>36</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Beach Sand Around Vault Exterior</td>
<td>Beach Sand</td>
<td>--</td>
<td>600</td>
<td>3,600</td>
<td>133 ²</td>
</tr>
<tr>
<td>Temporary Equipment Access Ramp</td>
<td>Armor Rock/Rock and Cobble</td>
<td>42</td>
<td>675</td>
<td>5,062</td>
<td>188</td>
</tr>
<tr>
<td><strong>Shoreline Vault Segment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vault Riprap Moved</td>
<td>Armor Rock</td>
<td>100</td>
<td>2,000</td>
<td>24,000</td>
<td>889</td>
</tr>
<tr>
<td><strong>Above Mean High Water Mark</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seawall Construction in Place of Vault</td>
<td>Armor Rock</td>
<td>60</td>
<td>900</td>
<td>13,500</td>
<td>500</td>
</tr>
<tr>
<td>Temporary Riprap Storage</td>
<td>Armor Rock</td>
<td>--</td>
<td>1,325</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Onshore Pipelines Segment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pothole Excavation (under road)</td>
<td>Topsoil</td>
<td>--</td>
<td>800</td>
<td>10,000</td>
<td>370</td>
</tr>
<tr>
<td>Pothole Excavation (CRC valve pit)</td>
<td>Topsoil</td>
<td>--</td>
<td>800</td>
<td>400</td>
<td>15³</td>
</tr>
<tr>
<td>Concrete Slurry (casing)</td>
<td>Concrete</td>
<td>227</td>
<td>--</td>
<td>1,600</td>
<td>59</td>
</tr>
<tr>
<td>Concrete Slurry (pipelines)</td>
<td>Concrete</td>
<td>534</td>
<td>--</td>
<td>1,269</td>
<td>47</td>
</tr>
<tr>
<td>Staging/Access Areas (8,295 sq ft total minus temporary equipment access ramp (798 sq ft))</td>
<td>N/A</td>
<td>--</td>
<td>7,497</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (above MHWM)</td>
<td>--</td>
<td>821</td>
<td>11,322</td>
<td>26,769</td>
<td>991</td>
</tr>
<tr>
<td>Total (below MHWM)</td>
<td>--</td>
<td>1,952</td>
<td>14,934</td>
<td>33,862</td>
<td>1,255</td>
</tr>
<tr>
<td>Total – All Project Segments</td>
<td>--</td>
<td>2,773</td>
<td>26,256</td>
<td>60,631</td>
<td>2,246</td>
</tr>
</tbody>
</table>

Notes:
1 Volume for the offshore pipeline reflects a 1 ft cover from the distance of each pipeline from the surf zone (approximately 5 ft offshore contour) to the shoreline vault. Pipelines are exposed on the seafloor offshore of the surf zone. This volume would not change based on the Project alternative for offshore recovery of the pipelines.
2 Beach sand around vault exterior was calculated based on a linear distance of 100 feet of vault wall on the three beach sides to a depth of 6 feet below local sand level, which would be at its lowest annual point during the winter work period when the sand cover migrates offshore.
3 Pothole excavation (CRC valve pit) was calculated based on a 12-foot by 24-foot excavation for the trench box to a depth of about 10 feet to provide full access around the pipeline.
2.5 EQUIPMENT/PERSONNEL REQUIREMENTS

The equipment and personnel requirements for the Project are summarized in Tables 2-3 and 2-4.

Table 2-3. Project Equipment List

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Quantity</th>
<th>Horsepower</th>
<th>Hours/Day</th>
<th># of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onshore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onshore Casing and Pipeline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decommissioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavator</td>
<td>1</td>
<td>310</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Crane</td>
<td>1</td>
<td>220</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4x4 Truck</td>
<td>1</td>
<td>325</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Cement Truck</td>
<td>5</td>
<td>300</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Cement Pump</td>
<td>1</td>
<td>85</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Onshore Pipeline Recovery and Removal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavator</td>
<td>3</td>
<td>310</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Winch</td>
<td>1</td>
<td>150</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Bulldozer</td>
<td>1</td>
<td>435</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>4x4 Truck</td>
<td>1</td>
<td>325</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td><strong>Onshore Vault Removal and Armor Rock Reconstruction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavator</td>
<td>3</td>
<td>310</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Crane</td>
<td>1</td>
<td>220</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4x4 Truck</td>
<td>1</td>
<td>325</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Vacuum Truck</td>
<td>5</td>
<td>225</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Offshore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offshore Intake Structure Removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dive Support Vessel</td>
<td>1</td>
<td>1,000</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Shallow Air Dive System</td>
<td>1</td>
<td>50</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td><strong>Project Alternative for Offshore Recovery of the Pipelines</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dive Support Vessel</td>
<td>1</td>
<td>1,000</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Shallow Air Dive System</td>
<td>1</td>
<td>50</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes:

1 The Project Alternative for Offshore Recovery of the Pipelines would not require additional workdays or equipment.
### Table 2-4. Personnel Requirements

<table>
<thead>
<tr>
<th>Labor</th>
<th>Quantity</th>
<th>Hours/Day</th>
<th># of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flagman</td>
<td>6</td>
<td>10</td>
<td>73(^1)</td>
</tr>
<tr>
<td>Onshore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onshore Casing and Pipeline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decommission</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Site Supervisor</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Heavy Equipment Operator</td>
<td>3</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Rigger</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Onshore Pipeline Recovery and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Site Supervisor</td>
<td>1</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Heavy Equipment Operator</td>
<td>3</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Rigger</td>
<td>2</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Onshore Vault Removal and Armor Rock Reconstruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Site Supervisor</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Heavy Equipment Operator</td>
<td>3</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Rigger</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Offshore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offshore Intake Structure Removal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Dive Supervisor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Diver</td>
<td>3</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Tender</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Surveyor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Marine Wildlife Monitor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Project Alternative for Offshore Recovery of the Pipelines(^2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Dive Supervisor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Diver</td>
<td>3</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Tender</td>
<td>2</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Surveyor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Marine Wildlife Monitor</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes:

1. Flagman (6) would be used throughout Project activities.
2. The Project Alternative for Offshore Recovery of the Pipelines would not require additional workdays.
2.6 PROJECT SCHEDULE

Project operations have been proposed to take place in the first quarter of 2020 to take advantage of low-tide conditions during that time of year. It is expected that Project activities would be conducted during daylight hours (approximately 10 to 12 hours/day) for approximately 73 days, with offshore removal activities conducted 7 days per week and onshore operations occurring 6 days per week. Table 2-5 provides a summary of the Project schedule by task.

Table 2-5. Project Schedule by Task

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Estimated Duration (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Project Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Perform Seafloor Debris Survey</td>
<td>2</td>
</tr>
<tr>
<td><strong>Onshore Work</strong></td>
<td></td>
</tr>
<tr>
<td>Mobilization</td>
<td>15</td>
</tr>
<tr>
<td>Strip Concrete Vault – Piping/Fencing/Electric</td>
<td>1</td>
</tr>
<tr>
<td>Casing and Pipeline Decommissioning</td>
<td>15</td>
</tr>
<tr>
<td>Offshore Pipeline Recovery and Removal</td>
<td>15</td>
</tr>
<tr>
<td>Vault Removal and Seawall Construction</td>
<td>15</td>
</tr>
<tr>
<td>Demobilization</td>
<td>2</td>
</tr>
<tr>
<td><strong>Offshore Work</strong></td>
<td></td>
</tr>
<tr>
<td>Mobilization</td>
<td>1</td>
</tr>
<tr>
<td>Recover Intake Structures</td>
<td>4</td>
</tr>
<tr>
<td>Demobilization</td>
<td>1</td>
</tr>
<tr>
<td><strong>Post-Project Final Surveys</strong></td>
<td></td>
</tr>
<tr>
<td>Perform Seafloor Debris Survey</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Duration</strong></td>
<td>73</td>
</tr>
</tbody>
</table>
3.0 ENVIRONMENTAL CHECKLIST AND ANALYSIS

This section contains the Initial Study (IS) that was completed for the proposed California Resources Corporation (CRC or Applicant) Grubb Lease (PRC 3913.1) Intake/Outfall Structures Decommissioning Project (Project) in accordance with the requirements of the California Environmental Quality Act (CEQA). The IS identifies site-specific conditions and impacts, evaluates their potential significance, and discusses ways to avoid or lessen impacts that are potentially significant. The information, analysis, and conclusions included in the IS provide the basis for determining the appropriate document needed to comply with CEQA. For the Project, based on the analysis and information contained herein, California State Lands Commission (Commission or CSLC) staff has found that the IS shows that there is substantial evidence that the Project may have a significant effect on the environment but revisions to the Project would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur. As a result, the CSLC has concluded that a Mitigated Negative Declaration (MND) is the appropriate CEQA document for the Project.

The evaluation of environmental impacts provided in this IS are based in part on the impact questions contained in Appendix G of the State CEQA Guidelines; these questions, which are included in an impact assessment matrix for each environmental category (Aesthetics, Agriculture/Forest Resources, Air Quality, Biological Resources, etc.), are "intended to encourage thoughtful assessment of impacts.” Each question is followed by a check-marked box with column headings that are defined below.

- **Potentially Significant Impact.** This column is checked if there is substantial evidence that a Project-related environmental effect may be significant. If there are one or more “Potentially Significant Impacts,” a Project Environmental Impact Report (EIR) would be prepared.

- **Less than Significant with Mitigation.** This column is checked when the Project may result in a significant environmental impact, but the incorporation of identified Project revisions or mitigation measures would reduce the identified effect(s) to a less than significant level.

- **Less than Significant Impact.** This column is checked when the Project would not result in any significant effects. The Project's impact is less than significant even without the incorporation of Project-specific mitigation measures.

- **No Impact.** This column is checked when the Project would not result in any impact in the category or the category does not apply.
Where appropriate, Project impacts are evaluated per the three segments identified in Table 2-1 for the Project: 1) Offshore Intake and Outfall Pipelines, 2) Shoreline Vault, and 3) Onshore Pipelines. Project segments may be discussed individually or combined based on the resource discussion. Additionally, the Project alternative for offshore recovery of the pipelines is discussed (as applicable) within the Offshore Intake and Outfall Pipelines segment analysis.

The environmental factors checked below would be potentially affected by this Project. A checked box indicates that at least one impact would be a “Potentially Significant Impact” except that the Applicant has agreed to Project revisions, including the implementation of mitigation measures, that reduce the impact to “Less than Significant with Mitigation.”

Table 3-1. Environmental Issues and Potentially Significant Impacts

| ☒ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Cultural Resources – Tribal |
| ☐ Energy | ☒ Geology, Soils, and Paleontological Resources | ☐ Greenhouse Gas Emissions |
| ☒ Hazards and Hazardous Materials | ☒ Hydrology and Water Quality | ☐ Land Use and Planning |
| ☐ Mineral Resources | ☐ Noise | ☐ Population and Housing |
| ☐ Public Services | ☒ Recreation | ☒ Transportation |
| ☒ Utilities and Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

Detailed descriptions and analyses of impacts from Project activities and the basis for their significance determinations are provided for each environmental factor on the following pages, beginning with Section 3.1, Aesthetics. Relevant laws, regulations, and policies potentially applicable to the Project are listed in the Regulatory Setting for each environmental factor analyzed in this IS as well as within Appendix A - Abridged List of Major Federal and State Laws, Regulations, and Policies Potentially Applicable to the Project.
AGENCY DETERMINATION

Based on the environmental impact analysis provided by this Initial Study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Signature

Alexandra Borack, Senior Environmental Scientist

Division of Environmental Planning and Management

California State Lands Commission

12/18/19
1 3.1 AESTHETICS

<table>
<thead>
<tr>
<th>AESTHETICS – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

2 3.1.1 Environmental Setting

The proposed Project consists of work in the ocean (marine) and on land (terrestrial).

3.1.1.1 Marine Areas

The Project site is located within a small embayment created south of Pitas Point and is part of the larger Santa Barbara Channel and Pacific Ocean. This open water area has extensive views of the Santa Barbara Channel and more distant Channel Islands as well as adjacent beach front properties. Offshore vessels are typically visible from the site as well as distant oil and gas production platforms.

3.1.1.2 Terrestrial Areas

The Project site is located on the coast of Ventura County along the shoulder of Pacific Coast Highway (PCH) and is visible from the Ventura Freeway – U.S. Highway 101 (U.S. 101), Union Pacific Railroad (UPRR), the Solimar Beach housing community, and recreational users from Solimar/Emma Wood State Beaches. A portion of U.S. 101 as well as State Route 1 (PCH) are considered eligible, but are not officially designated, State scenic highways (Ventura County Planning Division 2011). Views from the Project site include the Pacific Ocean to the south, PCH and U.S. 101 leading to the Santa Ynez foothills and Grubb Lease to the north, Solimar Beach and residential community to the east, and Pitas Point to the west. Figures 3.1-1 through 3.1-4 provide photo documentation of the visual character of the Project site.
Figure 3.1-1. View of Project Site (Fenced Vault Area) Looking West Along PCH

Figure 3.1-2. View of Project Site at Low Tide from Solimar Beach Looking North
Figure 3.1-3. View along PCH from the Project Site Looking East

Figure 3.1-4. View of Vault Entrance and Staging Area Looking Southwest
3.1.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to aesthetics that are relevant to the Project. State laws and regulations pertaining to aesthetics and relevant to the Project are identified in Appendix A. In addition to State regulations, the onshore portion of the Project is also located within the local jurisdiction of the County of Ventura (Coastal Area Plan 2017). Local goals, policies, or regulations applicable to this area with respect to aesthetics are listed below.

- Visual Resource Goal 1: Maintain and enhance the County’s scenic and visual resources for the current and future enjoyment of its residents and visitors.

- Ventura County General Plan (Goals, Policies, and Programs) Goal 1.7.1.1: Preserve and protect the significant open views and visual resources of the County.

- Ventura County General Plan (Goals, Policies, and Programs) Goal 1.7.1.2: Protect the visual resources within the viewshed of lakes and State and County designated scenic highways, and other scenic areas as may be identified by an area plan.

Any project that is inconsistent with any of the above policies of the Ventura County General Plan Goals, Policies and Programs or policies of the Coastal Area Plan (CAP) (noted above), would result in a potentially significant environmental impact.

3.1.3 Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

(a to c) Less than Significant Impact.

All Project Segments

Decommissioning activities would be conducted predominantly during daytime hours for approximately 73 days. The timing of these activities has been proposed outside of peak recreational use and would occur during the first quarter of 2020. During this time, decommissioning equipment and a small support vessel would be introduced to the
existing viewshed but would not substantially impact any scenic vista or affect public views due to the small number of craft and equipment as well as the temporary and localized activities. The Project would also include staging and access areas on PCH but the Project area does not include any designated scenic highway. Following completion of decommissioning activities this area of coastline would be returned to pre-Project conditions, with the onshore vault removal and diminished riprap footprint resulting in a benefit to the area’s aesthetics. Therefore, the impact would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant with Mitigation.

All Project Segments

Project work activities would be conducted predominantly during daytime hours, and no significant sources of light or glare would be used during that time that would have the potential to affect views in the area. Some nighttime operations may be required to take advantage of tide and weather conditions, however, including offshore lighting associated with safe operations of the one dive support vessel as well as the potential for two portable light towers to facilitate safe working conditions onshore until daybreak or until work activities are completed in the early evening. Therefore, nighttime work illumination could significantly impact the Solimar Beach and Pacific Ocean views for the community located 0.15 mile east. MM AES-1 would direct all lighting downwards and onto the work area. With the implementation of this measure, the impact would be less than significant.

MM AES-1 Nighttime Illumination Shielding. Project lighting shall be as low an intensity as allowed by safety requirements and located, designed, and equipped to provide shielding and minimize glare from light sources and diffusers, and to minimize halo and spillover effects.

3.1.4 Mitigation Summary

Implementation of the following mitigation measure would reduce the potential for Project-related impacts to aesthetic resources to less than significant.

- MM AES-1: Nighttime Illumination Shielding
3.2 AGRICULTURE AND FOREST RESOURCES

<table>
<thead>
<tr>
<th>AGRICULTURE AND FOREST RESOURCES(^3) - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

3.2.1 Environmental Setting

According to the California Department of Conservation Farmland Mapping and Monitoring Program, the Project area is categorized as Other Land (California Department of Conservation 2016), and not considered agricultural. The Project site is not located within an area zoned for agricultural use or under a Williamson Act contract. According to Figure 4.2-6 of the Ventura County General Plan (Goals, Policies, and Programs 2017), there are no forest resources, agricultural preserves, or prime soils within the vicinity of the Project site.

\(^3\) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).
3.2.2 Regulatory Setting

There are no federal or state laws and regulations pertaining to agriculture and forest resources relevant to the Project. The onshore portion of the Project is located within the local jurisdiction of the County of Ventura (CAP 2017) that provides policies on agricultural lands; however, due to no agricultural land in the area, they do not apply.

3.2.3 Impact Analysis

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

(a to e) No Impact.

All Project Segments

Because there are no agricultural and forested lands in the Project area, there would be no impact to agricultural or forest resources.

3.2.4 Mitigation Summary

The Project would have no impact to agriculture and forestry resources; therefore, no mitigation is required.
3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

<table>
<thead>
<tr>
<th>Determination</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

3.3.1 Environmental Setting

The federal government has established ambient air quality standards to protect public health (primary standards) and welfare (secondary standards). The state of California has established separate, more stringent standards. Federal and state standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (e.g. dust) and lead. In addition, California has standards for ethylene, hydrogen sulfide, sulfates and visibility-reducing particles.

Ventura County (County) occasionally exceeds the federal 8-hour ozone standard and state 1-hour ozone standard. Under both federal and state Clean Air Acts, the County is an ozone nonattainment area. The County also has elevated ambient levels of very fine dust particles called PM₁₀ (particulate matter 10 microns or less in diameter). While the County is an attainment area for the federal PM₁₀ standard, it is in nonattainment for the more stringent state PM₁₀ standard.

3.3.1.1 Local Climate and Meteorology

The Project is located within the South Central Coast Air Basin. The climate, meteorology, air quality, and air quality trends of the area have been described in detail in several planning and environmental documents and are best summarized in the Ventura County Air Pollution Control District (VCAPCD) 2016 Air Quality Management Plan (AQMP) (VCAPCD 2017). The County can be described as having a Mediterranean climate, characterized by warm, dry summers and cooler mildly damp winters. The unique combination of prevailing wind conditions generated by a persistent offshore high-
pressure system and the topography of coastal mountains results in airflow variations that are conducive to the formation and retention of air pollutants.

3.3.1.2 Criteria Pollutants

Criteria air pollutants are those contaminants for which ambient air quality standards have been established for the protection of public health and welfare. Criteria pollutants include ozone (O₃), carbon monoxide (CO), oxides of nitrogen (NOₓ), sulfur dioxide (SO₂), PM₁₀, and particulate matter with a diameter of 2.5 microns or less (PM₂.₅).

Ozone. O₃ is formed in the atmosphere through complex photochemical reactions involving NOₓ, reactive organic gases (ROG) (also known as reactive organic compounds), and sunlight that occur over several hours. Since ozone is not emitted directly into the atmosphere but is formed as a result of photochemical reactions, it is classified as a secondary or regional pollutant. These ozone-forming reactions take time, and therefore peak ozone levels are often found downwind of major source areas. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from ozone exposure.

Carbon Monoxide. CO is primarily formed through the incomplete combustion of organic fuels. Higher CO values are generally measured during winter when dispersion is limited by morning surface inversions. Seasonal and diurnal variations in meteorological conditions lead to lower values in summer and in the afternoon. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body’s organs and tissues, which can cause health effects to those with cardiovascular disease and can affect mental alertness and vision.

Nitric Oxide (NO). NO is a colorless gas formed during combustion processes which rapidly oxidizes to form nitrogen dioxide (NO₂), a brownish gas. The highest nitrogen dioxide values are generally measured in urbanized areas with heavy traffic. Exposure to NO₂ may increase the potential for respiratory infections in children and cause difficulty in breathing even among healthy persons and especially among asthmatics.

Sulfur Dioxide. SO₂ is a colorless, reactive gas that is produced from burning sulfur-containing fuels, such as coal and oil, as well as by other industrial processes. Generally, the highest concentrations of SO₂ are found near large industrial sources. SO₂ is a respiratory irritant that can cause narrowing of the airways, leading to wheezing and shortness of breath. Long-term exposure to SO₂ can cause respiratory illness and aggravate existing cardiovascular disease.
**Particulate Matter.** Ambient air quality standards have been set for PM$_{10}$ and PM$_{2.5}$. Both consist of different types of particles suspended in the air, such as metal, soot, smoke, dust and fine mineral particles. The particles’ toxicity and chemical activity can vary, depending on the source. The primary source of PM$_{10}$ emissions appears to be from the soil via road use, construction, agriculture, and natural windblown dust; other sources include sea salt, combustion processes (such as those in gasoline or diesel vehicles), and wood burning. Primary sources of PM$_{2.5}$ emissions come from construction sites, wood stoves, fireplaces and diesel truck exhaust. Particulate matter is a health concern because when inhaled it can cause permanent lung damage. While both sizes of particulates can be dangerous when inhaled, PM$_{2.5}$ tends to be more damaging because it remains in the lungs.

### 3.3.2 Regulatory Setting

Federal and state laws and regulations pertaining to air quality and relevant to the Project are identified in Appendix A. The U.S. Environmental Protection Agency (USEPA) has jurisdiction under the Federal Clean Air Act. The California Air Resources Board (CARB) has jurisdiction under the California Clean Air Act and California Health and Safety Code. The USEPA and CARB classify an area as attainment, unclassified, or non-attainment, depending on whether the monitored ambient air quality data show compliance, insufficient data to determine compliance, or non-compliance with federal or state ambient air quality standards, respectively.

#### 3.3.2.1 Air Quality Standards

Air quality standards are specific pollutant concentration thresholds that are used to protect public health and the public welfare. The USEPA has developed two sets of standards; one to provide an adequate margin of safety to protect human health, and the second to protect the public welfare from any known or anticipated adverse effects. At this time, SO$_2$ is the only pollutant for which the two standards differ. The CARB has developed air quality standards for California, which are generally lower in concentration (i.e., more stringent) than federal standards. California standards exist for O$_3$, CO, suspended PM$_{10}$, visibility, sulfates, lead, hydrogen sulfide, and vinyl chloride. Table 3.3-1 lists applicable ambient air quality standards.
Table 3.3-1. Ambient Air Quality Standards (State and Federal)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>California Standard</th>
<th>Federal Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone ($O_3$)</td>
<td>1-Hour</td>
<td>0.09 ppm</td>
<td>--</td>
</tr>
<tr>
<td>Ozone ($O_3$)</td>
<td>8-Hour</td>
<td>0.070 ppm</td>
<td>0.070 ppm</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>1-Hour</td>
<td>20 ppm</td>
<td>35 ppm</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>8-Hour</td>
<td>9.0 ppm</td>
<td>9 ppm</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO$_2$)</td>
<td>Annual Arithmetic Mean</td>
<td>0.030 ppm</td>
<td>0.053 ppm</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO$_2$)</td>
<td>1-Hour</td>
<td>0.18 ppm</td>
<td>100 ppb</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>Annual Arithmetic Mean</td>
<td>--</td>
<td>0.030 ppm</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>24-Hour</td>
<td>0.04 ppm</td>
<td>0.14 ppm</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>3-Hour</td>
<td>--</td>
<td>0.5 ppm (secondary)</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>1-Hour</td>
<td>0.25 ppm</td>
<td>75 ppb</td>
</tr>
<tr>
<td>Respirable Particulate</td>
<td>Annual Geometric Mean</td>
<td>20 μg/m$^3$</td>
<td>--</td>
</tr>
<tr>
<td>Matter PM$_{10}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respirable Particulate</td>
<td>24-Hour</td>
<td>50 μg/m$^3$</td>
<td>150 μg/m$^3$</td>
</tr>
<tr>
<td>Matter PM$_{10}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Particulate Matter</td>
<td>Annual Geometric Mean</td>
<td>12 μg/m$^3$</td>
<td>12.0 μg/m$^3$</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Particulate Matter</td>
<td>24-Hour</td>
<td>--</td>
<td>35 μg/m$^3$</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide (H$_2$S)</td>
<td>1-Hour</td>
<td>0.03 ppm</td>
<td>--</td>
</tr>
<tr>
<td>Vinyl Chloride</td>
<td>24 Hour</td>
<td>0.01 ppm</td>
<td>--</td>
</tr>
<tr>
<td>Sulfates</td>
<td>24 Hour</td>
<td>25 μg/m$^3$</td>
<td>--</td>
</tr>
<tr>
<td>Lead</td>
<td>30 Day Average</td>
<td>1.5 μg/m$^3$</td>
<td>--</td>
</tr>
<tr>
<td>Lead</td>
<td>Calendar Quarter</td>
<td>--</td>
<td>1.5 μg/m$^3$</td>
</tr>
<tr>
<td>Lead</td>
<td>Rolling 3-Month Average</td>
<td>--</td>
<td>0.15 μg/m$^3$</td>
</tr>
<tr>
<td>Visibility Reducing Particles</td>
<td>8-Hour</td>
<td>Extinction coefficient of 0.23 per kilometer - visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.</td>
<td>--</td>
</tr>
</tbody>
</table>

Source: CARB 2019

**Air Toxic Health Risks.** Diesel fuel combustion in internal combustion engines produces exhaust containing a number of compounds that have been identified as toxic air contaminants (TACs) by CARB. In 1998, CARB identified diesel particulate matter (DPM) from diesel exhaust as a TAC. In 2000, CARB developed the Diesel Risk Reduction Plan to reduce PM and DPM emissions from diesel-fueled engines and vehicles to establish new emission standards, certification programs, and engine retrofit programs to control exhaust emissions from diesel engines and vehicles. CARB has the following diesel enforcement programs and regulations to reduce the smog-forming pollutant and TAC emissions and that may be applicable to the Project:
• **Commercial Vehicle Idling.** Diesel-fueled motor vehicles with a gross vehicle weight rating greater than 10,000 pounds are prohibited from idling the vehicle's primary engine for more than 5 minutes at any location.

• **Heavy Duty Vehicle Inspection Program (HDVIP).** The HDVIP program requires heavy-duty trucks and buses to be inspected for excessive smoke, tampering, and engine certification label compliance.

• **Software Upgrade for Diesel Trucks.** Requires owners of eligible 1993–1998 model year electronically controlled heavy-duty diesel engines to install low NOx software at the time of an engine rebuild.

• **Truck and Bus Regulation.** This regulation requires that all trucks and buses be equipped with 2010 or newer model year engines to reduce PM, DPM and NOx emissions. Starting in 2020, the California Department of Motor Vehicles will only register vehicles that comply with this regulation.

• **Strategic Plan for Diesel Enforcement.** Assembly Bill (AB) 233 also known as the Healthy Heart and Lung Act (HHLA) enacted in 2007, requires CARB to develop a strategic plan to enforce diesel emission control regulations. HHLA specifically requires CARB, every 3 years, to review existing diesel emission control regulations enforcement and anticipated enforcement needed to implement the Diesel Risk Reduction Plan. Based on that review, CARB is required to develop a Strategic Plan for consistent, comprehensive and fair enforcement of these regulations. In 2008 CARB issued a notice of postponement for the first Strategic Plan’s public review (CARB 2008). No future date for public review has been set and further review by CARB has been postponed (CARB 2019).

### 3.3.2.2 Regional/Local Regulatory

The VCAPCD shares responsibility with CARB for ensuring that all ambient air quality standards are attained within the County. The VCAPCD has jurisdiction under the California Health and Safety Code to develop emission standards (rules) for the County, issue air pollution permits, and require emission controls for stationary sources in the County. The VCAPCD is also responsible for the attainment of air quality standards in the County. The Grubb Lease Outfall/Intake facilities are located within the jurisdiction of the VCAPCD. Ventura County is currently designated as nonattainment for the federal and state 8-hour ozone standard, state 1-hour ozone standard, and the state 24-hour and annual arithmetic mean PM$_{10}$ standard (VCAPCD 2019). The County is in attainment for all other federal and state standards.

### 3.3.2.3 VCAPCD Rules and Regulations

The following VCAPCD rules and regulations are applicable to the Project:
• Rule 50 - Opacity: This rule sets the opacity standards for the discharge of visible air contaminants.

• Rule 51 – Nuisance. Rule 51 indicates that no air contaminants shall be discharged that would cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which would cause injury or damage to business or property.

• Rule 55 – Fugitive Dust: This rule sets the requirements of fugitive dust generators. The provisions of this rule shall apply to any operation that would result in disturbed surface area, or a human-made condition capable of generating fugitive dust, including bulk material handling, earth-moving, construction, demolition, storage piles, unpaved roads, track-out, or off-field agricultural operations.

• Rule 62.7 – Asbestos Demolition and Renovation: This rule sets the requirements for any demolition and renovations activities.

• Rule 64 – Sulfur Content of Fuels: This rule sets the sulfur content requirements for gaseous and liquid fuels used in any combustion source. Ocean vessels are exempted.

The VCAPCD’s 2003 Air Quality Assessment Guidelines include adopted significance thresholds for NO\textsubscript{X} and ROGs for long-term project (operational) emissions (Table 3.3-2) (VCAPCD 2003). The Project would be a short-term decommissioning project and would not have an operational phase; therefore, the thresholds of significance do not apply. However, a project that is inconsistent with the AQMP is considered to have a significant cumulative adverse air quality impact (VCAPCD 2003).

Table 3.3-2. VCAPCD Thresholds of Significance (Operational)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Threshold (pounds per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>25</td>
</tr>
<tr>
<td>ROGs</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: VCAPCD 2003

3.3.2.4 Commercial Harbor Craft Regulation

In November 15, 2007, CARB approved a Commercial Harbor Craft Regulation to reduce emissions from diesel engines on commercial harbor craft vessels. The regulation requires the following:

• All commercial harbor craft owners and operators are required to fuel diesel engines with California ultralow sulfur diesel and install a non-resettable hour meter on each engine.
• All new commercial harbor craft engines are required to meet the USEPA marine or off-road emissions standard in effect at the time the vessel is acquired.

• All new replacement engines for all in-use harbor craft are required to meet the Tier 2 or Tier 3 marine or off-road standards in effect at the time the engine is acquired.

• Existing Tier 1 or earlier propulsion and auxiliary engines on in-use harbor craft are required to meet USEPA Tier 2 or Tier 3 standards in effect at the time of regulation compliance.

3.3.3 Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact.

All Project Segments

The Project is a temporary decommissioning project that does not have an operations phase. The VCAPCD only requires emissions for long-term projects to be below the 25 pounds/day threshold for any one pollutant (NOₓ and ROG). A review of the AQMP indicates that it focuses primarily on projects that would increase NOₓ and ROG emissions within the County on a long-term basis. While the Project would cause daily NOₓ emissions exceeding 25 pounds per day (refer to Table 3.3-3), the Project is a temporary decommissioning project that would not cause a long-term increase in NOₓ emissions. Therefore, the impact would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact.

All Project Segments

Air pollutant emissions would be generated by equipment used for onshore casing and pipeline removal as well as vault demolition. These emissions include NOₓ and ROG because both are considered ozone precursors, potentially resulting in atmospheric ozone formation, and the County is in non-attainment for both the 8-hour and 1-hour ozone standards. Emissions would also include PM₁₀ for which the County is in non-attainment. The onshore activities would include diesel powered bulldozers, cranes, excavators, cement pumps, and a winch. All onshore equipment used during the Project would have Tier 4 compliant engines, which are more efficient than the Tier 2 or 3 engines.
required by USEPA and CARB. Offshore equipment would have Tier 2 compliant engines, at a minimum. Worker commute trips, supply/equipment delivery trips, and disposal trips would also contribute to air quality impacts. Project decommissioning activities would occur in four phases over approximately 73 days (Table 3-3).

Project criteria pollutant emissions for the Project were estimated using the most recent emission factors and load factors for construction equipment, marine engines and on-road vehicles obtained from the California Emissions Estimator Model® (CalEEMod) User’s Guide, Emission Factors (EMFAC) model, the ICF International Current Methodologies in Preparing Mobile Source Port-Related Emissions Inventories Report, and The Port of Long Beach 2013 Emissions Inventory. Construction equipment and marine equipment emissions were estimated using the engine horsepower, engine emission factor, engine load factor and hours of engine use per day. On-road vehicle emissions were estimated using the vehicle type (i.e. passenger gasoline-powered vehicle, heavy-duty diesel-powered vehicle), engine emission factors and length of daily round trips. Fugitive dust emissions from proposed soil disturbance activities were also calculated using emission factors obtained from the CalEEMod User’s Guide and the South Coast Air Quality Management District.

Table 3.3-3. Equipment and Vessel Use by Project Phase

<table>
<thead>
<tr>
<th>PHASE</th>
<th>EQUIPMENT/ VESSEL</th>
<th>NUMBER</th>
<th>HOURS PER DAY</th>
<th>DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Intake Structure Removal</td>
<td>Dive Support Vessel</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Dive Air System</td>
<td>1</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Onshore Casing and Pipeline Decommissioning</td>
<td>Crane</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Cement Pump</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Excavator</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Onshore Pipeline Recovery and Removal</td>
<td>Bulldozer</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Excavator</td>
<td>3</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Winch</td>
<td>1</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Onshore Vault Removal and Seawall Construction</td>
<td>Crane</td>
<td>3</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Excavator</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Project Alternative for Offshore Recovery of the Pipelines*</td>
<td>Dive Support Vessel</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Dive Air System</td>
<td>1</td>
<td>24</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes:
* This alternative, if implemented, would take place within the Onshore Pipeline Recovery and Removal phase.

The estimated calculated emissions for each phase are discussed below. Emissions related to the Project alternative for offshore recovery of the pipelines have also been outlined. Project criteria pollutant estimates are included in Table 3.3-4 (Estimated Criteria...
Pollutant Project Emissions), and Appendix D provides a copy of the Air Quality Spreadsheets supporting this analysis.

Table 3.3-4. Estimated Criteria Pollutant Project Emissions

<table>
<thead>
<tr>
<th>EMISSIONS SUMMARY</th>
<th>NOx</th>
<th>ROG</th>
<th>PM10</th>
<th>PM2.5</th>
<th>CO</th>
<th>SO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Intake Structure Removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pounds/Day</td>
<td>37.54</td>
<td>1.49</td>
<td>1.83</td>
<td>1.81</td>
<td>27.70</td>
<td>7.17</td>
</tr>
<tr>
<td>Onshore Casing and Pipeline Decommissioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pounds/Day</td>
<td>9.21</td>
<td>0.52</td>
<td>0.30</td>
<td>0.16</td>
<td>14.79</td>
<td>0.05</td>
</tr>
<tr>
<td>Onshore Pipeline Recovery and Removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pounds/Day</td>
<td>8.00</td>
<td>0.67</td>
<td>0.25</td>
<td>0.14</td>
<td>21.19</td>
<td>0.06</td>
</tr>
<tr>
<td>Onshore Vault Removal and Seawall Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pounds/Day</td>
<td>9.63</td>
<td>0.60</td>
<td>2.20</td>
<td>0.18</td>
<td>15.87</td>
<td>0.05</td>
</tr>
<tr>
<td>Project Alternative for Offshore Recovery of the Pipelines</td>
<td>38.96</td>
<td>1.53</td>
<td>1.87</td>
<td>1.83</td>
<td>27.83</td>
<td>7.18</td>
</tr>
</tbody>
</table>

Notes: PM10 and PM2.5 concentrations include fugitive dust from excavation, concrete demolition and earth moving equipment.

* This alternative, if implemented, would take place within the Onshore Pipeline Recovery and Removal Phase.

Project air quality impacts would primarily result from the dive support vessel (DSV) emissions as well as the onboard dive air system used in the Offshore Intake Structure Removal phase and the Project alternative for offshore recovery of the pipelines, if implemented. The peak daily NOx emissions of 46.96 pounds per day would occur during the 4 days of the Onshore Pipeline Recovery and Removal phase, but only if the Project alternative for offshore recovery of the pipelines is implemented. All vessel engines used during the Project would meet the Commercial Harbor Craft Regulation.

Emissions resulting from Project equipment and vessels would temporarily increase local pollutant concentrations. The primary criteria pollutants regulated by the VCAPCD are NOx and ROG, as discussed in the Regulatory Setting, above. As discussed above, the VCAPCD is the local agency responsible for attaining the air quality standards established by CARB and USEPA and has not adopted any thresholds of significance for construction emissions. In addition, the Project’s offshore and onshore construction emissions would be localized and temporary, and peak NOx emissions would be limited to 4 days during the Offshore Intake Structure Removal phase and 4 days during the Onshore Pipeline Recovery and Removal phase if the Project alternative for offshore recovery of the pipelines is implemented. The incremental pollutant increase that would contribute to non-attainment would not be cumulatively considerable, and additionally CRC would implement best management practices (Appendix D) in order to further minimize NOx, ROG, and dust generation from the Project site. The Project would not result in a cumulatively considerable net increase of any criteria pollutant, and therefore the impact would be less than significant.
c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

All Project Segments

Sensitive receptors in the general Project vicinity include two adjacent rural residential neighborhoods and recreationalists enjoying Solimar/Emma Wood State Beaches, with the closest residence approximately 800 feet to the southwest of the Project site. The Project onshore and offshore activity emissions would be temporary and at a distance from the nearby residences. In addition, the implementation of best management practices outlined in Appendix D would further reduce onshore impacts to these sensitive receptors. Therefore, the impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact.

All Project Segments

Project equipment would generate odors from fuel combustion. However, whether Project odors are considered an adverse impact depends on several variables. These include:

- Nature of the odor source
- Frequency of odor generation (e.g., daily, seasonal, activity-specific)
- Intensity of the odor (e.g., concentration)
- Distance from the odor source to sensitive receptors
- Wind direction (e.g., upwind or downwind)
- Sensitivity of the receptor

The onshore Project site is located along PCH adjacent to Solimar Beach and near residential communities. Work activities would require the temporary use of some odor-causing construction equipment generating minor odors that would dissipate quickly in the open air. Additionally, the onshore work area would be delineated and not directly accessible to the public. Offshore Project equipment would be located on Project vessels away from sensitive receptors and public areas. Therefore, the impact would be less than significant.
3.3.4 Mitigation Summary

The Project would have no significant impacts to air quality; therefore, no mitigation is required.
### 3.4 BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>BIOLOGICAL RESOURCES – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or that is a species of interest to the State Lands Commission or the California Coastal Commission; or cause a marine wildlife population to drop below self-sustaining levels?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, State Lands Commission, or California Coastal Commission?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>☐</td>
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<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including essential fish habitat)?</td>
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<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?</td>
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#### 3.4.1 Environmental Setting

This section describes the ecological setting and biological resources in the offshore and onshore Project areas. The Project area is located at the CRC facilities north of U.S. 101, extending through the shoreline vault alongside PCH and Solimar Beach to terminate approximately 700 feet offshore in a water depth of 12 to 14 feet (Figure 2-7).
Decommissioning activities would be restricted to the areas of original installation for the offshore intake and outfall pipelines, shoreline vault, and onshore pipelines.

Biological field surveys were conducted in both the offshore and onshore Project areas. The offshore biological study area (BSA) included the area within a 6-foot buffer along the length of the Intake and Outfall Pipelines from water depths of approximately 10 feet to 16 feet at the pipeline’s terminus. The biological dive survey was conducted on November 1, 2018, by Padre Associates, Inc. (Padre) along the pipeline right-of-way to characterize the habitat on the pipelines and along the six-foot corridor (Appendix E2).

In addition to marine biological surveys, data on existing environmental conditions in the Project area were supplemented with geophysical surveys. Geophysical surveys were conducted in the marine study area (MSA) by eTrac to enhance the seafloor imagery and support the delineation of the surrounding seafloor types and associated habitat (eTrac 2019) (Figure 3.4-1). Project planning and engineering for anchoring locations was based on the presence of softbottom conditions and avoidance of sensitive hardbottom areas within the MSA.

The onshore BSA was comprised of a 50-foot buffer north and south of the concrete vault structure, the developed areas within the potholing disturbance area, the northern valve tie-in box disturbance area and the immediate adjacent habitat (Figure 3.4-2). The field surveys took place on March 28, 2019, by Padre and identified existing plant species composition occurring within the onshore BSA. Additionally, the survey included an inventory of existing wildlife resources (vertebrate and invertebrate species) by walking through the Project disturbance, staging, and access areas along developed roads and right-of-ways. The Padre biologist recorded species observed through visual observation using 8x40 binoculars, auditory cues (calls and songs), and indirect signs (tracks, scat, skeletal remains, burrows, nests, etc.).

3.4.1.1 Marine Habitats and Communities

Marine habitat extends from the top of the riprap out into the ocean.

Offshore Intake and Outfall Pipelines Segment

The marine biological resource area for the Offshore Intake and Outfall Pipelines Segment and vessel transit area includes intertidal, subtidal, and open water pelagic habitats as well as a dynamic surf zone environment. Figure 3.4-1 illustrates the bathymetry, seafloor habitats, and kelp beds within the Project region.

Open Water Pelagic. The open water habitat supports migration and foraging habitat for marine mammals, reptiles, and avifauna. In the Project region, open water pelagic habitat occurs at depths approximately greater than 120 feet (where kelp can no longer grow).
At least 29 species of marine mammals inhabit or visit southern California (California/Mexico Border to Point Conception) waters. These include five species of pinnipeds (seals and sea lions) and 22 species of cetaceans (whales and dolphins) (Allen et al. 2011). The species most often seen in the Project area are common dolphins and coastal bottlenose dolphin (Allen et al. 2011). Common dolphins, the most abundant cetaceans off California, move through regional waters in groups of up to several thousand animals. Coastal bottlenose dolphins are most commonly encountered along the shoreline in the surf zone.

**Subtidal.** The seafloor substrate throughout the offshore BSA includes mixed substrate types consisting of medium-sized cobble (4- to 8-inch-diameter) and small boulders (10- to 15-inch-diameter), as well as low-relief sandstone bedrock and expanses of sand in between bedrock (Appendix E3). Sand waves of less than 1 inch were observed within sandy-bottom areas. In general, substrate types are similar between all three pipelines.

A bed of giant kelp (*Macrocystis pyrifera*) occurs offshore of the Project site, but its density becomes sparse southwest of pipelines’ termini and was not established within the survey corridors during the November 2018 dive survey. Kelp is not present within the surf zone where wave action disturbs the seafloor. Kelp bed density fluctuates with the seasons, increasing during the summer months and decreasing after winter storms (Dayton et al. 1984).

The wastewater outfall pipeline hosts algae (*Corallina* sp., *Calliarthron* sp., *Lithothamnium* sp., *Mastocarpus* [*Gigartina*] *papillate*, *Cryptosiphonia woodii* and *Mazzaella* [*Rhodoglossum*] *affinis*), epibiotic bryozoans (*Bugula neritina*), and surfgrass (*Phyllospadix* sp.) (Figure 3.4-3). The northern and southern intake pipeline corridors host similar algae species as well as occasional feather boa (*Egregia menziesii*) and low-growing, red algae (*Cryptosiphonia woodii* and *Mazzaella affinis*).

Epibiotia and macrofauna on all Project pipelines consist of a dense growth of bryozoans (*Hippodiplosia insculpta* and *Membranipora* sp.), stalked tunicates (*Styela montereyensis*), angular unicorn snails (*Acanthinucella spirata*), orange and yellow sponges (*Halichondria* sp.) and Spanish shawl nudibranchs (*Flabellinopsis iodinea*). An occasional solitary anemone (*Anthopleura* sp.) was observed underneath and between the pipeline and bedrock. In addition, California spiny lobster (*Panulirus interruptus*) were observed within gaps underneath the pipelines and inside of the end of the outfall pipeline where it is open to the seawater. Evidence of gaper clams (*Tresus* sp.) were observed within the sand and cobble substrate and a few perch (*Embiotocidae*) and sculpin (*Cottidae*) species were present in the surveyed area. During dive surveys, an approximate 5-square foot patch of surf grass (*Phyllospadix* sp.) was observed growing on the top of the wastewater outfall pipeline at a water depth of 12 feet. Neither surfgrass nor eelgrass (*Zostera marina*) were observed anywhere else within the survey corridor.
Figure 3.4-1. Hard Bottom and Kelp Resources Within the Marine Study Area
Figure 3.4-2. Onshore Biological Survey Area
No marine invasive species were identified (e.g., Caulerpa taxifolia or Sargassum horneri). A single giant kelp holdfast was observed approximately 7 feet south of the southernmost pipeline in 13 feet of water. The kelp was sparse and only two individual thalli were observed. No abalone species were observed during dive surveys. Habitat along the northern and southern intake pipelines is similar to the wastewater outfall pipeline.

*Intertidal and Coastal Strand.* The shoreline along the vault structure includes rip-rap that supports sparse barnacle (*Balanus* spp.) growth and may provide temporary refuge for shore crabs (*Hemigrapsus* sp.); however, the rip-rap is frequently exposed to high energy surf and fluctuating sand levels and does not support high-value intertidal habitat. A narrow, gradually sloping sandy beach area is located to the southwest of the pipeline vault within this segment and extends to the surf zone. Solimar Beach extends approximately 4 miles southeast to Emma Wood State Beach, but there is only approximately 150 feet of sandy beach area within this segment, extending from the western rip rap storage area to the eastern rip rap storage area (Figure 3.4-2). Due to regular saltwater inundation from high tides and wave activity, wind, and dynamic soils, the beach habitat does not support vegetation. In addition, the shifting sand seasonally exposes the pipelines on top of bedrock. However, deposits of kelp detritus and driftwood from extreme high tide periods provide cover for marine invertebrates and potential foraging habitat for avifauna including western gull (*Larus occidentalis*), whimbrel (*Numenius phaeopus*), and willet (*Tringa semipalmata*), which were all observed foraging during field surveys. The amount of available habitat from these kelp detritus deposits and driftwood debris fluctuates throughout the year based on ocean tides and wave activity.

![Figure 3.4-3. Outfall Pipeline Subtidal Habitat](image)
3.4.1.2 Marine Sensitive Habitats and Protected Areas

Sensitive habitats for special-status species are provided protection under federal and state regulations. Section 3 of the federal Endangered Species Act (FESA) provides critical habitat area designation and protection for some endangered marine mammals, regulated by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA). The California Endangered Species Act (CESA) also defines sensitive habitats, including pinniped haul-outs and rookeries and Marine Protected Areas (MPAs), and California Department of Fish and Wildlife (CDFW) provides protection under the Marine Life Protection Act.

**Critical Habitats.** The MSA (which includes the Offshore Intake and Outfall Pipelines Segment) is not within a designated critical habitat area. The nearest marine critical habitat extends from Point Arena to Point Arguello, approximately 75 miles northwest of the MSA, designated by the National Marine Fisheries Service (NMFS) to protect endangered leatherback sea turtles (*Dermochelys coriacea*) along the U.S. west coast (NMFS 2012).

**Pinniped Haul-Outs.** The California south coast provides a diversity of haul-out locations such as rocky shorelines, sandy beaches, estuaries and mudflats (Figure 3.4-4). California sea lion (*Zalophus californianus*) and harbor seals (*Phoca vitulina*) have several haul-outs along beaches and on shallow, rocky outcroppings. The nearest pinniped haul-out or rookery is located on Carpinteria Crescent Rock approximately 8.9 miles northwest of the MSA.

**Marine Protected Areas.** The California Marine Life Protection Act was established to protect the natural diversity and abundance of marine life and marine ecosystems in California. Three types of MPAs are designated (or recognized) in California: State Marine Reserves (SMRs), State Marine Parks, and State Marine Conservation Areas. Activities associated with the Project would be restricted to a series of narrow corridors around the existing CRC pipelines and several anchoring points further offshore. The closest State MPA to the proposed activities is the Anacapa Island SMR, which is located approximately 17.2 miles south of the Project area.
Figure 3.4-4. Pinniped Haul-Outs Near Project Area
Figure 3.4-5. Marine Protected Areas Near Project Area
Essential Fish Habitat. Essential Fish Habitat (EFH) is defined by the Magnuson-Stevens Fishery Conservation and Management Act and NOAA as “…those waters and substrate necessary for fish spawning, breeding, feeding, or growth to maturity.” “Waters,” as used in this definition, are defined to include “aquatic areas and their associated physical, chemical, and biological properties that are used by fish.” These may include “…areas historically used by fish where appropriate; ‘substrate’ to include sediment, hard bottom, structures underlying the waters, and associated biological communities.” “Necessary” means, “the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem.” EFH is thus described as a subset of all habitats occupied by a species. Based on the existing habitat type, Pacific Coastal Pelagics and Pacific groundfish species could occur in the MSA. An EFH Assessment was prepared in support of the Project (Appendix G).

3.4.1.3 Marine Special-Status Species

The southern California coast supports numerous special-status marine mammals, birds, turtles, and fish. Special-status species include those species that are state- or federally-listed as endangered or threatened, species proposed for such listing, candidate species, and state or local species of concern. For the purposes of this analysis, special-status marine species are those species that could be found in the MSA (which includes the Offshore Intake and Outfall Pipelines Segment) or further offshore and that meet any of the following criteria:

- Marine species that are listed or proposed or are candidate species for listing as threatened or endangered by USFWS pursuant to FESA
- Marine species listed as rare, threatened or endangered by CDFW pursuant to CESA
- Marine species managed and regulated under the Magnuson-Stevens Fishery Conservation and Management Act
- Marine species protected under the Marine Mammal Protection Act (MMPA)
- Marine species designated by CDFW as California Species of Concern
- Marine species designated by NOAA as Species of Concern
- Marine species not currently protect by statute or regulation but considered rare, threatened or endangered under CEQA (State CEQA Guidelines, § 15380)

Special-status species were evaluated based on a review of agency publications, NMFS Stock Assessment Reports, and marine mammal field guides for species known to occur along the California coast (NMFS and USFWS 1998, NOAA 2019, Allen et al. 2011). Detailed lists of the special-status marine species, their known ranges, sightings, reported periods of occurrence in the Project region, and overall likelihood of occurrence within the MSA or during vessel transit are found in Appendix E1. Based on the ranges, habitat
requirements of the species and the habitats present within the MSA, a total of five
managed or protected marine species (bocaccio [*Sebastes paucispinis*], common dolphin
[*Delphis* sp.], coastal bottlenose [*Tursiops truncatus*], California sea lion, and Pacific
harbor seal) have the potential to occur in the Project’s offshore area.

**Fish**

*Bocaccio*. Bocaccio are large Pacific rockfish that range from Punta Blanca, Baja
California, to the Gulf of Alaska off Krozoff and Kodiak Islands. They are most common
between Oregon and northern Baja California. The Puget Sound/Georgia Basin distinct
population segment of bocaccio are listed as endangered under FESA. Bocaccio are slow
growing, late to mature, and long-lived. They are known to inhabit waters from the surface
(young/juvenile) to 1,050 feet. While the MSA is comprised mostly of soft substrate and
shallow, subtidal habitats, and therefore primarily supports fish assemblages adapted to
these habitats, hard substrate and kelp beds located farther offshore could attract juvenile
bocaccio, which could transit through the MSA during localized movements. Therefore,
this species has the potential to occur in the Project area.

*Grunion*. Grunion (*Leuresthes tenuis*), a member of the silverside family (Atherinidae),
spawn on sandy beaches from Monterey Bay to Central Baja California. Twice a month,
at new and full moons between March and early September, grunions come ashore
during the two or three nights following the highest tide. Grunion bury their eggs 4 to 5
inches below the surface, with maturation occurring in 10 days. The following high tide
reaches the eggs, induces them to hatch, and carries the larvae offshore where they
mature. Although Grunion are known to be present in the Project region, they are not
likely to use the beach within the Project site for spawning due to the lack of sand during
high tide events where the wave wash extends up to the riprap.

**Marine Mammals and Turtles**

At least 29 species of marine mammals inhabit or visit southern California
(California/Mexico Border to Point Conception) waters. These include five species of
pinnipeds (seals and sea lions) and 22 species of cetaceans (whales and dolphins) (Allen
et al. 2011). In addition, four species of marine turtles have been reported offshore
southern California. However, due to the limited disturbance area for anchoring and
pipeline removal as well as the shallow water depths, the Project dive vessel is not likely
to encounter large cetaceans or sea turtles in the Project area. Smaller marine mammals,
such as dolphin and pinniped species, and potentially migrating gray whales, have a
higher potential of occurring within the Project area.

In the United States, two laws regulate human activities where marine mammals and
turtles might be adversely affected. These include the MMPA of 1972, which prohibits the
intentional taking, import, or export of any marine mammal without a permit, and the FESA
of 1973, which extends similar protection to species listed as threatened or endangered. All marine mammals are protected under the MMPA, and all sea turtles in U.S. waters are listed under the FESA and are overseen by NMFS.

Cetaceans. As many as 22 species of Cetaceans (whales, dolphins, and porpoises), use waters offshore California as year-round habitat and calving grounds, important seasonal foraging grounds, or annual migration pathways. All cetacean species fall under the protection of the MMPA.

Small odontocetes, or toothed whales, are expected to occur within the Project area or during daily vessel transit to and from Ventura Harbor and the Project area. Large cetaceans, such as gray, humpback, and mike whale (Eschrichtius robustus, Megaptera novaeangliae, Balaenoptera acutorostrata, respectively) are known to migrate and forage in coastal waters and may be observed during vessel transit; however, the species most often seen in the Project area are common dolphins and coastal bottlenose dolphin (Allen et al. 2011). Common dolphins, the most abundant cetaceans off California, move through regional waters in groups of up to several thousand animals. Coastal bottlenose dolphins are most commonly encountered along the shoreline in the surf zone.

Pinnipeds. Five species of pinnipeds (seals and sea lions) are known to occur within Southern California. Most pinnipeds common to the Project area breed on the Channel Islands and on offshore rocks and isolated beaches along the mainland coast. California sea lions and Pacific harbor seals commonly occur in nearshore waters offshore Ventura beaches. Sea lions and harbor seals haul out on nearshore rocks and beaches along the Carpinteria coast and on the northern Channel Islands; major mainland haul-out sites near the Project area are located near the Carpinteria Crescent Rock and the Carpinteria harbor seal rookery near Casitas Pier (Figure 3.4-4).

Northern elephant seals breed on the Channel Islands (San Miguel, San Nicolas, Santa Rosa Islands) but are uncommon in Project area waters (NMFS 2015 and Lowry et al. 2017). Elephant seals range widely at sea and spend much of their time underwater (Allen et al. 2011).

Marine Turtles. Although rarely encountered in California during the fall and winter months, marine turtles may occur within waters off the southern California coast and could potentially occur within the offshore Project area. The four listed sea turtles that may occur within the Project area include the endangered Leatherback turtle (Dermochelys coriacea) and Loggerhead turtle (Caretta caretta), and the threatened Green turtle (Chelonia mydas) and Olive Ridley turtle (Lepidochelys olivacea). Sea turtles are highly migratory within the eastern North Pacific Ocean which makes their population sizes and geographic ranges hard to define. There are no known sea turtle nesting beaches on the west coast of the United States. Although sea turtles have been observed along the southern California coast during warm water years, such as El Niño events, they are not
frequently observed in the Project area. Satellite-tagged leatherback turtles have been tracked annually from Hawaii to California waters where they feed on jellyfish from July through August (NMFS 2012). Sea turtle occurrences in offshore California thus usually coincide with the seasonal aggregations of jellyfish or other prey items. It is known that green turtles are more frequently observed near the Mexican coast from October through December, and are primarily observed along the equator, between 15 degrees North and five degrees South from January through March (NMFS and USFWS 1998). Juvenile loggerhead turtles are commonly reported off southern California and Mexico; however, juvenile loggerhead turtles tend to concentrate in areas where there are high densities of pelagic red crab (*Pleuroncodes planipes*) which are more common further south than the Project area (Conant et al. 2009). In the eastern Pacific, olive ridley turtles are highly migratory and appear to spend most of their non-breeding life cycle in the oceanic zone. Olive ridley turtles are rarely seen in coastal California waters; however, a few sightings have been reported near Las Animas Canyon in Santa Barbara County, and Point Piedras Blancas in San Luis Obispo County (Nafis 2000-2019).

3.4.1.4 Terrestrial Habitats and Communities

This section describes the onshore habitats and terrestrial biological resources within the Project area that extend from the top of the riprap landward, terminating at the CRC valve box tie-in area.

Shoreline Vault Segment and Onshore Pipelines Segment

*Ruderal Vegetation.* Ruderal vegetation describes areas that were disturbed by past land-use practices or recent ground disturbance. Ruderal vegetation occurs within and adjacent to the vault area and associated 36-inch pipeline and was the dominant plant community observed in the onshore BSA, consisting of disturbance-adapted non-native species including ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), giant reed (*Arundo donax*), pampas grass (*Cortaderia spp.*), bur clover (*Medicago polymorpha*), wild radish (*Raphanus spp.*), and cheeseweed (*Malva parviflora*). Intermittent native plant species observed within the onshore BSA included big saltbush (*Atriplex lentiformus*), salt grass (*Distichlis spicata*), California sagebrush (*Artemisia californica*), and coastal goldenbush (*Isocoma menziesii*) (Figure 3.4-6 and 3.4-7). California rare plant woolly seablite (*Suaeda taxifolia*) was observed on the southern boundary of the onshore BSA approximately 300 feet south of the vault structure.

Common wildlife may use ruderal habitat within this segment for burrowing, refuge, and foraging. Examples of wildlife surveyed within this ruderal habitat include California ground squirrel (*Otospermophilus beecheyi*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), and song sparrow (*Melospiza melodia*). Ruderal habitat within the Onshore Pipeline...
Segment is delineated by an existing chain link fence that excludes access to U.S. 101 (Figures 3.4-8 and 3.4-9).

**Developed Land.** The north side of the vault structure contains developed land and is regularly used for beach parking. Additional developed, non-vegetated areas adjacent to the vault structure include the Pacific Coast Highway, access roads, paved staging areas, and rip-rap erosion control barriers that support the south edge of the road along the beach.

Habitat within the Onshore Pipelines Segment is also developed and consists of asphalt and concrete roadways and infrastructure. These developed lands have impervious surfaces and thus do not support vegetative cover. Developed areas within this segment include the highway bridge underpass access road, paved staging areas, and Union Pacific Railroad right-of-way (Figure 3.4-8 and 3.4-9).

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**Figure 3.4-6. Ruderal Plant Community and Developed Land within Vault Segment Looking West**
Figure 3.4-7. Rip Rap and Ruderal Habitat Adjacent to Vault Structure Looking East

Figure 3.4-8. Onshore Pipeline Segment Developed Lands Looking North
3.4.1.5 Terrestrial Sensitive Natural Communities and Critical Habitats

Based on a query of the California Natural Diversity Database (CNDDB) and the USFWS Environmental Conservation Online System (ECOS), there are no sensitive or protected natural communities or critical habitats within the onshore Project area (CDFW 2019a, and USFWS 2019). There are also no wetlands or riparian habitats within the onshore Project area. The nearest designated critical habitat is located within the Ventura River, approximately 4.5 miles south of the Project area. The Ventura River is designated habitat for southern steelhead (*Oncorhynchus mykiss*), tidewater goby (*Eucylogobius newberryi*), and southwestern willow flycatcher (*Empidonax traillii extimus*).

Terrestrial Special-Status Species

Special-status species are plants and animals legally protected under FESA, CESA, or other regulations as well as species that the scientific community considers sufficiently rare to qualify for such protection. Special-status species are defined as follows:

- Species that are listed or proposed for listing as threatened or endangered under FESA (50 Code of Federal Regulations [CFR] 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register [FR])
- Species that are candidates for possible future listing as threatened or endangered under FESA (81 FR 87246 87272, December 2, 2016)
• Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (Cal. Code Regs, tit.14, § 670.5)
• Animals listed as California Species of Special Concern on CDFW's Special Animals List (CDFW 2019b)
• Plants listed as rare under the California Native Plant Protection Act (Fish & G. Code 1900 et seq.)
• Plants with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B (CDFW 2019d), and that the scientific community considers threatened or endangered in California
• Plants designated as CRPR 3 and 4 with a locally significant population that meets the criteria under State CEQA Guidelines, section 15380, subdivision (d)

Based on reviews of the CNDDB, an official species list from NMFS, a USFWS Information Planning and Conservation official species list, a California Native Plant Society (CNPS) query, and other available public documents, 67 special-status species have the potential to occur in the onshore BSA (including the Vault Structure Segment and Onshore Pipelines Segment). The determinations for the potential to occur in the Project area are based on the species’ range and habitat requirements, the habitats present within the Project area, and observed vegetation and wildlife present during field visits. In addition, species typically associated with other regional habitat types may use the highly disturbed, ruderal vegetation areas as a movement corridor.

The onshore BSA is located outside of the known geographic range and lacks suitable habitat for many of the terrestrial special-status species identified during desktop reviews. Therefore, these special-status species have no potential to occur in the Project area and are not discussed further in this section. The special-status species that could potentially occur or that were observed during the field survey are discussed in more detail below. Potential to occur was evaluated by comparing the species’ habitat preferences to the existing habitats, elevation, and soils of the onshore BSA, and by examining the nearest documented occurrence. Species with general habitat requirements found within the onshore BSA as well as nearby documented occurrences (generally less than 5 miles, but dependent on the species dispersal range) could potentially occur. In total, one federally listed species and eight other special-status or rare species occur or have the potential to occur in the Project’s onshore BSA. A complete detailed list of terrestrial special-status species known to occur in the Project region, preferred habitat, and potential habitat occurrence in the onshore BSA is included in Appendix E1.

Plants

During March 2019 field surveys, woolly seablight (Suaeda taxfolia) was observed within the onshore BSA. No additional special-status plant species were identified within the
onshore BSA during field surveys. However, based on the criteria described above, the
following special-status plant species have the potential to occur within the Project area:
Aphanisma (*Aphanisma blitoides*), Coulter’s saltbrush (*Atriplex coulteri*), Miles’ milk vetch
(*Astragalus didymocarpus var. milesianus*), and South coast saltscale (*Atriplex pacifica*).
Field surveys were conducted during the blooming period for each of these species.

*Aphanisma*. Aphanisma is an annual herb that is native to California that occurs in coastal
sage scrub communities and blooms March through June. It has a CNPS ranking of 1B.2,
meaning it is fairly rare, threatened, or endangered in California or elsewhere. This
species was not observed during March 2019 surveys; however, due to the presence of
marginal coastal scrub habitat within the onshore BSA and nearby coastal occurrences,
this species has a low potential to occur within the onshore Project area.

*Coulter’s saltbush*. Coulter’s saltbush is a perennial herb in the Chenopodiaceae
(goosefoot) family that occurs in coastal dune habitat and generally blooms March
through October. It has a CNPS ranking of 1B.2, meaning it is fairly rare, threatened, or
endangered in California or elsewhere. This species was not observed during March 2019
field surveys; however, due to the presence of marginal coastal scrub habitat within the
onshore BSA and nearby coastal occurrences, this species has a low potential to occur
within the onshore Project area.

*Miles’ Milk Vetch*. Miles’ milk vetch is an annual herb that occurs in coast scrub
communities and generally blooms from March to June. It has a CNPS ranking of 1B.2,
meaning it is fairly rare, threatened, or endangered in California or elsewhere. The
species was not observed during March 2019 field surveys; however, due to the presence
of marginal coastal scrub habitat within the onshore BSA and nearby coastal occurrences,
this species has a low potential to occur within the onshore Project area.

*South coast saltscale*. South coast saltscale is an annual herb in the Chenopodiaceae
(goosefoot) family that occurs in coastal playa habitat and generally blooms March
through October. It has a CNPS ranking of 1B.2, meaning it is fairly rare, threatened, or
endangered in California or elsewhere. This species was not observed during March 2019
field surveys; however, due to the presence of marginal coastal scrub habitat within the
onshore BSA and nearby coastal occurrences, this species has a low potential to occur
within the onshore Project area.

*Woolly Seablite*. Woolly seablite is a shrub that is native to California and usually occurs
on salt-marsh edges and coastal sage scrub communities. It is a California Rare Plant
rank 4.2, which means that it has limited distribution in California. Woolly seablite was
observed approximately 300 feet south of the onshore vault structure during March 2019
biological surveys.
Reptiles

**Coast (Blainville’s) horned lizard.** Coast horned lizards are a State Species of Special Concern. Horned lizards prefer open, sandy soil areas and low vegetation in valleys, foothills, and semi-arid mountains. They can also be found in grasslands, coniferous forests, woodlands, and chaparral if there are open areas with loose soils. Historically, coast horned lizards were found from the Baja California border west of the deserts north to the San Francisco Bay area, but their range is now fragmented due to agriculture and land alteration. Horned lizards primarily eat harvester ants but will also consume small invertebrates such as spiders, beetles, termites, flies, honeybees and grasshoppers. Coast horned lizards were not observed during field surveys; however, due to the presence of marginal sandy soil habitat adjacent to the proposed impact area and nearby coastal occurrences, this species could potentially occur within the onshore Project area.

**Coastal whiptail lizard.** The coastal whiptail lizard, also known as the San Diegan tiger whiptail, is a State Species of Special Concern. Coastal whiptails can be found in a variety of habitats but prefer hot and dry open areas with sparse foliage. They can also be found in chaparral, woodland, and riparian areas. Coastal whiptails are found mostly in coastal Southern California, west of the Peninsular Ranges, south of the Transverse Ranges, and north into Ventura County. This species eats small invertebrates, especially spiders, scorpions, centipedes, termites, and small lizards. Coastal whiptail lizards were not observed during field surveys; however, due to the presence of marginal ruderal habitat adjacent to onshore vault and pipeline segments, as well as nearby occurrences, this species could potentially occur within the onshore Project area.

**Southern California legless lizard.** Southern California legless lizards are a State Species of Special Concern. This species lives mostly underground in sparsely vegetated areas of beach dunes, chaparral, sandy washes, and stream terraces with oaks, burrowing in moist warm loose soil. These lizards are often found under rocks, boards, driftwood, and logs. This species does not bask in direct sunlight and primarily eats larval insects, beetles, termites, and spiders. Legless lizards sometimes remain below ground during the day, becoming active on the surface at dusk and at night (Stebbins 2003). No legless lizards were observed during field surveys; however, due to the presence of marginal sandy soil habitat adjacent to the onshore vault and nearby coastal occurrences, this species could potentially occur within the onshore Project area.

Birds

Bird species commonly associated with the sandy beaches of southern California have the potential to occur throughout the Project area. The Project area is greater than 10 miles from any habitat types that are preferred by almost all the special-status birds in the region including rivers and riparian corridors, marshlands, estuaries, and coniferous forests. This eliminates the potential for these special-status bird species to occur within
the Project area. However, a breeding colony of the federally listed bird species, California least tern (*Sternula antillarum browni*), is documented approximately 8 miles south of the Project area at the Santa Clara River mouth near McGrath Beach. Due to their foraging range and the nearshore nature of the Project, there is the potential that California least tern could occur in the Project area.

*California least tern.* California least terns are the smallest terns in North America. They can be identified from other terns by their yellow bill, black crown and white forehead. They can be found foraging along the coast and at sandy beaches, estuaries, lagoons, lake, and rivers. Breeding surveys estimated 40 to 57 breeding pairs and 62 nests at McGrath State Beach (Frost 2016). California least terns typically migrate to the nesting areas by mid- to late-April and are generally present through September (Frost 2016). Nesting colonies are formed in sandy soils with little vegetation along the ocean, lagoons, and bays where they forage by plunge-diving for small fish (i.e., anchovy [*Engraulis* sp.] and silversides [*Antherinopsidae* sp.]). Nesting habitat does not occur within the Project area; however, foraging habitat is present in the offshore waters and therefore, California least tern could potentially occur in the Project area.

### 3.4.2 Regulatory Setting

Federal and state laws and regulations pertaining to biological resources and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to biological resources are listed below. Ventura County’s CAP was prepared in accordance with the California Coastal Act, and established goals for future activity in the coastal zone, including:

- Protect, maintain and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and man-made resources.
- Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the State.

### 3.4.3 Impact Analysis

**a) Have a substantial adverse 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Less than Significant with Mitigation.

**Offshore Intake and Outfall Pipelines Segment**

*Marine Vessel and Marine Wildlife Interactions.* Project-related vessel transit to and from Ventura Harbor, located approximately 7 miles southeast of the offshore Project area,
Environmental Checklist and Analysis – Biological Resources

would increase the probability of vessel and marine wildlife interactions, including collisions. Vessel activity within the Project area would also increase the potential for interactions, because dolphins, seals, and sea lions may use the Project area for foraging and migrating gray whales may pass through on their migratory routes. Sea turtles may also occur in the Project area, though unlikely to be present during Project activities.

Once on site, the Project DSV would be anchored during decommissioning activities, creating the potential for marine wildlife entanglement in the vessels’ anchor lines. If the Project alternative for offshore recovery of the pipelines is necessary, then the use of the Project dive vessel for a slightly longer period would consequently increase the probability of vessel and marine wildlife interactions, including collisions and entanglements. Potentially significant impacts to marine wildlife could occur from interactions with the DSV (i.e., harassment or strikes) during transit as well as from marine wildlife entanglement. **MM BIO-1** would be implemented to ensure that marine wildlife interactions are avoided or minimized with wildlife monitoring and Project activity cessation, if necessary, until the resource had been appropriately assessed and relevant treatment approved (Appendix F). With the implementation of this measure, the impact would be less than significant.

**MM BIO-1: Marine Wildlife Contingency and Training Plan Implementation.** The Project Marine Wildlife Contingency and Training Plan (MWCTP) shall be implemented during all offshore Project activities. A Marine Wildlife Monitor (MWM) shall be present on the offshore Project vessel during transit and within the Marine Study Area to monitor designated avoidance zones and have the authority to halt Project activities that may impact marine wildlife. As specified in the MWCTP, the following shall be implemented throughout the Project:

- A pre-activity environmental orientation shall be conducted for all Project personnel.
- Vessel-based monitoring for marine wildlife shall be performed by a trained MWM during all offshore Project activities including anchoring and active pipeline recovery activities.
- If lighting is required for work in low-light conditions, then specific impact avoidance measures shall be implemented as necessary: lighting would be low intensity, directed downward, and green lighting shall be used (when possible) to reduce attraction to lights and equipment.
- The MWM shall record daily observations on monitoring forms and prepare a daily report as required by regulatory and resource agencies. A Project completion technical report shall be prepared and provided to the appropriate agencies, if requested.
**Sensitive Marine Species and Subtidal Habitat Disturbance.** The proposed Project would remove individual pipelines by utilizing a winch located on top of the concrete vault and pulling the pipelines up from the shore. This method eliminates the need for subsea trenching or excavating along the exposed pipeline corridors. If the Project alternative for offshore recovery of the pipelines is necessary, then the pipelines would be cut and recovered to the dive vessel instead of winching them to shore. Although the pipelines are primarily exposed on the seafloor, this method may require a small amount of trenching or excavating on the beach along the exposed pipeline corridors. The outfall pipeline does support a small patch of surf grass; however, surf grass attached to artificial structures and removed during decommissioning projects has historically been considered a less-than-significant impact because the structures are not considered natural habitat. Marine biological dive surveys did not observe any special-status species along the pipeline corridors, or any significant habitat in the subtidal pipeline removal area that would provide refuge for special-status species. Marine wildlife that would be otherwise moving through the area could be deterred from the offshore BSA. Regardless of onshore or offshore pipeline recovery methods, pipeline removal would move slowly, and impacts would be temporary and limited to the immediate area adjacent to and underneath the pipelines and anchoring points. In addition, any affected marine wildlife, including foraging birds, would be adequately served by the abundant habitat provided by nearby areas. Therefore, the impact would be less than significant.

**Intertidal and Beach Habitat Disturbance.** Intertidal and beach habitats could have up to 1,200 cubic yards of sand excavated for pipeline removal, assuming one foot of cover for each pipeline from the surf zone to the shoreline vault (Table 2-2). However, the Project would occur when most of the sand has been naturally displaced, leaving the pipelines mainly exposed on bedrock. The Project’s timing would minimize the volume of sand excavated and reduce Project-related turbidity within the surf zone, and therefore the impact would be less than significant.

**Oil Spills.** Refined products (i.e., diesel, gasoline) are more toxic than heavier crude, and the loss of fuel or lubricating oil from the DSV during Project operations could affect the water column, seafloor, intertidal habitats, and associated biota, especially sensitive early life stage forms of fish and invertebrates. Marine invertebrates would experience the heaviest impacts from an oil spill since the oil would settle out on rock and nearby kelp reefs and cause direct mortality from ingestion and reduced respiration. Marine wildlife exposed to oil spills could experience fur or feather contamination, loss of buoyancy, and loss of locomotive capabilities as well as direct lethal toxicity to or sub-lethal irritation. Marine mammals may also suffer from direct skin contact resulting in eye irritation, burns to mucous membranes of eyes and mouth, and increased vulnerability to infection. Baleen whales are particularly vulnerable because of their surface feeding behavior. Turtles are not likely to be in the Project area, but sea turtles are vulnerable to oil impacts...
due to their indiscriminate feeding in convergence zones, long pre-dive inhalations, and lack of avoidance behavior (Milton et al. 1984).

The Project vessel would be small and have a limited amount of petroleum-fueled equipment on board, which greatly reduces both the likelihood that a release would occur and the severity of any release. In addition, large equipment operating on the beach would be checked daily for leaks prior to entering the work area and would not be left on the beach overnight. Regardless, the release of petroleum into the marine environment is considered a potentially significant impact. MM HAZ-1 would require implementation of the Oil Spill Response and Contingency Plan (Appendix H) to ensure hazardous materials are managed and stored properly in the coastal environment to reduce the oil spill potential, and would establish a protocol for notification and clean-up to reduce the impact if a spill occurs. With the implementation of this measure, the impact would be less than significant.

Shoreline Vault Segment

Special-status species. Heavy equipment operation and associated noise, dust from ground disturbance and excavation, and an increase in human presence have the potential to disrupt native plant communities and foraging activities of some common wildlife species, with a low, unlikely potential of affecting special-status species including the Southern California legless lizard, coast horned lizard, and coastal whiptail lizard.

The reptile species listed above are known to use upland habitats, specifically sandy soils, which may occur within the onshore Project area. However, the Project site lacks suitable vegetation and is highly disturbed, which decreases the likelihood of encountering these species. Initial ground disturbance may result in the mortality of common, burrowing wildlife (i.e., California ground squirrel) during Project activities, but no special-status species are expected to occur within the subterranean ground disturbance areas (Appendix E1). Project activities would not create any significant migration barriers and no sensitive habitats would be removed as a result of the Project. Potentially significant impacts to special-status species from Project activities, if species are present, include injury or mortality due to vehicle, equipment, or foot traffic as well as temporary displacement. MM BIO-2 would ensure Project personnel and crews take caution to avoid plant and wildlife that may occur in the work areas. MM BIO-3 would require biological pre-activity surveys and monitoring to ensure the Project work areas are and remain clear of any special-status plant and animal species prior to the start of work, and would halt Project activities if wildlife enters the work area, and MM BIO-4 would delineate the work limits, ensuring heavy equipment and vehicles stay within the permitted disturbance area. With the implementation of these measures, the impact would be less than significant.

Special-status plant species are not expected to occur in the developed areas and ruderal habitat around the vault structure and staging area. Rare plant woolly seablite was
observed during field surveys 300 feet away from the onshore Project disturbance and staging areas but would not be impacted. The Project would not result in loss of any special-status species habitat. Therefore, the impact would be less than significant, and MM BIO-3 would further reduce this impact by ensuring the Project work areas are clear of any special-status-species plant species prior to the start of work.

MM BIO-2 Environmental Awareness Training. The approved biological monitor(s) shall be responsible for conducting an 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.

MM BIO-3: Onshore Biological Pre-activity Surveys and Monitoring. A qualified biological monitor shall survey the onshore work area for sensitive species or other wildlife that may be present no more than 24 hours prior to the commencement of 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 Project decommissioning 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 qualified biological monitor shall stop work and notify CRC, CSLC, and consult with the appropriate agencies to resolve the impact prior to re-starting work in the area.

MM BIO-4: Delineation of Work Limits. Prior to the start of the Project, the onshore decommissioning area perimeters shall be clearly flagged to ensure heavy equipment and vehicles stay within the permitted disturbance area and footprints shall be the minimum extent necessary for equipment staging and activity. Natural areas outside of the work zone shall not be disturbed. Designated equipment staging and fueling areas shall also be delineated at this time.

Onshore Pipelines Segment

No endangered, threatened, candidate, sensitive, or special-status species were surveyed or identified with the potential to occur in the onshore pipelines segment. Therefore, there would be no impact.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
Less than Significant Impact with Mitigation.

Offshore Intake and Outfall Pipelines Segment

The subtidal hardbottom habitat found underneath the offshore pipelines could be affected by removal activities. Pulling the pipelines shoreward along the pipeline corridor would cause scouring and disturbance along the seafloor. While the intake and outfall pipelines would be dragged over hard bottom habitat areas, the impact would occur along the existing pipeline footprint with minimal localized disturbance (the offshore BSA). Marine biological dive surveys observed that the offshore BSA was largely unvegetated and devoid of fish or kelp resources (see analysis under question a), above, for special-status species discussion), but immobile organisms living along and adjacent to the pipelines could be crushed or suspended in the water, possibly exposing them to fish and macroinvertebrate predators. Large, mobile organisms (e.g., fish, large crustaceans) would be able to leave the area prior to disturbance. However, sediment would gradually recontour with natural wave action and subsequent benthic organism colonization would be expected to occur rapidly from the MSA and surrounding region. In addition, pre- and post-decommissioning marine biological surveys required within U.S. Army Corps of Engineers Nationwide Permit No. SPL-2019-00359 would further minimize the impact by ensuring the pipeline corridors and anchor locations are clear of unanticipated species as well as accounting for any seasonal habitat differences. Therefore, the impact from offshore pipeline removal would be less than significant.

The DSV would be anchored in the MSA as part of the pipeline pulling activities (Figure 3.4-1) which could impact hardbottom habitat. MM BIO-5 (Appendix L) requires the DSV, based upon recent geophysical and biological surveys, to avoid sensitive hardbottom habitat areas and ensure that anchors are placed in sandy locations. With the implementation of this measure, the impact to hardbottom habitat from marine vessel anchoring would be less than significant.

MM BIO-5: Marine Safety and Anchoring Plan Implementation. CRC shall implement the Project Marine Safety and Anchoring Plan during offshore activities in order to reduce potential impacts to hardbottom substrate.

Shoreline Vault Segment and Onshore Pipelines Segment

There is no riparian habitat present and there are no sensitive natural communities located within the onshore BSA. Therefore, there would be no impact.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
Less than Significant Impact.

Offshore Intake and Outfall Pipelines Segment

Subtidal Habitat. Based on recent surveys, the pipelines are located above the seafloor and therefore onshore winching and removal activities would not require offshore trenching or excavating. If the Project alternative for offshore recovery of the pipelines is necessary, then the pipelines would be cut and recovered vertically to the dive vessel instead of winching them to shore. No dredging or fill activities are proposed as part of the Project. Therefore, the impact would be less than significant.

Intertidal and Beach Habitat. Impacts to the intertidal and beach habitats would be reduced to the maximum extent by scheduling the pipeline removal during the winter. If seasonal natural erosion has not already exposed the pipelines, then minimal excavation may be required to remove pipelines from the intertidal and beach habitats. Any excavation would be short-term, localized, and backfilled with the native sand to naturally recontour during seasonal wave action. Therefore, the impact would be less than significant.

Shoreline Vault Segment and Onshore Pipelines Segment

No wetlands occur within the onshore BSA. Therefore, there is no impact.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation.

Offshore Intake and Outfall Pipelines and Shoreline Vault Segments

The Project could temporarily affect terrestrial and marine wildlife movement due to the offshore Project vessel and decommissioning equipment on the beach and within the vault structure impact area, as discussed under question a), above. However, due to the short-term nature of the Project and implementation of MM BIO-1 through MM BIO-5, the Project would not significantly interfere with the movement of native or migratory terrestrial wildlife, fish, or marine wildlife species or impede the use of native wildlife nursery sites. With the implementation of these measures, the impact would be less than significant.
Onshore Pipelines Segment

Project activities within the onshore pipeline segment could temporarily interfere with native resident or migratory wildlife species movement between established wildlife corridors within the onshore pipeline segment work area. However, the Project has a small impact area, short-term disturbance, and there are existing man-made barriers precluding some species movement (Section 3.4.1.4, Terrestrial Habitats and Communities). Therefore, the impact would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation.

All Project Segments

The County’s CAP, as described in the Regulatory Setting, seeks to preserve natural resources by protecting fish, wildlife, and riparian and native habitats. As discussed under questions a) and b), above, the Project has the potential to adversely impact offshore sensitive habitats and to potentially impact other sensitive terrestrial and marine wildlife. MM BIO-1 through MM BIO-5 and MM HAZ-1 would provide Project planning, surveys, and monitoring to minimize and avoid Project impacts to wildlife and native habitats, which would also meet the intent of the relevant local government goals, objective, and policy. With the implementations of these measures, the impact would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No Impact.

All Project Segments

The Project does not conflict with local, regional, or state habitat conservation plan provisions because there are no such designated plans within the MSA or onshore BSA. Therefore, there would be no impact.

3.4.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to biological resources to less than significant.

- MM BIO-1: Marine Wildlife Contingency and Training Plan Implementation
- MM BIO-2: Environmental Awareness Training
1. MM BIO-3: Onshore Biological Pre-activity Survey and Monitoring
2. MM BIO-4: Delineation of Work Limits
3. MM BIO-5: Marine Safety and Anchoring Plan Implementation
4. MM HAZ-1: Oil Spill Response and Contingency Plan Implementation
3.5 CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>CULTURAL RESOURCES - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?</td>
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<td>☒</td>
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<td>☐</td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</td>
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</tr>
<tr>
<td>c) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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</tr>
</tbody>
</table>

3.5.1 Environmental Setting

3.5.1.1 Marine Areas

More than 500 sunken vessels have been reported within the coastal waters of Southern California. Precise locations are usually unknown, with only vague narratives provided for the area in which the ship was last known or thought to have sunk. The most common reasons for shipwrecks were either running aground on natural hazards such as prominent rocks or colliding in harbors during stormy weather. As such, the most probable areas for shipwrecks along the California coast occur where concentrated shipping traffic coincides with navigational hazards such as reefs, headlands, and prevailing bad weather or fog. Some sensitive areas include offshore islands, seaports, and obstructions. Less sensitive areas include open sea and coastline away from established shipping routes.

Approximately 33 shipwrecks have been logged in the CSLC Shipwrecks Database for the area offshore of Ventura County. Except as verified by actual surveys, CSLC data on shipwrecks was taken from books, old newspapers, and other contemporary accounts that do not contain precise locations. The CSLC Shipwrecks database reflects information from many sources and generally does not reflect actual fieldwork. Additionally, not all shipwrecks are listed in the CSLC Shipwrecks Database and their listed locations may be inaccurate, as ships were often salvaged or re-floated. It is also possible that previously unidentified vessels or parts of vessels may be in the offshore Project area. A review of the NOAA Automated Wreck and Obstruction Information System (AWOIS) indicates an electronic navigational chart wreck is located approximately 1.6 miles due south of the Project site. The AWOIS does not provide any additional information about this wreck (NOAA 2018).
3.5.1.2 Terrestrial Areas

Cultural resources include any prehistoric or historic sites, buildings, districts, structures, traditional use areas, or objects considered to be important to a culture, subculture or community for scientific, traditional, religious or other reasons. Cultural resources encompass three categories: archaeological resources (both historic and prehistoric), architectural resources, and traditional cultural resources.

As indicated within the Ventura County CAP (2017), the Ventura County coast is archaeologically and culturally significant to a variety of groups. This area was the site of one of the densest Native American populations in North America. In particular, the Ventureño Chumash have inhabited the Central Coast from Malibu to just west of Ventura for generations. The archaeological record in Chumash territory reflects cultural continuity over a long span of time, possibly indicating that people ancestral to the Chumash arrived in the area as early as 13,000-10,000 years ago.

Archaeologists working in the Santa Barbara Channel mainland region of Ventura County have divided the local pre-contact record into five major chronological time periods: Pre-Millingstone (also known as Paleoindian or Paleo coastal), Millingstone Period, Early Period, Middle Period, and Late Period. Discussion of the latter three periods is based on a chronology developed by Chester King (1990).

The Pre-Millingstone Period (c. 25,000 – c. 8,500 B.P.) represents the earliest human occupation in North America and coincides with the entry of people into the Americas during the latter part of the Wisconsin glaciation. Human populations during this period are thought to have been highly nomadic and driven primarily by the seasonal movements of large game. The Millingstone Period (c. 8,500 – c. 6,500 B.P.) is characterized by the predominance of hand stones and milling slabs in the archaeological record, indicating a reliance on hard seeds and other plant foods. During the Early Period (c. 6,500 – c. 3,200 B.P.), the climate in the Santa Barbara Channel region became warmer and drier, resulting in a significant decrease in human populations. By the end of the Early Period, early Chumash communities had become established in the region.

During the Middle Period (c. 3,200 – c. 800 B.P.), marine resources had greater prominence and fishing and sea mammal hunting became widespread. Trade and craft specialization increased dramatically during this period. During the Late Period (c. 800 B.P.– 1769 A.D.), two-thirds of the people in the Ventura region lived near the coast, although settlements were also located in oak woodland communities and along rivers or other water courses. The Late period saw a rapid rise in social complexity and increased settlement size.

The Protohistoric Period (c. A.D. 1542 – 1769), defined as the time with intermittent trade and contact between Native Americans and Spanish trading vessels, was disrupted in
1769 by the arrival of the Spanish expedition led by Gaspar de Portolá. Archaeological
evidence has verified that the establishment of the Spanish mission of San Buenaventura
decimated both the native Chumash population in Ventura County as well as the culture
itself (Greenwood 1978). During the Mission Period (A.D. 1772 – 1834), the Spanish
established twenty-one Franciscan missions and various military presidios and pueblos
along El Camino Real between San Diego and Sonoma.

In 1821, Mexico declared independence from Spain; one year later, California became a
Mexican Territory. After the missions were secularized in 1834, lands were gradually
transferred to private ownership via a land grant system. During this time, known as the
Rancho Period (A.D. 1822 – 1845), the Project site was included within Rancho Cañada
de San Miguelito, an 8,877-acre land grant awarded by Governor Pío Pico to Ramón
Rodríguez in 1846 (Hoffman 1862).

Following the Bear Flag Revolt in 1846, John C. Frémont and the California Battalion
marched into Mission San Buenaventura, finding all the inhabitants had fled except the
Chumash neophytes. The Treaty of Hidalgo formally transferred California to the United
States in 1848 and statehood was achieved in 1850. Originally known as Buenaventura,
the town of Ventura officially became recognized within the United States when a post
office was established in 1861 (Galvin 2011). Oil exploration in Ventura County started
during the 1880s, yet remained unsuccessful until 1916, when the large South Mountain
Oil Field was discovered near Santa Paula. Drilling in the Ventura Avenue Oil Field and
the Rincon Oil Field soon followed in 1919 and 1927, respectively.

While the adjacent Ventura Avenue Oil Field was discovered in 1919, oil extraction near
the western end of the Ventura Anticline, which includes Solimar Beach and the Taylor
Ranch area, did not occur until 1931. The discovery well for the San Miguelito oil field
was the Continental Oil Co. “Grubb No. 1” (American Petroleum Institute [API] No.
411102042), which was spudded on November 22, 1931, and reached 6,750 feet below
ground surface (DOGGR 2018). Grubb No. 1 went on to produce 600 barrels per day.

3.5.2 Regulatory Setting

Federal and state laws and regulations pertaining to cultural resources and relevant to
the Project are identified in Appendix A. At the local level, Chapter 4.1.1 (Archaeological
Resources) of the Ventura County CAP (2017) includes policies to protect cultural
resources. Local goals, policies, or regulations applicable to this area with respect to
cultural resources are listed below.

- Archaeological Resource Goal 1: To recognize archaeological sites in the County's
  coastal zone as important to an understanding of human history and prehistoric
  societies and to protect archaeological resources from disturbance by human
  activities.
• Policy 1 – Discretionary development shall be reviewed to identify potential locations for sensitive archaeological resources.

• Policy 2 - New development shall be sited and designed to avoid adverse impacts to archaeological resources to the maximum extent feasible. If there is no feasible alternative that can eliminate all impacts to archaeological resources, then the alternative that would result in the fewest or least significant impacts to resources shall be selected. Impacts to archaeological resources that cannot be avoided through siting and design alternatives shall be mitigated. When impacts to archaeological resources cannot be avoided, mitigation shall be required and shall be designed in accordance with established federal, state or County standards and shall be consistent with the policies and provisions of the Local Coastal Plan (LCP).

• Policy 5 – Native American tribal groups approved by the Native American Heritage Commission for the area shall be consulted when development has the potential to adversely impact archaeological resources.

• Policy 6 – Protect and preserve archaeological resources from destruction and avoid impacts to such resources where feasible.

3.5.2.1 Records Search Results

On February 14, 2019, Padre ordered an expedited archaeological records search from the South Central Coast Information Center (SCCIC) located at California State University, Fullerton. The center is an affiliate of the State of California Office of Historic Preservation and the official state repository of archaeological and historic records and reports for Orange, Los Angeles, and Ventura counties. Padre received the results on March 6, 2019.

The records search included a review of all recorded historic-era and prehistoric archaeological sites within a 0.25-mile radius of the Project site as well as a review of known cultural resource surveys and technical reports. The State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Points of Historic Interest, and the California Office of Historic Preservation Archaeological Determinations of Eligibility were also analyzed.

The records search revealed that no cultural resources had been previously recorded within the Project site or within a 0.25-mile search radius, and that portions of the Project site were included within seven previous cultural resources studies (Table 3.5-1). The SCCIC did not provide information on two of those seven studies (VN-01265 and VN-02872). No additional studies have been completed within a 0.25-mile radius of the Project site.
Table 3.5-1. Previous Cultural Resources Studies

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<tr>
<th>Report No.</th>
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<tr>
<td>VN-00572</td>
<td>Dames &amp; Moore, 1988</td>
<td>Phase I Cultural Resources Survey, Fiber Optic Cable Project, Burbank to Santa Barbara, California</td>
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<tr>
<td>VN-00957</td>
<td>Leonard, 1968</td>
<td>Evaluation of the Archaeological Potential of the Proposed Rerouting of the Pacific Coast Highway</td>
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<tr>
<td>VN-01153</td>
<td>Peak &amp; Associates, 1991</td>
<td>Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California</td>
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<td>VN-01265</td>
<td>Information not Provided by SCCIC</td>
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<td>VN-02872</td>
<td>Information not Provided by SCCIC</td>
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<tr>
<td>VN-02974</td>
<td>Pierson et al., 1987</td>
<td>Archaeological Resource Study: Morro Bay to Mexican Border</td>
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Source: SCCIC 2019

3.5.2.2 Field Survey Methods and Results

Padre conducted a Phase I pedestrian survey of the Project site on March 15, 2019 and examined the Project site with parallel transects spaced at no more than 16-foot intervals, where feasible. The survey area included a 200-foot long and 15-foot wide proposed staging area near the intersection of “A” Lease Canyon Road and PCH, an existing 20-foot by 42-foot riprap-reinforced vault area, and a 50-foot wide pipeline corridor that extended southwest from the vault for approximately 100 feet before terminating at the low tide line.

The Phase I archaeological study identified the intake/outfall shoreline vault structure, constructed in 1967, as a cultural resource. Associated with this resource are the two 12-inch-diameter steel submarine intake pipelines and one 12-inch-diameter steel submarine outfall pipeline. The pipelines and vault are further discussed in detail in Section 2.1.1, Offshore Intake and Outfall Pipelines, and Section 2.1.2, Shoreline Vault, respectively.

After the pedestrian survey was completed, Padre was notified that the Project would require a pothole disturbance within San Miguelito Road to locate the 36-inch conduit as well as a 60-foot by 40-foot staging area on CRC Lower Grubb Lease Property. Given the small size of the added areas, extensive previous ground disturbance, and the lack of previously recorded cultural resources, Padre did not examine these areas with a pedestrian survey.
3.5.3 Impact Analysis

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

(a to b) Less than Significant with Mitigation.

All Project Segments

The Project would completely remove the shoreline vault structure and its associated offshore pipelines, which have been jointly identified as a cultural resource. The resource was evaluated using listing eligibility criteria from the California Register of Historical Resources (Appendix A) and is not associated with a significant event or individual, nor does it embody a distinctive method of construction. The integrity of the resource is poor as indicated by the massive corrosion observed within the concrete vault and associated pipelines. Thus, the structures do not appear to possess the potential to yield important information that could not be obtained from other sources. Therefore, this resource is not considered a historical resource or a unique archaeological resource pursuant to section 15064.5.

Although Padre did not complete an underwater cultural resources survey within the offshore Project area, the recent geophysical survey for the MSA did not detect any anomalies (eTrac 2019). Additionally, Padre contacted CSLC for information about potential shipwrecks in the offshore Project site and none were located. Thus, submerged cultural resources are not anticipated to occur within the offshore Project site. Finally, the offshore pipelines are laying on the surface of the seafloor; therefore, no ground disturbance (such as dredging) is needed to remove the pipelines which further reduces the potential to disturb any submerged cultural resources.

Although pipeline removal and onshore excavation would occur in areas with no identified historical or unique archaeological resources, the possibility exists that previously unknown archaeological resources could be encountered during Project activities. MM CUL-1/TCR-1 would ensure that, in the event of accidental discovery, further disturbance would halt until the resource had been appropriately assessed and treatment, if necessary, approved. With the implementation of this measure, the impact would be less than significant.

MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources. Prior to ground-disturbance, the Applicant shall contact culturally-affiliated tribes and retain a culturally-affiliated tribal monitor if requested. The
Applicant shall also retain a qualified archaeologist to, jointly with any requested culturally-affiliated tribal monitor, train construction staff to be able to identify potential cultural resources. 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 an approved archaeologist and tribal monitor, if retained, has evaluated the nature and significance of the discovery. In the event that a potentially significant cultural or tribal cultural resource is discovered, CRC, 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 by the archaeologist and, for tribal cultural resources, the culturally-affiliated tribal monitor, and submitted to CSLC staff for review and approval prior to implementation of the plan. If the archaeologist or tribe determines that damaging effects on the cultural or tribal cultural resource shall be avoided or minimized, then work in the area may resume.

Title to all abandoned shipwrecks, 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.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation.

All Project Segments

The project is not expected to disturb human remains. However unlikely, unmarked burials could be unearthed during subsurface construction activities and consequently the Project could disturb human remains, including those interred outside formal cemeteries. MM CUL-2/TCR-2 would ensure that, in the event of accidental discovery, further disturbance would halt until the human remains had been appropriately assessed and
Environmental Checklist and Analysis – Cultural Resources

3.5.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to cultural resources to less than significant.

- MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources
- MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains
3.6 CULTURAL RESOURCES – TRIBAL

<table>
<thead>
<tr>
<th>CULTURAL RESOURCES – TRIBAL</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</td>
<td>☐</td>
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</tr>
<tr>
<td>i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1, subdivision (k), or</td>
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</tr>
<tr>
<td>ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</td>
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</tbody>
</table>

3.6.1 Environmental Setting

3.6.1.1 Ethnographic Context

The Project site is located within the ethnographic territory of the Chumash, who have inhabited the California coast from Morro Bay to Malibu (Kroeber 1925), and east to the Carrizo Plain for generations. The archaeological record in Chumash territory reflects cultural continuity over a long span of time, possibly indicating that people ancestral to the Chumash arrived in the area as early as 13,000-10,000 years ago. The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover 1986). The Chumash living in Ventura County formed the Ventureño dialect group of the Chumash language family.

The Ventureño Chumash are named for their association with the Spanish Mission San Buenaventura, founded in 1782. Another dialect of Chumash, Barbareño, named for its association with Mission Santa Barbara (founded December 4, 1786), was spoken throughout the Santa Barbara Channel region. The Project site is located near the boundary between these two, adjoining dialect-regions. At the time of Spanish contact in...
A.D. 1542, the Barbareño population was concentrated most heavily near the canyon mouths. Major Barbareño Chumash villages included sukuv at Rincon Point, misopsno at Carpinteria Creek, helo at Mescalitan Island – Goleta Slough, syuxtun at Burton Mound, and mikiw and kuyamu at Dos Pueblos. The Ventureño population mainly resided along the Santa Clara River. Major Ventureño Chumash villages in Ventura County included sisolop in Ventura, Matija in Ojai, simiyi near Simi, Sa’aqtik’oy in Saticoy, and Muwu at Point Mugu (Grant 1978).

Prior to being colonized, the Chumash were a non-agrarian culture and relied on hunting and gathering for their sustenance. Archaeological evidence indicates that the Chumash utilized marine food resources from their earliest coastal occupation, at least 9,000 years ago (Greenwood 1978). Much of their subsistence was derived from pelagic fish, particularly during the late summer and early fall (Hoover 1986). Shellfish were also harvested, including mussel and abalone from rocky shores and cockle and clams from sandy beaches. In addition to marine resources, acorns were also a food staple; they were ground into flour using stone mortars and pestles and then leached to remove tannic acid. A wide variety of seeds, including chia from various species of sage, were used and several plants were harvested for their roots, tubers, or greens (Hoover 1986).

The coastal Chumash practiced regular, seasonal population dispersal and aggregation in response to food resource location and seasonal availability (Landberg 1965). Large coastal villages would therefore have only been fully populated in the late summer, during the peak pelagic fishing period. The Chumash depended largely on stored food resources through the winter, and during the spring and summer the population dispersed through inland valleys to harvest wild plant resources (Landberg 1965).

Prior to Spanish colonization, the Chumash lived in large, hemispherical houses constructed by planting willows or other poles in a circle and bending and tying them together at the top. The house was then covered with tule mats or thatch. Houses were estimated to measure 50 feet in diameter or larger and housed up to 40 to 50 people. Other Chumash structures included dance houses and sweathouses (Kroeber 1925). Archaeological evidence supports observations that twin or split villages existed on opposite sides of streams or other natural features, possibly reflecting the moiety system of native California (Greenwood 1978).

3.6.1.2 Submerged Tribal Cultural Resources

Underwater Tribal cultural resources are defined as submerged sites having some cultural affiliation. These can take the form of submerged prehistoric sites or isolated prehistoric artifacts. Several submerged archaeological sites are located offshore of California’s central coast, with most found in relatively shallow water. Bickel (1978) asserts that many of the shallow water sites may be a result of cliff erosion and are therefore associated with archaeological sites located on the cliffs above. Other
submerged artifacts could be from random loss or purposefully discarded in association with ceremonial rituals or other events. Many of these submerged sites contain a variety of prehistoric artifacts, including manos, metates, choppers and pestles (Bickel 1978, and URS Corporation 1986).

In more recent studies, researchers have begun to reconstruct the early coastline of California, which has become inundated with rising sea levels in the Late Holocene. The sea level began dropping approximately 30,000 years ago from a level near or slightly below current conditions. At the climax of the Wisconsin glaciation, 18,000 to 24,000 years ago, the sea level was as much as 394 feet below present sea levels. About 18,000 years ago, a warming trend caused the sea level to rise again due to melting ice sheets until 11,000 years ago, during the earliest California coastal occupation, when the sea level was approximately 151 feet below present levels. Reconstructions use detailed bathymetric maps of the ocean bottom in conjunction with graphed curves representing sea-level rise during the Holocene and the chronology of land uplift or submergence (Glassow 1999).

This research has many implications for early coastal archaeological sites that have become submerged by modern sea levels and comprise a comparatively understudied area of archaeology due to their lack of visibility and accessibility. Although marine resources are not represented abundantly in archaeological sites until the Middle Holocene, Early Holocene Native Americans still recognized coastal habitats and littoral zones as regions that produced desirable resources, either for subsistence or for craft. Thus, pre-contact indigenous people would have settled these now-submerged coastal regions, and in fact, Tribal records have identified submerged village sites in several coastal areas.

3.6.1.3 Tribal Coordination

Pursuant to Executive Order B-10-11, concerning coordination with Tribal governments in public decision making, the CSLC adopted a Tribal Consultation Policy in August 2016 to provide guidance and consistency in its interactions with California Native American Tribes (CSLC 2016). The Tribal Consultation Policy, which was developed in collaboration with Tribes, other State agencies and departments, and the Governor's Tribal Advisor, recognizes that Tribes have a connection to areas that may be affected by CSLC actions and “that these Tribes and their members have unique and valuable knowledge and practices for conserving and using these resources sustainably” (CSLC 2016).

Prior to preparing the MND, the CSLC did not have in its records any requests for consultation pursuant to AB 52 from Tribes in the Project area. Regardless, under AB 52 lead agencies must avoid damaging effects on Tribal cultural resources, when feasible, whether or not consultation occurred or is required. The CSLC proceeded to contact the
NAHC, which maintains two databases to assist specialists in identifying cultural resources of concern to California Native Americans (Sacred Lands File and Native American Contacts). A request was sent to the NAHC for a scared lands file search of the Project area and a list of Native American representatives who may be able to provide information about resources of concern located within or adjacent to the Project area.

On February 25, 2019, the NAHC responded to CSLC with a list of 10 Tribal contacts listed in alphabetical order below:

- Gino Altamirano, Chairperson, Coastal Band of the Chumash Nation
- Eleanor Arrellanes, Barbareño / Ventureño Band of Mission Indians
- Raudel Banuelos, Barbareño / Ventureño Band of Mission Indians
- Fred Collins, Spokesperson, Northern Chumash Tribal Council
- Kenneth Kahn, Chairperson, Santa Ynez Band of Chumash Indians
- Julio Quair, Chairperson, Chumash Council of Bakersfield
- Mona Tucker, Chairperson, yak tityu tityu tiłhini – Northern Chumash Tribe
- Julie Lynn Tumamait-Stennslie, Chair, Barbareño / Ventureño Band of Mission Indians
- Patrick Tumamait, Barbareño / Ventureño Band of Mission Indians
- Mark Vigil, Chief, San Luis Obispo County Chumash Council

The NAHC’s reply from February 25, 2019, also stated that the Sacred Lands File record search for the Project area was negative.

On August 28, 2019, CSLC staff provided a notice of the Project to all Tribes on the NAHC list. CSLC staff did not receive any responses from the Tribal representatives identified in the NAHC’s February 25, 2019 letter. At the time of MND publication, CSLC staff had not received any comments from the Tribes or been informed of any Tribal cultural resources within or adjacent to the Project area.

3.6.2 Regulatory Setting

Federal and state laws and regulations pertaining to Tribal cultural resources and relevant to the Project are identified in Appendix A. At the local government level, there are no goals, policies, or regulations applicable to this issue area for the Project due to its location and the nature of the activity.
3.6.3 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   (i) Listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code section 5020.1, subdivision (k), or

   (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation.

All Project Segments

The Project involves the complete removal of the shoreline vault structure and associated pipelines. On February 14, 2019, Padre ordered an expedited archaeological records search from the SCCIC located at California State University, Fullerton. The records search did not identify any tribal cultural resources within the Project site or a 0.25-mile radius. Padre also conducted a Phase I pedestrian survey of the Project site on March 15, 2019 and examined the Project site with parallel transects spaced at no more than five-meter intervals, where feasible. Again, no tribal cultural resources were identified. Finally, as provided above, CSLC staff conducted outreach efforts to tribes indicated on the NAHC list requesting any information about known Tribal cultural resource sites or any other Tribal cultural resources in or near the Project area. CSLC did not receive any tribal input from outreach efforts.

Although the Project would occur in areas with no identified tribal cultural resources, the pipeline and vault removal and excavation activities could impact previously unknown tribal cultural resources. MM CUL-1/TCR-1 would ensure that, in the event of accidental discovery, further disturbance would halt until the resource had been appropriately assessed and treatment, if necessary, approved. In addition, if unanticipated human remains of Native American origin are discovered in the offshore or onshore Project areas, MM CUL-2/TCR-2 would ensure proper coordination with the most likely descendent(s). With the implementation of these measures, the impact would be less than significant.
3.6.4 Mitigation Summary

Implementation of the following mitigation measure would reduce the potential for Project-related impacts to tribal cultural resources to less than significant.

- MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources
- MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains
3.7 ENERGY

<table>
<thead>
<tr>
<th>ENERGY - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</td>
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</tr>
<tr>
<td>b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</td>
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</tbody>
</table>

3.7.1 Environmental Setting

Ventura County (County) relies primarily on an interrelated energy system. Electricity and natural gas are the primary forms of household energy while petroleum fuels are the primary energy source for most modes of transportation. Electricity in the County is supplied by Southern California Edison Company (SCE) (Ventura County General Plan – Resources Appendix 2019). As indicated in the SCE 2018 Final Renewables Portfolio Standard (RPS) Procurement Plan (Volume I, April 2019), SCE considers contracts for renewable energy through its RPS procurement activities that will help achieve the State’s RPS goals as well as provide needed energy to serve SCE’s customers. SCE expects additional cities and eligible public entities within the SCE service territory to begin community choice aggregation development. Specifically, three additional phases of the Clean Power Alliance implementation covering much of Los Angeles and Ventura Counties were scheduled for 2019. These departures will reduce SCE’s potential RPS need and thus improve SCE’s progress towards meeting its RPS compliance goals (SCE 2019).

3.7.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to energy that are relevant to the Project. State laws and regulations pertaining to energy and relevant to the Project are identified in Appendix A. Specifically, Southern California Edison (local energy provider) is overseen by the California Public Utilities Commission. Additionally, the County participates in a Joint Powers Agency called the Ventura County Regional Energy Alliance (VCREA). The VCREA is in the process of creating an Energy Action Plan to develop efficient energy resources throughout the County region. The Energy Action Plan will be finalized in 2020. The County provides goals and policies related to energy resources within its General Plan (2016). Local goals, policies, or regulations applicable to this area with respect to energy are listed below.

- Ventura County General Plan (Goals, Policies, and Programs) Goal 1.9.1.1: Promote land use patterns which minimize energy consumption.
3.7.3  Impact Analysis

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact.

All Project Segments

The proposed Project involves the use of terrestrial heavy equipment and marine vessels, both powered by petroleum-based fuel sources. As such, Project activities would result in temporary nonrenewable fossil fuel consumption (e.g., gas and diesel) to operate the decommissioning vehicles and equipment. However, as discussed in Section 3.3, Air Quality, the County of Ventura General Plan Goal 1.9.1.4 requires that Project equipment be tuned in accordance with manufacturers specifications to maximize energy efficiency. In addition, as indicated in Section 3.17, Transportation, Project-related vehicle trips would be minimized to the extent feasible. Finally, Project activities would not draw energy from the Southern California Edison power grid. The Project would not increase long-term demand for existing energy sources or result in new energy source development. Therefore, the impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact.

All Project Segments

The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, there would be no impact.

3.7.4  Mitigation Summary

The Project would have no significant impacts to energy; therefore, no mitigation is required.
### 3.8 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>☐</td>
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<tr>
<td>ii) Strong seismic ground shaking?</td>
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<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>iv) Landslides?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>☐</td>
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<tr>
<td>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
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<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</td>
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<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>☐</td>
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<tr>
<td>f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☐</td>
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</tbody>
</table>

### 3.8.1 Environmental Setting

The Project site is within the North Coast area which spans approximately 12 miles, from the northern County line at Rincon Point southward to the Ventura River (Ventura County General Plan, CAP (2017). The North Coast is located on the edge of a geologically complex and active area that includes a portion of the Santa Ynez Mountains, formed by thrust faulting and east-west fold. Sedimentary Miocene marine terraces reach from these mountains to the ocean, where they have been eroded to prominent sea cliffs. The North Coast beaches are highly vulnerable to erosion and wave damage. At Solimar Beach,
erosion is weakening the existing seawalls. According to the CAP, improvements will have to be made to protect existing homes within this area. This area is designated by the County of Ventura as "Present Use Critical". In the Project area, surficial geologic units include Holocene aged beach sand deposits (Qs) and alluvium, characterized by unconsolidated floodplain deposits of silt, sand, and gravel (Qa) (Dibblee and Ehrenspeck 1988). Soils within the onshore Project area are classified as Coastal Beach, with traces (totaling less than 5 percent) of tidal flats and river wash.

Underlying the area is the Red Mountain Thrust Fault and its branches, including the Padre Juan Fault. There has been seismic activity in this fault zone within the past 20,000 years. According to the California Department of Conservation, California Earthquake Hazards Zone Application Interactive Mapping System (EQ Zapp) (ESRI 2019) under the Alquist-Priolo Act of 1972, the Red Mountain Fault is designated as a "special studies zone". This means that engineering geology reports may be required for some new coastal zone development within the designated area.

As indicated in the CAP, short periods of low to moderate groundshaking are a potential North Coast hazard. Low coastal terraces could be subject to liquefaction where groundwater is less than 15 feet from the surface. In addition, tsunamis could occur along the North Coast where elevations are less than 30 feet above mean sea level. Finally, landslides and mass earth movement pose potentially severe hazards on slopes greater than 25 percent.

### 3.8.2 Regulatory Setting

Federal and state laws and regulations pertaining to geology, soils, and paleontological resources and relevant to the Project are identified in Appendix A. Ventura County goals, policies, or regulations applicable to this area with respect to geology, soils, and paleontological resources are listed below.

- Geologic and Seismic Protection Policy 1: The County shall minimize the potential effects of geologic, soil, and seismic hazards through the development review process.

- Geologic and Seismic Protection Policy 2: To maintain consistency, the County shall refer to the California Building Code, the Land Use Development Code, County Ordinances, the Coastal Land Use Plan, and the Comprehensive General Plan when considering the siting and construction of structures in seismically hazardous areas.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 2.7.2.1: Development in mapped landslide/mudslide hazard areas shall not be permitted unless adequate geotechnical engineering investigations are performed, and appropriate and sufficient safeguards are incorporated into the project design.
• Ventura County General Plan (Goals, Policies, and Programs) Policy 2.7.2.2: In landslide/mudslide hazard areas, there shall be no alteration of the land which is likely to increase the hazards, including concentration of water through drainage, irrigation or septic systems, removal of vegetative cover, and no undercutting of the bases of slopes or other improper grading methods.

• Ventura County General Plan (Goals, Policies, and Programs) Policy 2.12.2.1: All permits for seawalls, revetments, groins, retaining walls, pipelines and coastal outfalls shall be designed to mitigate wave hazards and protect against further beach erosion, and shall obtain a Floodplain Development Permit from the County Public Works Agency prior to the issuance of a Building Permit or a Grading Permit.

• Ventura County Coastal Area Plan Paleontology Goal 1: To recognize the importance of coastal fossils and prehistoric organism evolution, to protect important paleontological resources from human activities, to preserve significant paleontological sites to the fullest extent possible, and to take steps to preserve the information a site may yield.

  – Policy 1 - Discretionary development shall be reviewed to determine the geologic unit(s) to be impacted and paleontological significance of the geologic rock units containing them.

  – Policy 3 - Protect and preserve paleontological resources from destruction and avoid impacts to such resources where feasible.

3.8.3 Impact Analysis

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

(ii) Strong seismic ground shaking?

(iii) Seismic-related ground failure, including liquefaction?

(iv) Landslides?

Less than Significant Impact.

All Project Segments
The Project site is located within a seismically active area designated under the Alquist-Priolo Act as a special studies zone. Additionally, the Ventura County General Plan indicates that the Project area is subject to liquefaction as groundwater can be found less than 15 feet from the surface. Tsunamis could also occur since the Project site elevation is less than 30 feet above mean sea level.

In accordance with CEQA, this analysis addresses the potential impacts of the Project on the environment; it does not address the potential impact that the environment could inflict on the Project. As stated by the California Supreme Court, “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users.” (California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 386 (CBIA)).

During decommissioning activities, demolition and grading would be required to remove the existing concrete shoreline vault from the armor rock covered slope between PCH and Solimar Beach. After the existing facilities are removed, the armor rock would be replaced to close the gap in the armor rock seawall that came from concrete vault removal. The armor rock seawall is a permanent structure that would continue to maintain the structural integrity of PCH and provide erosion control to this area of Solimar Beach once the vault is removed. The riprap structure would be subject to potential geologic impacts from seismic shaking, liquefaction, or tsunami; however, the Project would be designed to ensure the replacement armor rock seawall would accommodate and withstand strong seismic shaking without suffering significant damage. The replacement armor rock seawall design would be reviewed and approved by the California Coastal Commission (CCC) and the California Department of Transportation (Caltrans) to ensure long-term structural integrity.

Project activities, including seawall structure replacement, would not exacerbate existing geological conditions. No long-term impacts to the coastline due to loss of slope stability or erosion would result from the Project. This analysis therefore does not evaluate existing environmental risks that could affect the Project because the Project would not exacerbate them, consistent with the Court’s ruling in CBIA. Therefore, the impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact.

Offshore Intake and Outfall Pipelines Segment
Offshore pipeline removal could require shallow excavations in the surf zone and beach areas. An excavator would be utilized as necessary to unearth any covered pipeline segments and would sidecast the material. Following pipeline removal, these areas would quickly fill in due to normal sand deposition during the next tide cycle. No substantial sand erosion or sand loss would result. Therefore, the impact would be less than significant.

Shoreline Vault Segment

During decommissioning activities, demolition and grading would be required to remove the existing concrete vault. A grading plan for the vault demolition and armor rock seawall restoration would be developed as part of the Excavation and Grading Plan, as described in Section 2.2.3, Shoreline Vault. This grading plan would ensure that the vault removal activities and restoration do not result in soil erosion or loss of topsoil from the compacted soil adjacent to and under the PCH. The Project work plans would be submitted to Caltrans for an encroachment permit along Pacific Coast Highway and to the CCC for a Coastal Development Permit before Project activities begin. After the existing facilities are removed, the surrounding armor rock removed to access the concrete vault would be replaced to close the gap in the armor rock seawall and prevent future erosion from the compacted soil. Therefore, the impact would be less than significant.

Onshore Pipeline Segment

The 36-inch-diameter conduit would require minor excavation to pothole the area for access to the onshore pipelines. All material would be placed back into the holes and recompressed once the investigation is complete. Grouting the 36-inch-diameter conduit would not require any soil disturbance. Therefore, the impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact.

All Project Segments

See discussion under Section a (i-iv) above.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

(d to f) No Impact.

All Project Segments

The Project would not take place on expansive soils or involve the use of septic tanks or alternative wastewater disposal systems. In addition, the Project site is not located on soils identified to contain unique paleontological resources or unique geologic features. Therefore, there would be no impact.

3.8.4 Mitigation Summary

The Project would have no significant impacts to geology, soils, and paleontological resources; therefore, no mitigation is required.
3.9 GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>GREENHOUSE GAS EMISSIONS – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

3.9.1 Environmental Setting

Greenhouse Gases (GHGs), defined as any gas that absorbs infrared radiation in the atmosphere, include, but are not limited to, water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorocarbons. These GHGs trap and build up heat in the atmosphere near the earth’s surface, commonly known as the Greenhouse Effect. The atmosphere and the oceans are reaching their capacity to absorb CO₂ and other GHGs, leading to significant global climate change in the future. Unlike criteria pollutants and TACs, which are pollutants of regional and local concern, GHGs and climate change are a local, regional, and global issue. There is widespread international scientific consensus that human-caused increases in GHGs have and will continue to contribute to climate change, although there is uncertainty concerning the magnitude and rate of the warming.

As stated on California’s Climate Change Portal (https://www.climatechange.ca.gov/state/):

> Climate change is already having significant and widespread impacts on California's economy and environment. California's unique and valuable natural treasures - hundreds of miles of coastline, majestic forests and high value agriculture, snow-melt fed fresh water supply, vast snow and water fueled recreational opportunities, as well as other natural wonders - are especially at risk.

In addition, the Intergovernmental Panel on Climate Change (IPCC), in the section of its Fifth Assessment Report by Working Group II, “Climate Change 2014: Impacts, Adaptation, and Vulnerability,” (IPCC 2014; released March 31, 2014) specific to North America (Chapter 26), stated in part:

> North American ecosystems are under increasing stress from rising temperatures, carbon dioxide (CO₂) concentrations, and sea-levels, and are particularly vulnerable to climate extremes. Climate stresses occur alongside other anthropogenic influences on ecosystems, including land-use changes, non-native species, and pollution, and in many cases will exacerbate these pressures. [26.4.1; 26.4.3]. Evidence since the Fourth Assessment Report (AR4) highlights increased
ecosystem vulnerability to multiple and interacting climate stresses in forest ecosystems, through wildfire activity, regional drought, high temperatures, and infestations [26.4.2.1; Box 26-2]; and in coastal zones due to increasing temperatures, ocean acidification, coral reef bleaching, increased sediment load in runoff, sea level rise (SLR), storms, and storm surges [26.4.3.1].

Climate change is having widespread impacts on California’s economy and environment and will continue to affect communities across the state. Many impacts already occur, including increased fires, floods, severe storms, and heat waves (California Climate Change Center 2012). Documented effects of climate change in California include increased average, maximum, and minimum temperatures; decreased spring runoff to the Sacramento River; shrinking glaciers in the Sierra Nevada; sea-level rise at the Golden Gate Bridge; warmer temperatures in Lake Tahoe, Mono Lake, and other major lakes; and plant and animal species found at changed elevations (Office of Environmental Health Hazard Assessment 2018).

According to the IPCC, the concentration of CO₂, the primary GHG, has increased from approximately 280 parts per million (ppm) in pre-industrial times to well over 380 ppm today. CO₂ concentrations are currently increasing about 1.9 ppm/year; present CO₂ concentrations are higher than any time in at least the last 650,000 years. CO₂ is also used as a reference gas for climate change. To account for different GHG warming potentials, emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, if the CO₂ warming potential is set at a reference value of 1, CH₄ has a warming potential of 25 (i.e., 1 ton of methane has the same warming potential as 25 tons of CO₂ [IPCC 2014]), while nitrous oxide has a warming potential of 298.

To meet both the statewide 2020 GHG reduction target that requires California to reduce its total statewide GHG emissions to 1990 levels (Health & Saf. Code, § 38550), and the 2050 goal of 80 percent below 1990 levels (Executive Order S-3-05), not only must projects contribute to slowing the increase in GHG emissions, but, ultimately, projects should contribute to reducing the State’s GHG output. In order to reach California’s GHG reduction targets, per capita emissions would need to be reduced by slightly less than 5 percent each year from 2020 to 2030, with continued reductions through 2050.

3.9.2 Regulatory Setting

Federal and state laws and regulations pertaining to greenhouse gas emissions and relevant to the Project are identified in Appendix A. Various entities address this issue area at the state and regional levels. For example, CARB’s Climate Change Scoping Plan (2008) establishes GHG reduction strategies and goals for California’s future, focusing on large contributors to state GHG emissions (e.g., power generation and transportation).
AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a statewide GHG emissions cap. It requires that statewide GHG emissions be reduced to 1990 levels by 2020. In 2008 and 2014, CARB approved the Scoping Plan and the first update to the Scoping Plan, respectively. In 2016, the California Legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, CARB approved the 2017 Scoping Plan Update: The Strategy for Achieving California’s 2030 GHG Target in November 2017. The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California’s 2030 GHG reduction target.

At the local level, the VCAPCD is the agency primarily responsible for air quality standards attainment as established by CARB and USEPA. However, the VCAPCD has not approved a GHG significance threshold for construction or operational emissions.

### 3.9.3 Impact Analysis

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

(a to b) Less than Significant Impact.

All Project Segments

Given the global nature of climate change resulting from GHG emissions, GHG emission impacts are inherently cumulative in nature. The determination whether a project’s GHG emissions impacts are significant depends on whether emissions would be a cumulatively considerable contribution to the significant cumulative impact.

GHG emissions from Project equipment were estimated in Table 3.9-1 using the most recent emission factors and load factors for construction equipment, marine engines and on-road vehicles obtained from the CalEEMod User’s Guide, the EMFAC model, the ICF International Current Methodologies in Preparing Mobile Source Port-Related Emissions Inventories Report, and The Port of Long Beach 2013 Emissions Inventory.

The VCAPCD has not established GHG thresholds and therefore CSLC staff reviewed recommended thresholds for the air districts adjacent to Ventura county and determined that, for the purposes of this analysis, any GHG emissions over the San Luis Obispo Air Pollution Control District (SLOAPCD) Bright-Line threshold of 1,150 MTCO$_2$e would constitute a potentially significant impact (SLOAPCD 2012 and 2012a). This threshold is
more conservative than the South Coast Air Quality Management District’s interim operational emissions significance threshold of 10,000 metric tons of CO₂ equivalent per year (MTCO₂e/yr). Based on the projected GHG emissions, offshore and onshore Project activities would emit approximately 0.002 tons of N₂O, 0.017 tons of CH₄, and 74 tons of CO₂. Converting these GHGs to MTCO₂e yielded a total GHG emission estimation of 68 MTCO₂e for the Project. This amount is significantly below the SLOAPCD GHG threshold of 1,150 MTCO₂e. While SLOAPCD requires that the construction emissions generating MTCO₂e be amortized over the operational Project life span or 25 years, whichever is longer, even without amortization the Project’s GHG impact would still be well below the threshold. In addition, CRC shall implement best management practices outlined in Appendix D to minimize NOx, ROGs, and dust generation from the Project site to further minimize GHG generation. Therefore, this impact would be less than significant.

Table 3.9-1. Estimated GHG Total Project Emissions

<table>
<thead>
<tr>
<th>Phase</th>
<th>CO₂ (Tons/Year)</th>
<th>N₂O (Tons/Year)</th>
<th>CH₄ (Tons/Year)</th>
<th>MTCO₂e (Annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Intake Structure Removal</td>
<td>7.8</td>
<td>0.000</td>
<td>0.001</td>
<td>7.2</td>
</tr>
<tr>
<td>Onshore Casing and Pipeline Decommissioning</td>
<td>12.0</td>
<td>0.000</td>
<td>0.003</td>
<td>11.0</td>
</tr>
<tr>
<td>Onshore Pipeline Recovery and Removal</td>
<td>22.9</td>
<td>0.000</td>
<td>0.006</td>
<td>21.1</td>
</tr>
<tr>
<td>Onshore Vault Removal and Seawall Construction</td>
<td>19.4</td>
<td>0.000</td>
<td>0.005</td>
<td>17.9</td>
</tr>
<tr>
<td>Offshore Pipeline Removal Option</td>
<td>11.8</td>
<td>0.000</td>
<td>0.001</td>
<td>10.8</td>
</tr>
<tr>
<td>TOTAL EMISSIONS</td>
<td>74.0</td>
<td>0.002</td>
<td>0.017</td>
<td>68.0</td>
</tr>
</tbody>
</table>

3.9.4 Mitigation Summary

The Project would have no significant impacts to greenhouse gas emissions; therefore, no mitigation is required.
### 3.10 HAZARDS AND HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>HAZARDS AND HAZARDOUS MATERIALS - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise or people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

### 3.10.1 Environmental Setting

#### 3.10.1.1 Project Location and Surroundings

The Project site is located along Ventura County coast at Solimar Beach, between two residential developments. Pacific Coast Highway, UPRR, and U.S. 101 are located adjacent to the north of the Project site. The nearest airport (Oxnard Airport) is located approximately 12.5 miles southeast. The closest school is Sheridan Way in the city of Ventura, approximately 4 miles east of the Project site. Online Review Searches of the State Water Resources Control Board (SWRCB) (SWRCB 2019) GeoTracker and Department of Toxic Substances Control (DTSC) (DTSC 2019) Envirostor databases (commonly referred to as the "Cortese List" (Gov Code, § 65962.5)) showed no potentially
contaminated sites within the Project area. The nearest hazardous materials site is located approximately 4 miles southeast, towards the city of Ventura on Front Street (Caltrans Ventura Maintenance Facility LUST Cleanup Site).

3.10.2 Regulatory Setting

Federal and state laws and regulations pertaining to hazards and hazardous materials and relevant to the Project are identified in Appendix A. At the local level, the onshore Project area is located within the County’s jurisdiction (CAP 2017). Local goals, policies, or regulations applicable to this area with respect to hazards and hazardous materials are listed below.

- Hazards Goal 1: To protect public safety and property from naturally occurring and human-induced hazards as provided in County ordinances.

- Energy and Industrial Facilities – Goal 1: To allow continued exploration and production of oil and gas in most of the North Coast sub-area, and to allow the necessary expansion of major, existing processing facilities while meeting Coastal Act and County objectives and maintaining environmental quality.
  - Policy 13: Owners/operators shall notify both the County of Ventura Planning Division and any other designated affected State agencies (e.g. DOGGR, CSFM, CSLC, LARWQCB) of any intent to decommission or remove any pipelines or facilities. Upon completion of pipeline construction or removal of pipelines or facilities, the site shall be restored to the approximate previous grade and condition. Upon removal or decommissioning of pipelines or facilities, an assessment of the surrounding soils shall be conducted by a qualified licensed expert, e.g. a licensed geologist or registered professional civil engineer, to determine whether or not those soils are contaminated. If the soils are found to be contaminated, a soil remediation plan delineating the method and timing of remediation shall be prepared and submitted to the County Planning Division and the Los Angeles Regional Water Quality Control Board for their review and approval. All excavated materials shall be replaced in reverse order with topsoil replaced at grade level and compacted if necessary. All sites previously covered with native vegetation shall be re-seeded with the same or recovered with the previously removed vegetation materials and shall include measures as deemed necessary to prevent erosion until the vegetation can become established.
  - Policy 19: Upon decommissioning of off-shore facilities that contain on-shore facilities or pipelines (or “components”), a phasing plan shall be submitted delineating the timeline for disposition of the on-shore facilities.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 2.1.2.1: Applicants for land use and development permits shall provide all necessary
information relative to identified hazards that may affect or be affected by their proposed project. Applicants shall also specify how they intend to mitigate identified hazards.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 2.15.2.4: Applicants shall provide a statement indicating the presence of any hazardous wastes on a site, prior to development. The applicant must demonstrate that the waste site is properly closed or will be closed before the project is inaugurated.

3.10.3 Impact Analysis

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

(a to b) Less than Significant with Mitigation.

Offshore Intake and Outfall Pipelines Segment

During decommissioning operations, the DSV and associated offshore and onshore equipment would contain hazardous materials such as fuel, lubricant, and oil supplies. However, the Project vessel would be small and have a limited amount of petroleum-fueled equipment on board, which greatly reduces both the likelihood that a release would occur and the severity of any release. The likelihood of a vessel fuel oil spill due to a collision is also extremely small given the brief duration of decommissioning activities, shallow water conditions, and appropriate noticing to watercraft via the Advanced Notice to Mariners (MM REC-1). In addition, large equipment operating on the beach would be checked daily for leaks prior to entering the work area and would not be left on the beach overnight. Regardless, the release of unanticipated hazardous materials into the environment is considered a potentially significant impact. MM HAZ-1 would require implementation of the Oil Spill Response and Contingency Plan (Appendix H) to ensure hazardous materials are managed and stored properly in the coastal environment to reduce the oil spill potential, and would establish a protocol for notification and clean-up to reduce the impact if a hazardous release occurs. The offshore support work vessel would also carry sorbent material for rapid deployment to contain and clean up any small spill or sheen on the water surface. With the implementation of these measures, the impact would be less than significant.

**MM HAZ-1: Oil Spill Response and Contingency Plan Implementation.** The Project Oil Spill Response and Contingency Plan (OSRCP) shall be implemented during all Project activities in the event of a release of oil or...
contaminants. The OSRCP delineates prevention measures including daily inspection of equipment, refueling at designated stations, and secondary equipment containment for equipment to prevent spills. Additionally, the onshore and offshore work sites shall maintain onsite response equipment to clean up minor spills. In the event of a major spill (greater than five barrels) the OSRCP requires CRC to utilize an independent oil spill response contractor (Marine Spill Response Corporation) to provide secondary cleanup.

Impacts could also result from existing external anti-corrosive pipeline coating or mastic filler that may contain asbestos. The external coatings and filler would be sampled and tested for the presence of any hazardous materials prior to offshore pipeline removal. If asbestos is found, MM HAZ-2 (Appendix I) would ensure that hazardous materials are removed from the Project site, by certified professionals, while minimizing exposure to the marine environment. Specifically, pipelines would be pulled to shore and cut into sections using best management practices to contain and recover any loose material. The pipeline ends would then be wrapped with plastic sheeting and tape to seal them, and material would be transported to an appropriate waste receiving facility for recycling or disposal. If the Project alternative for offshore recovery of the pipelines is necessary, cuts would occur underwater where the asbestos would remain wet and not friable. Any loose material would be recovered from the seafloor. Once on deck, the pipelines would be handled as described above by certified professionals who would ensure minimized exposure to the marine environment. With the implementation of this measure, the impact would be less than significant.

**MM HAZ-2: Hazardous Materials Management and Contingency Plan**

**Implementation.** The Project’s Hazardous Materials Management and Contingency Plan shall be implemented during all Project activities which includes identification of appropriate equipment fueling and maintenance areas, testing for potential hazardous materials prior to facility demolition and/or removal, daily equipment inspection schedule, a spill response plan, and maintenance of on-site spill response supplies.

**Shoreline Vault and Onshore Pipelines Segment**

The shoreline vault contains standing water, which was investigated in April 2019. Lab results showed no significant concentrations of hazardous materials within the vault. Prior to demolition, the shoreline vault would be purged of standing water and the liquid resampled to confirm there are no contaminated materials. In addition, the shoreline vault contains water pumps, piping, metal grating and other ancillary equipment. This material would be surveyed for asbestos containing materials or lead based paint just prior to the planned demolition activities. If contaminated materials are found during the survey or sampling, MM HAZ-2 would ensure disposal in a way that no public or environmental hazards would occur. With the implementation of this measure, the impact would be less than significant.
Small quantities of hazardous materials, such as fuels, hydraulic fluids, and oils would be used for the decommissioning equipment operating onshore. The unanticipated release of hazardous materials into the onshore environment is considered a potentially significant impact. **MM HAZ-2** would ensure that all fuels, hydraulic fluids, and oils supplied for onshore activities would be stored in proper containment devices at the designated staging areas. All onshore fueling operations would only occur at designated staging areas. In addition, **MM HAZ-1** would ensure that, in the case of a minor spill, sorbent materials would be maintained on-site for immediate response. With the implementation of these measures, the impact would be less than significant.

**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

**f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

**(c to g) No Impact.**

**All Project Segments**

The Project site is not within 0.25 mile of any existing or proposed school, and the Project is not anticipated to emit any hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of any existing or proposed school. The Project site is not within an airport land use plan, within 2 miles of a public airport, or within the vicinity of a private airstrip. The onshore Project area is located adjacent to the PCH and along the CRC access road but would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan or expose people or structures to any significant risk from wildfires. Therefore, there would be no impact.

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements in
providing information about hazardous materials release site locations. Government Code section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List at least annually. The Project is not located on a site included on the Cortese List (DTSC 2019). Therefore, there would be no impact.

3.10.4 Mitigation Summary

Implementation of the following mitigation measure(s) would reduce the potential for Project-related impacts to hazardous materials to less than significant.

- MM HAZ-1: Oil Spill Response and Contingency Plan Implementation
- MM REC-1: Advanced Notice to Mariners
### 3.11 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>HYDROLOGY AND WATER QUALITY - Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Result in substantial erosion or siltation on or off site;</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) Impede or redirect flood flows?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

### 3.11.1 Environmental Setting

#### 3.11.1.1 Marine Areas

The California Current is the primary driver for water transport along the northern and central portions of the California coast, including the Ventura County coastline. The California Current is generally characterized as a broad, shallow, slow moving southerly current characterized by cold, low-salinity, high-oxygen water from Alaska. The nearshore manifestations of the California Current can vary in both speed and direction as winds, tides, and surf conditions can dramatically alter local conditions. The California Countercurrent brings warmer and more saline waters from Baja California north along the Ventura County coastline, and the two currents mix near the surface surrounding the
Channel Islands. Habitat for both cold and warm water species occurs where these two currents mix, in the Channel Islands and on the Ventura Coast.

Surface water temperatures in the Project MSA typically range from 55 to 67 degrees Fahrenheit (°F) with a mean value of 62°F. Winds along this section of the coastline are predominantly from the northwest, and promote the surface water mass' offshore movement with subsequent replacement by cold, nutrient-rich water upwelling from deeper layers. Seasonal upwelling plays an important role in temperature and nutrient cycling along the entire coast of California. Upwelling is not restricted temporally and can occur at any time during the year when the necessary wind conditions persist.

3.11.1.2 Terrestrial Areas

The Project area is located within the Ventura River Watershed, identified as Zone 1 by the Ventura County Water Resources Division (Ventura County Watershed Protection District 2016). It is located in the North Coast Groundwater Basin within the Ventura River Watershed. This basin is mainly coastal with narrow strips of permeable sediments and marine terrace deposits. There are 26 groundwater wells within the Basin, but only eight are active. The closest water well, Well No. 49032, is an irrigation well located 3.75 miles southeast of the Project site.

According to the Ventura Countywide Unified Storm Drain Map (Ventura County 2015), there is an outlet for the Line Canyon River System (River ID C-6) which runs east of “A” Lease Canyon Road, passes under U.S. 101 and the PCH via a culvert, and terminates at a beach outfall approximately 320 feet downcoast from the concrete vault. The drainage originates at the top of the ridge southwest of Gas Line Road, approximately 1.9 miles from the Project site. The nearest rainfall gauge from the Red Mountain Station (308), located approximately 2.5 miles from the Project site, measured 2018 rainfall at 12.75 inches compared to the annual average of 14.67 inches for the County.

The Ventura Countywide Stormwater Quality Management Program map (Ventura County 2015) does not show any existing stormwater infrastructure near the Project area. All stormwater generated or flowing through the Project area would drain onto the beach. The paved roadways of U.S. 101 and PCH, the access roads, paved staging areas, and the UPRR right-of-way are all impervious surfaces within and surrounding the Project area.

The PCH, adjacent to the Project site, is within a low risk flood zone/beach zone; however, the main Project site is located in a Federal Emergency Management Agency (FEMA) Regulatory Floodway Zone VE, which is designated as a Special Flood Hazard area subject to coastal high hazard flooding due to its location in areas of high velocity water (waves) (FEMA 2010).
3.11.2 Regulatory Setting

Federal and state laws and regulations pertaining to hydrology and water quality and relevant to the Project are identified in Appendix A. Local policies from the Ventura County CAP (2017) applicable to this area with respect to hydrology and water quality are listed below.

- Policy 1.3.2.2: Discretionary development shall comply with all applicable County and State water regulations.
- Policy 1.3.2.4: Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.

3.11.3 Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant With Mitigation.

Offshore Intake and Outfall Pipelines Segment

The pipelines would be pulled into shore along their present alignment, or if the Project alternative for offshore recovery of the pipelines is necessary, the pipelines would be cut and lifted from their exposed location on the sea floor. Either option would minimize seafloor disturbance. Pipeline removal activities would result in small-scale, temporary increases in nearshore turbidity consisting of sand, silt, and associated organic matter suspended in the water column. While large-scale increases of organic matter within a water column (e.g., ocean upwelling, lake mixing, etc.) can increase dissolved nutrient concentrations, resulting in increased algal blooms, the Project would introduce minimal amounts of organic matter into the water column and the associated water turbidity would not substantially inhibit phytoplankton photosynthesis. In addition, the offshore Project area is located within sandy intertidal and shallow subtidal habitats that have regular wave action disturbance. The increased water turbidity and associated water quality issues that could result from Project activities would be less severe than those that commonly occur from winter storms, and thus the Project disturbance would be comparable to that which occurs naturally in this coastal region. Therefore, the impact would be less than significant.

As discussed in Section 3.10, Hazards and Hazardous Materials, potentially significant water quality impacts could also result from the inadvertent release of petroleum products. MM HAZ-1 would establish a protocol for notification and clean-up to reduce the impact if a spill occurs. The offshore support work vessel would also carry sorbent material for
rapid deployment to contain and clean up any small spill or sheen on the water surface. Water quality impacts could also result from potential asbestos within the external anti-corrosive pipeline coating or mastic filler. If asbestos is present, MM HAZ-2 would ensure that hazardous materials are removed from the Project site, by certified professionals, while minimizing exposure to the marine environment. With the implementation of these measures, the impact would be less than significant.

Shoreline Vault and Onshore Pipelines Segment

The shoreline vault would be removed to at least minus 5 feet below ground surface and partially abandoned in-place. To access this area, existing riprap at the base of the vault would be removed and then replaced following vault removal. Beach sand would be temporarily excavated and stockpiled to expose the vault walls for removal, increasing local turbidity. However, the stockpiles would have a short-term duration and would be located in the highly disturbed intertidal zone with wave forces that normally create turbidity. Therefore, the impact would be less than significant.

As discussed in Section 2.2.3, Shoreline Vault, a grading plan for the vault demolition and armor rock seawall restoration would be developed as part of the Excavation and Grading Plan. This grading plan would ensure that the vault removal activities and restoration do not result in soil erosion or loss of topsoil from the compacted soil adjacent to and under the PCH. In addition, the onshore pipelines would require minor excavation to pothole and investigate the pipeline casing. All material would be placed back into the holes and recompacted once the investigation is complete. Grouting the 36-inch-diameter conduit would not require any soil disturbance. Therefore, the impact would be less than significant.

Accidental hazardous materials discharge to the beach during construction could temporarily adversely affect ocean water quality or result in a violation of water quality standards. Contaminants from construction vehicles and equipment could increase the pollutant load in any runoff transported to the ocean. MM HAZ-1 and MM HAZ-2 would ensure that rapid deployment occurs for minor spills, major spills have a process for notification and clean-up, and any hazardous materials are removed from the Project area with minimal affect on the marine or terrestrial environment. With implementation of these measures, the impact would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
Less than Significant Impact.

All Project Segments

The Project would not require use of groundwater resources. However, as this Project would be on the coastline, the water table would be very close to the surface. The shoreline vault excavation may require dewatering which could create some subsurface alterations in groundwater flow. All alterations would be temporary, and the area would be restored to pre-Project conditions after decommissioning is completed, with sandy soils re-compacted and any impacted vegetation restored to its natural state, thus restoring natural groundwater recharge rates in the area. Therefore, the impact would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:

i) Result in substantial erosion or siltation on or off site;

ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;

Less than Significant Impact.

All Project Segments

During shoreline vault removal, the riprap structure relocation would increase the risk of erosion and siltation and temporary excavation would occur on San Miguelito Road to access the onshore pipeline casing. These temporary impacts would be further minimized both by the Excavation and Grading Plan (see Section 2.2.3, Shoreline Vault) and the onshore excavation trench box design. The riprap would be replaced after the onshore pipelines and casing are abandoned and the concrete vault removed, thus reducing the impermeable surface area along this stretch of coastline by returning it to pre-Project and existing riprap conditions.

The roadway adjacent to the Project is in a low risk flood zone; however, the shoreline vault is located in a FEMA Regulatory Floodway Zone VE, which is a coastal high hazard area due to its location and inherent areas of high-velocity water (waves). Regardless, the Project would not create additional impervious surface or increase any surface runoff that could cause flooding. In addition, all above-ground structures, except for the replaced riprap structure, would be removed thereby reducing any increased flood risk and maintaining the existing drainage pattern on-site. Therefore, the impact would be less than significant.
iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant with Mitigation.

All Project Segments

The Line Canyon River System beach outfall is located 320 feet away from the vault structure; therefore, there is no stormwater drainage system within the onshore Project area. Any contaminated materials found during onshore Project activities could contribute to polluted runoff draining to the beach. MM HAZ-1 and MM HAZ-2 would ensure that proper clean up and disposal occurs for any accidental spill or hazardous material release. With the implementation of these measures, the impacts would be less than significant.

iv) Impede or redirect flood flows?

No Impact.

All Project Segments

Although the Project site is located within the FEMA Regulatory Floodway Zone VE, onshore Project activities would not create additional impervious surfaces or provide any impediment to existing flood flows. The minor onshore excavation would be temporary and would be backfilled immediately following pipeline grouting. Therefore, there would be no impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact.

All Project Segments

The Project site is located in a FEMA coastal high hazard area, defined by a one percent annual chance of a 100-year flood and wave effects of three feet or more. The Project site is therefore at risk of flooding and tsunami. However, Project decommissioning activities would only occur during low and very low tides, and all equipment would be moved off the beach during high tide, which reduces the inundation risk. There are no permanent Project components, except for the relocated riprap set to match the existing adjacent riprap structure, that would be located above ground and subject to flood or tsunami hazards. The subsurface onshore pipelines and casing would be backfilled and grouted in place. Therefore, the impact would be less than significant.
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact.

All Project Segments

The Project site is not a part of a groundwater sustainability management planning area and its activities would not conflict with any water quality control plan. Therefore, there would be no impact.

3.11.4 Mitigation Summary

Implementation of the following mitigation measure(s) would reduce the potential for Project-related impacts to hydrology and water quality to less than significant.

- MM HAZ-1: Oil Spill Response and Contingency Plan Implementation
3.12 LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>LAND USE AND PLANNING – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

3.12.1 Environmental Setting

The onshore Project site is located within the North Coast Planning Area of the Ventura County CAP and is zoned as Coastal Open Space (COS), which is occupied by Solimar Beach. The surrounding parcels are zoned Coastal Open Space (COS), Coastal Agriculture (CA), and Residential Beach (RV; 3,000 square feet). According to the Ventura County CAP, North Coast Land Use Map (Ventura County 2014), land use designations in the vicinity of the Project site include the Solimar and Faria Existing (Residential) Communities (Residential Low 1-2 Dwelling Units/Acre), Open Space along PCH and US 101, and Agricultural Development further northwest in the upland areas near the CRC Grubb Lease facility.

The offshore pipelines are located within state waters (CSLC Lease PRC 3913.1), which extend to the state-federal boundary (three nautical miles offshore).

3.12.2 Regulatory Setting

Federal and state laws and regulations pertaining to land use and planning and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to land use and planning are listed below.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 1.10.2.1: Discretionary development which would cause significant impacts to coastal beaches or sand dunes shall be prohibited unless the development is conditioned to mitigate the impacts to less than significant levels.

3.12.3 Impact Analysis

a) Physically divide an established community?

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?
(a to b) No Impact.

All Project Segments

The onshore Project site is located adjacent to Solimar Beach between Pitas Point and Emma Wood State Beach within Ventura County Assessor’s Parcel Number 060-0-330-015. The Project site has a land use designation of Open Space and is zoned COS (10-acre minimum) within the Ventura County Local Coastal Plan – Ventura County Area Plan. The offshore Project site is located within State Lease PRC 3913.1. The pipeline alignments are outside of any marine sanctuary boundaries.

The Project is a short-term construction project and would not involve construction of any above-ground structures which would physically divide an established community. Therefore, there would be no impact.

The Project would remove offshore pipelines and the shoreline vault structure as well as grout the onshore pipeline casing and appurtenant pipelines. The above-ground uses would not change, the Project activities would be located within existing right-of-ways, there would be no change in land use. Because there would be no change in land use in the offshore and onshore Project areas, there would be no conflict with land use policies in those locations. Therefore, there would be no impact.

3.12.4 Mitigation Summary

The Project would have no impact to land use and planning; therefore, no mitigation is required.
3.13 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>MINERAL RESOURCES – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
</tbody>
</table>

3.13.1 Environmental Setting

Ventura County General Plan (2017) Resources Appendix lists petroleum (oil and gas) and aggregate (principally sand and gravel) as the two principal mineral resources. The aggregate resource areas are based on Mineral Resource Zone maps developed by the State Division of Mines and Geology as per the Surface Mining and Reclamation Act of 1975. The Project site is located within an area classified by the California Division of Mines and Geology (1981) as MRZ-3. MRZ-3 areas contain mineral deposits, but the deposit’s significance cannot be evaluated from available data.

According to the California Department of Conservation (2018), Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder (Figure 3.13-1), the Project site is not located within an active oil and gas development area, but it is located adjacent to the San Miguelito Field located northeast past U.S. 101. The closest well is approximately 0.5-mile south along the shoreline in front of Solimar Beach.

3.13.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to mineral resources that are relevant to the Project. State laws and regulations pertaining to mineral resources and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to mineral resources are listed below.

- Policy 1.4.2.8: Discretionary development within a Mineral Resource Area (see Resource Protection Map) shall be subject to the provisions of the Mineral Resource Protection (MRP) Overlay Zone and is prohibited if the use will significantly hamper or preclude access to or the extraction of mineral resources.
3.13.3 Impact Analysis

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
(a to b) No Impact.

All Project Segments

There are no known mineral resources in or near the Project area, and Project activities would not hinder access to nearby mineral resource extractions. The offshore pipelines and vault removal and riprap structure reconstruction would not result in the loss of any known mineral resource in the area, and grouting the onshore pipelines and casing would consume a negligible quantity of aggregate that would not result in the loss of any known mineral resources or recovery sites in the area. Therefore, there would be no impact.

3.13.4 Mitigation Summary

The Project would have no impact to mineral resources; therefore, no mitigation is required.
3.14 NOISE

<table>
<thead>
<tr>
<th>NOISE – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Generate excessive ground-borne vibration or ground-borne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

3.14.1 Environmental Setting

The Project area is located on Ventura County coast, along the shoulder of PCH and in close proximity to U.S. 101 and the UPRR. The onshore Project site is also between the Solimar and Faria Beach residential communities. Existing ambient noise levels in the Project vicinity are largely dictated by traffic noise from U.S. 101, surf noise and occasional rail traffic. Noise impacts on biological resources are analyzed in Section 3.4, Biological Resources.

3.14.1.1 Basis of Environmental Acoustics and Vibration

Sound, Noise, and Acoustics

Sound is the mechanical energy from a vibrating object that is transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is defined as unwanted sound (i.e., loud, unexpected, or annoying). Acoustics is the physics of sound. A sound source generates pressure waves, the amplitude of which determines the source’s perceived loudness. Sound pressure level (SPL) is described in terms of decibel (dB), with near-total silence for human hearing corresponding to 0 dB. When two sources at the same location each produce the same pressure waves, the resulting sound level at a given distance from that location is approximately 3 dB higher than the sound level produced by only one source. For example, if one automobile produces a 70 dB sound pressure level when it passes an observer, two cars passing simultaneously do not produce 140 dB; rather, they combine to produce 73 dB.
The perception of loudness can be approximated by filtering frequencies using the standardized A-weighting network. The “A-weighted” noise level de-emphasizes low and very high frequencies of sound in a manner similar to the human ear’s de-emphasis of these frequencies (OSHA 2013, and AIHA 2003). There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. All noise levels reported in this section are in terms of A-weighting.

In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear. However, people can begin to detect 3 dB increases in noise levels, with a 5 dB increase generally perceived as distinctly noticeable and a 10 dB increase generally perceived as doubling the loudness. Four sound level descriptors are commonly used in environmental noise analysis:

- **Equivalent sound level ($L_{eq}$):** The $L_{eq}$ is the average sound level that contains the same acoustical energy as the time-varying sound that actually occurs during that period.

- **Maximum sound level ($L_{max}$):** The highest instantaneous sound level measured during a specified period.

- **Day-night average level ($L_{dn}$):** The energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours (10:00 p.m. to 7:00 a.m.).

- **Community noise equivalent level (CNEL):** Similar to $L_{dn}$, CNEL is the energy-average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours (10:00 p.m. to 7:00 a.m.) plus a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours (7:00 p.m. to 10:00 p.m.). The CNEL is usually within one dB of the $L_{dn}$.

Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, and the sound level attenuates (decreases) at a rate of 6 dB each time the distance doubles from a point or stationary source. Roadways, highways, and moving trains (to some extent) consist of several localized noise sources on a defined path; these are treated as “line” sources, which approximate the effect of several point sources. Sound levels attenuate at a rate of 3 dB for each time the distance doubles from a line source. Therefore, noise from a line source decreases less with distance than noise from a point source.
Ground-borne Vibration

In contrast to airborne noise, ground-borne vibration is not a common environmental problem. Vibration from sources such as buses and trucks is not usually perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

Ground-borne vibration can cause detectable building floor movement, window rattling, items shaking on shelves or walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Human annoyance from vibration can often occur and can happen when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.

Vibration is an oscillatory motion which can be described in terms of displacement, velocity or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that buildings undergo.

3.14.1.2 Existing Noise Conditions

Ambient noise measurements were taken at two locations representing the existing noise level at the nearest residences, both north (Faria Beach, Location No. 1) and south (Solimar Beach, Location No. 2) of the Project site (Figure 3.14-1). Noise measurements were obtained using a Larson-Davis (DSP80 or LXT) precision-integrating Type I sound level meter. The primary noise source is surf, to such an extent that daytime, evening, and nighttime ambient noise levels were very similar (Table 3.14-1).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Faria Beach (Nearest Residence)</th>
<th>Solimar Beach (Nearest Residence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date; Time</td>
<td>2/17/19; 8:28-8:43 a.m.</td>
<td>2/17/19; 8:51-9:06 a.m.</td>
</tr>
<tr>
<td>Noise level (dBA $L_{eq}$)</td>
<td>69.1</td>
<td>66.5</td>
</tr>
<tr>
<td>Date; Time</td>
<td>2/17/19; 3:21-3:36 p.m.</td>
<td>2/17/19; 3:30-3:55 p.m.</td>
</tr>
<tr>
<td>Noise level (dBA $L_{eq}$)</td>
<td>66.4</td>
<td>68.7</td>
</tr>
</tbody>
</table>
### 3.14.2 Regulatory Setting

Federal and state laws and regulations pertaining to noise and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to noise are limited to Ventura County General Plan Policies 2.16.2-1 through 2.16.2-3, which mostly address new development and land use compatibility with respect to noise. However, General Plan Policy 2.16.2-1(5) specifically addresses construction noise and requires construction noise to be evaluated and mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan (CNTCCP) prepared for Ventura County by Advanced Engineering Acoustics (2010). The CNTCCP states that residences are sensitive to construction noise during evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.), but not during daytime. Noise thresholds are not provided for daytime construction noise.

The Ventura County construction noise thresholds for residences are 50 dBA $L_{eq}$ (or ambient + 3 dBA) for evening and 45 dBA $L_{eq}$ (or ambient + 3 dBA) for nighttime.
Figure 3.14-1. Ambient Noise Measurement Locations
3.14.3 Impact Analysis

a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact.

All Project Segments

The Project would decommission and remove offshore and onshore facilities and grout the onshore pipeline casing and remaining appurtenant pipelines. No new long-term noise sources would be created nor would existing noise levels be exacerbated. No long-term impacts would result. However, decommissioning activities would generate temporary noise in the Project vicinity, including nearby beachfront residences. Peak-hour noise levels from Project activities were estimated for the nearest residences using the Roadway Construction Noise Model developed by the Federal Highway Administration (Table 3.14-2).

The onshore decommissioning peak-hour scenario is calculated from the onshore pipeline removal equipment list in Table 2-3 because this phase would generate the highest noise levels. This scenario includes three excavators, one dozer, one truck-mounted hydraulic winch, and one 4x4 truck within the proposed onshore staging area. The offshore decommissioning peak-hour scenario is calculated assuming the Project alternative for offshore recovery of the pipelines, where the DSV would be anchored as close to the beach as practical. Table 3.14-2 presents the modeled peak hour noise levels and compares them to the Ventura County construction noise thresholds, which are based on the ambient noise levels plus 3 dBA Leq. The modeled peak hour noise levels would not exceed the Ventura County construction noise thresholds for evening or nighttime. Therefore, the impact would be less than significant.

<table>
<thead>
<tr>
<th>Receptor</th>
<th>Onshore Decommissioning Peak Hour</th>
<th>Offshore Decommissioning Peak Hour</th>
<th>Construction Noise Threshold*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faria Beach (nearest residence)</td>
<td>55.0</td>
<td>53.7</td>
<td>Evening: 69.3, Nighttime: 69.6</td>
</tr>
<tr>
<td>Solimar Beach (nearest residence)</td>
<td>60.9</td>
<td>58.4</td>
<td>Evening: 65.1, Nighttime: 63.1</td>
</tr>
</tbody>
</table>

* Based on ambient + 3 dBA Leq (see Table 3.14-1)
Environmental Checklist and Analysis – Noise

b) Generate excessive ground-borne vibration or ground-borne noise levels?

Less than Significant Impact.

All Project Segments

While the Project would require the temporary use of heavy equipment, none of it is considered impact equipment (such as pile drivers), as defined by the Federal Highway Administration (USDOT 2006). The 2013 Caltrans Transportation and Construction Vibration Guidance Manual (CTCVGM), Table 19, indicates older residential structures (typical of the residences near the Project area) could be damaged by continuous or frequent intermittent vibration (typical of construction equipment) that exceeds a PPV of 0.3 in/sec. Table 20 of the CTCVGM indicates that humans can distinctly perceive and become annoyed by a continuous or frequent intermittent vibration (typical of construction equipment) exceeding a PPV of 0.04 in/sec.

Decommissioning-related vibration was estimated using methodology provided by the CTCVGM, and was based on how a large dozer would affect the nearest structure and inhabitants at least 750 feet away from the onshore work area (Caltrans 2013). This analysis indicates the Project would generate a PPV of 0.00107 at the nearest structure, which is much less than the PPV needed to cause damage to nearby residences or result in human annoyance. Therefore, the impact would be less than significant.

c) Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

No Impact.

All Project Segments

The Project site is not located within two miles or in the vicinity of a public airport or private airstrip. Also, the Project would not involve any aircraft uses for decommissioning, affect any airport or airstrip operations, or expose people on- or off-site to excessive aircraft noise levels. Therefore, there would be no impact.

3.14.4 Mitigation Summary

The Project would have no significant impacts to noise; therefore, no mitigation is required.
3.15 POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>POPULATION AND HOUSING – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

3.15.1 Environmental Setting

According to the U.S. Census Bureau (2019), Ventura County has a population of approximately 847,834 with an average household size of 3.04 persons. The Solimar and Faria Beach residential communities are the closest to the Project site, located 0.15 mile to the east and 0.26 mile to the west of the Project site, respectively.

3.15.2 Regulatory Setting

No federal, state, or local laws relevant to population and housing are applicable to the Project. The Ventura County General Plan Land Use Appendix (2013) and CAP (2017) include goals and policies addresses housing needs in the County’s unincorporated areas near the Project site. However, because the Project is a short-term decommissioning project, there are no relevant goals, objectives, or policies applicable to Project activities.

3.15.3 Impact Analysis

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

(a to b) No Impact.

All Project Segments

The Project would remove offshore pipelines and a shoreline vault as well as abandon-in-place the onshore pipeline casing and any remaining appurtenant pipelines. Persons working during the 73-day decommissioning Project may slightly increase the demand for...
temporary (rental) housing or hotel amenities; however, the small number of persons employed during the Project would not create a significant demand for housing or displace substantial numbers of available housing. The Project would not increase production of or generate the need for additional housing, generate new permanent jobs in the region, affect population growth, or displace existing housing or owners/tenants. Therefore, there would be no impact.

3.15.4 Mitigation Summary

The Project would have no impact to population and housing; therefore, no mitigation is required.
1 3.16 PUBLIC SERVICES

<table>
<thead>
<tr>
<th>PUBLIC SERVICES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Police Protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Schools?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Parks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Other public facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

2 3.16.1 Environmental Setting

3 The onshore Project area is located in unincorporated Ventura County; therefore, the County provides most of the services. Service providers are listed in Table 3.16-1.

Table 3.16-1. Summary of Public Service Providers

<table>
<thead>
<tr>
<th>Service</th>
<th>Provider(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>Ventura County Fire Department (Fire Station 25-Rincon)</td>
</tr>
<tr>
<td>Police</td>
<td>Ventura County Sheriff’s Office</td>
</tr>
<tr>
<td>School District</td>
<td>Ventura Unified School District</td>
</tr>
<tr>
<td>Parks</td>
<td>Ventura County Parks Department</td>
</tr>
</tbody>
</table>

5 The onshore Project site is within Ventura County Fire Department (VCFD) jurisdiction.
6 The VCFD has 33 stations and separate headquarters. Station 25 – Rincon is the closest station to the Project site, located approximately 3 miles northwest. Station 25 is staffed daily by three firefighters and maintains an engine, reserve engine, 1,800-gallon water tender, and a utility (VCFD 2019).

8 The Ventura County Sheriff’s Office is responsible for onshore law enforcement in unincorporated Ventura County. The Sheriff’s office headquarters is located approximately 10 minutes from the Project site, in the city of Ventura. Police protection services are also provided on Pacific Coast Highway and US 101 by the California
Highway Patrol (CHP) from their Ventura Office (Station 765 of the Coastal Division). Per the Penal Code, the County Sheriff’s Department is responsible for criminal offenses in unincorporated Ventura County (e.g., robberies), while the Ventura CHP is responsible for traffic-related offenses (e.g., traffic accidents).

The Ventura Unified School District (VUSD) provides elementary, middle, and high school education in the Project region. The VUSD consists of 31 schools, including 19 elementary schools, seven middle schools, five high schools, and several alternative schools. There are no schools adjacent to the Project area. The closest school to the onshore Project area is the Sheridan Way Elementary School, located approximately 4 miles southeast (Ventura County Unified School District 2019).

According to the Ventura County CAP (2017), within the North Coast Planning Area there are approximately 1,257 acres designated as Open Space and three parks (including Emma Wood State Beach, Faria and Hobson County Parks). Impacts to parks are discussed in Section 3.17, Recreation.

3.16.2 Regulatory Setting

Federal and state laws and regulations pertaining to public service and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to public services are listed below.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 4.7.2.2: Discretionary development shall be conditioned to provide adequate site security during the construction phase (e.g., licensed security guard or fencing around the construction site, and all construction equipment, tools, and appliances to be properly secured and serial numbers recorded for identification purposes).

- Ventura County CAP Section 30240: Environmentally Sensitive Habitat Areas, Adjacent Developments – (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.

3.16.3 Impact Analysis

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
1. 
   - Fire protection?

2. 
   - Police Protection?

3. 
   - Schools?

4. 
   - Parks?

5. 
   - Other public facilities?

6. **No Impact.**

7. **All Project Segments**

8. The Project is a short-term decommissioning project that does not involve the construction of any residences, buildings, or infrastructure. The Project would not require or generate a future need for any additional public services during or after decommissioning activities. Once the Project is complete, the Project site at Solimar Beach would be returned to pre-Project conditions. Therefore, there would be no impact.

9. **3.16.4 Mitigation Summary**

10. The Project would have no impact to public services; therefore, no mitigation is required.
3.17 RECREATION

<table>
<thead>
<tr>
<th>RECREATION</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Would the project interfere with existing use of offshore recreational boating opportunities?</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

3.17.1 Environmental Setting

Accessibility to and along the coastline is required by the California Coastal Act. The Project area is located within the County CAP’s North Coast Subarea, containing a Multi-Modal Route (characterized by several different recreational activity modes) approximately 12 miles long. The Route starts at Rincon Point (at the Santa Barbara County line) and extends south to Emma Wood State Beach (at the city of Ventura boundary). Half of this trail segment is a stand-alone bike path (Segments N1 and N3), and the remainder (Segment N2) is located within the public right-of-way for Old Pacific Coast Highway. Currently, only Multi-Modal Route segments N1 and N3 are complete Class 1 Pathways. There are also Single-Mode Routes for hikers and walkers along La Conchita Beach, Punta Gorda Beach, and the path on the rock revetment at Seacliff Beach (a return to source-of-origin route). The only pedestrian access to Solimar Beach near the Project site is via a concrete stairway located approximately 325 feet southeast of the vault structure or down the existing riprap revetment from the shoulder of PCH.

The North Coast Subarea Multi-Modal Route Segments N1, N2 and N3 are identified as follows:

- Segment N1 is a 4.0-mile-long improved, multi-modal pathway constructed by Caltrans as part of the Ventura to Santa Barbara Highway 101 HOV Lane project.
- This trail segment is a stand-alone bike path that can also accommodate hikers/walkers.

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4 The Commission has chosen to analyze this impact in addition to the impact analyses set forth in CEQA Guidelines Appendix G. Though use of the Appendix G checklist meets the requirements for an initial study, “public agencies are free to devise their own format.” (State CEQA Guidelines § 15063, subd. (f).)
Segment N2 is currently limited to a 7.1-mile-long Class 2 striped bike lane along Old Pacific Coast Highway, which is maintained by Caltrans. The existing bike lane is not ideal for hikers/walkers, and thus a parallel trail route should be constructed for this trail segment. Existing Single-Mode Routes for walking/hiking include the return to source-of-origin route on the Seacliff Beach rock revetment and seasonally-accessible beaches such as Faria Beach and Solimar Beach.

Segment N3 is a 1.0-mile-long improved multi-modal pathway operated by the California State Department of Parks and Recreation. The only Single-Mode Route along this trail segment is the seasonally-accessible shoreline at Emma Wood State Beach.

Figure 3.17-1. Excerpt from Figure 4.1-3 - North Coast from Ventura County CAP (2017)

### 3.17.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to recreation that are relevant to the Project. State laws and regulations pertaining to recreation and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to recreation are listed below.

Environmental Checklist and Analysis – Recreation

- Ventura County General Plan (Goals, Policies, and Programs) Policy 4.10.2.2: Discretionary development which would obstruct or adversely impact access to a publicly used recreation resource shall be conditioned to provide public access as appropriate.

3.17.3 Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

(a to b) Less than Significant Impact.

All Project Segments

The Project would temporarily affect recreational activities both onshore and offshore within the Solimar Beach community area. Project activities would occur in the late winter, outside of summer peak recreational use thus minimizing potential impacts. Recreational access to Solimar Beach would remain to the east and west of the beach and shoreline vault removal Project work areas. The offshore pipeline and shoreline vault removal staging areas would use a portion of the PCH shoulder used for recreational access, however advance notice would be given to adjacent residents and signs would be posted on-site to alert visiting recreational users (Section 2.2.1.2, Work Area Preparation and Ramp Construction). In addition, ample beach access areas would remain to the east and west along the PCH. Impacts to beach access and beach use, and other recreational activities would be short-term and most of Solimar Beach would remain accessible and open to the public. All Project activities would also be coordinated with appropriate agencies to minimize potential land use impacts, including, but not limited to, the CSLC, CCC, County of Ventura, California Department of Parks and Recreation, and the U.S. Coast Guard. No physical deterioration of any recreational facilities would occur, and no increase in demand for recreational facilities is expected. The Project would remove the intake/outfall structure and pipelines and restore the beach to pre-Project conditions, creating a long-term recreational benefit for the area.

Would the project interfere with existing use of offshore recreational boating opportunities?

Less than Significant with Mitigation.
All Project Segments

Offshore Project activities would include a DSV, used initially for the pre-Project dive surveys and later to support the 6-foot by 6-foot intake structure removals from each intake pipeline, but also in the event that the pipeline segments cannot be pulled to shore and must be cut and recovered offshore using divers. The DSV would mobilize to the Project site from a nearby port, most likely Ventura or Santa Barbara Harbor.

Recreational boating would not likely be significantly affected in the offshore Project area because the pipelines are located in relatively shallow water conditions, approximately 12 to 14 feet deep, and close to shore. The water conditions further offshore of the anchoring areas have dense kelp beds that are not heavily utilized by boaters. However, since offshore recreational activities (pleasure boating, recreational fishing, kayaking) may be precluded for a short period of time, **MM REC-1** would ensure that offshore activities are coordinated with the U.S. Coast Guard to provide adequate notice to vessels. No significant increase in boat traffic or interference with existing offshore vessel traffic would occur. With the implementation of this measure, the impact would be less than significant.

**MM REC-1: Advanced Notice to Mariners.** All offshore operations shall be described in a Local Notice to Mariners to be submitted to the U.S. Coast Guard at least 15 days prior to decommissioning activities. The Notice shall include:

- Type of operation (i.e., dredging, diving operations, construction).
- Location of operation, including latitude and longitude and geographical position, if applicable.
- Duration of operation, including start and completion dates (if these dates change, the U.S. Coast Guard needs to be notified).
- Vessels involved in the operation.
- VHF-FM radio frequencies monitored by vessels on the scene.
- Point of contact and 24-hour phone number.
- Chart Number for the area of operation.

### 3.17.4 Mitigation Summary

Implementation of the following mitigation measure would reduce the potential for Project-related impacts to recreation to less than significant.

- **MM REC-1: Advanced Notice to Mariners**
3.18 TRANSPORTATION

<table>
<thead>
<tr>
<th>TRANSPORTATION – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>b) Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>d) Result in inadequate emergency access?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
</tbody>
</table>

3.18.1 Environmental Setting

Ventura County is generally served by a multimodal transportation system composed of a highway system, county roads, local roads, bicycle and pedestrian facilities, rail system, and airport facilities. U.S. 101 and PCH are the key north-south highways that serve the County’s coastal area. There are no other highways in the Project vicinity. San Miguelito Road runs underneath U.S. 101 and connects the CRC Lower Grubb Lease Property to PCH. Decommissioning equipment and workers would gain access to the onshore Project site from U.S. 101 to PCH and then to the staging and work areas located along the PCH shoulder. Access to PCH from U.S. 101 northbound is from Exit 72 or from southbound is from Exit 78.

Level of Service (LOS) is a ranking used for traffic flow. LOS ranges from A to F, with A indicating very good free-flowing traffic operations and F indicating stop-and-go conditions. The County’s General Plan has policies that set an acceptable LOS standard.

Caltrans provides annual average daily traffic (AADT) counts and Peak Hour counts for U.S. 101 at the nearest Highway mile post (at Solimar Beach, South Jct. Route 1). AADT represents the total annual vehicle volume divided by 365 days. Peak Hour estimates the heaviest traffic flow, which usually occurs between 7:00 a.m. to 9:00 a.m. and 5:00 p.m. to 7:00 p.m. Peak Hour values indicate the volume in both directions. On roads that have large seasonal traffic fluctuations, such as U.S. 101, the peak hour is the hour near the annual maximum but excludes a few (30 to 50 hours) that are exceedingly high and that are not the typical high-frequency hours occurring during the season. Peak Month Average Daily Traffic is the average daily traffic for the month with the heaviest traffic flow, usually July or August. Table 3.18-1 provides applicable AADT and peak hour data for the portion of U.S. 101 closest to the Project area.
Table 3.18-1. Traffic Data for U.S. Highway 101 Milepost Number 33.852
(Exit 117, El Capitan SB Park)\textsuperscript{5}

<table>
<thead>
<tr>
<th>Back Peak Hour</th>
<th>Back Peak Month</th>
<th>Back AADT</th>
<th>Ahead Peak Hour</th>
<th>Ahead Peak Month</th>
<th>Ahead AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,000</td>
<td>81,000</td>
<td>75,000</td>
<td>5,800</td>
<td>76,000</td>
<td>71,000</td>
</tr>
</tbody>
</table>

Source: Caltrans 2019. \url{http://www.dot.ca.gov/trafficops/census/} March 5, 2019

3.18.2 Regulatory Setting

Federal and state laws and regulations pertaining to transportation and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to transportation are listed below.

Ventura County General Plan (Goals, Policies, and Programs) Goal 2.14.1.1: Minimize the loss of life, injury, damage to structures, and economic and social dislocations resulting from hazards created by proximity to airports, railroads, and truck routes.

- Ventura County General Plan (Goals, Policies, and Programs) Policy 4.2.2.3: The minimum acceptable Level of Service (LOS) for road segments and intersections within the Regional Road Network and Local Road Network shall be as follows:
  a) LOS-‘D’ for all County thoroughfares and Federal highways and State highways in the unincorporated area of the County, except as otherwise provided in subparagraph (b);

- In addition, Project impacts are considered significant if they remove public parking access when there is no on-site construction vehicle parking. The General Plan states that, “a project that will cause actual or potential barriers or increase the potential for vehicle-pedestrian/bicycle conflicts on existing or planned pedestrian/bicycle facilities may have a significant impact.”

3.18.3 Impact Analysis

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than Significant with Mitigation.

All Project Segments

The Project site is located along PCH and is adjacent to U.S. 101 and the UP RR. The PCH is also a popular bike route which connects to a Class I (separated from the road) bike trail. The Project would establish a temporary staging and equipment storage area.

\textsuperscript{5} Back indicates that the count was taken behind (south or east) and Ahead indicates the count was taken in front (north or west) of the Project location.
approximately 100 feet to the north and south of the existing shoreline vault, along the
PCH shoulder, for equipment staging and access. This area would temporarily preclude
parking adjacent to Solimar Beach as well as impede traffic within the existing bike trail
for the 73 days of decommissioning activity, and an encroachment permit and Traffic
Control Plan would be submitted to Caltrans for use of this area. Although Project areas
of disturbance are outside of the UPRR right-of-way, the 36-inch conduit and any
remaining internal pipelines would be grouted in-place below the UPRR corridor.
Therefore, an existing utilities modification would also be required from the UPRR.

The Project would temporarily remove informal beach parking on the shoulder of PCH in
order to park onshore decommissioning equipment, however since Project activities
would already temporarily prevent public access to this section of beach, it is not
anticipated that beach users would require the onshore Project area for parking. In
addition, the ample informal parking areas both west and east of the Project site would
remain accessible for parking. Therefore, the impact would be less than significant.

Project activities would also temporarily impede pedestrian/bicycle traffic for 73 days,
increasing the potential for vehicle-pedestrian/bicycle conflicts and thus considered a
potentially significant impact. Section 2.2.1.2, Work Area Preparation and Ramp
Construction, details the temporary closure of and rerouting for the eastbound bicycle and
vehicle lane of PCH. However, MM T-1 would require sign placement indicating the
temporary road closure and rerouting as well as flaggers present in both directions to
safely direct vehicles and pedestrians/bicycles and help to reduce traffic and circulation
impacts. MM T-1 would also specify that trucks be scheduled outside of the a.m. and p.m.
peak traffic periods to maintain the required minimum LOS. With the implementation of
this measure, the impact would be less than significant.

**MM T-1: Traffic Control Plan.** Prior to commencement of onshore Project activities,
a Traffic Control Plan shall be submitted to the CSLC, Ventura County
Transportation Commission, and Caltrans for review and approval. It shall
include measures such as appropriate signage, traffic cones, and flaggers to
reduce potential hazards to motorists, bicyclists, pedestrians, and workers
during the Project. Additionally, it shall specify that trucks (delivery, hauling and
transportation trucks) shall be scheduled outside the a.m. and p.m. peak
periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to the extent feasible
to minimize local roadway congestion.

b) Conflict or be inconsistent with State CEQA Guidelines section 15064.3,
subdivision (b)?

**Less than Significant Impact.**
CEQA Guidelines section 15064.3(b) indicates that vehicle miles traveled is the most appropriate measure for transportation impacts. In December 2018, the Office of Planning and Research provided an updated Technical Advisory to evaluate transportation impacts in CEQA. In particular, the advisory suggests that a project generating or attracting fewer than 110 one-way trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). During Project activities, no more than 15 personnel would be traveling daily to the Project area from nearby hotels or rental properties (see Section 3.15, Population and Housing) at any given time. Additionally, temporary increased traffic would result from the Project equipment’s initial transport to the staging areas as well as from trucks leaving the Project site with cut pipeline sections and other demolished materials for recycling or disposal. The peak trips that would occur in any one day is 25, significantly below the number identified in the Technical Advisory’s guidance. Therefore, the impact would be less than significant.

**c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*Less than Significant with Mitigation.*

The Project would have temporary staging and work areas along the PCH roadside shoulder for 73 days and does not include permanent features that would increase roadway hazards due to design or incompatible uses. As discussed under question a), above, the traffic would be re-routed, and this design could cause traffic hazards for cyclists or pedestrians that is considered a potentially significant impact. **MM T-1** would require sign placement indicating the temporary road closure and rerouting as well as flaggers present in both directions to safely direct vehicles and pedestrians/bicycles. With the implementation of this measure, the impact would be less than significant.

**d) Result in inadequate emergency access?**

*Less than Significant Impact.*

The Project would result in short-term encroachment on PCH. An encroachment permit would be obtained from Caltrans in support of this work, and the Traffic Control Plan would further ensure that roadway ingress/egress are maintained in both directions to facilitate emergency access. Therefore, the impact would be less than significant.
3.18.4 Mitigation Summary

Implementation of the following mitigation measure would reduce the potential for Project-related impacts to transportation to less than significant.

- MM T-1: Traffic Control Plan
1 3.19 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>UTILITIES AND SERVICE SYSTEMS – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

2 3.19.1 Environmental Setting

The Project does not include permanent components that would require or alter existing utilities or service systems. Non-hazardous solid waste in Ventura County is typically brought to Toland Road Sanitary Landfill in Santa Paula. The maximum permitted capacity at Toland Road Sanitary Landfill is 30,000,000 cy, and more than half (16,068,864 cy) remains (California Department of Resources Recycling and Recovery [CalRecycle] 2019). Hazardous materials are typically taken to the Clean Harbors Buttonwillow facility. Clean Harbors is permitted to accept approximately 10,500 tons/day and is estimated to reach capacity in 2040 (CalRecycle 2019).

3.19.2 Regulatory Setting

Federal and state laws and regulations pertaining to utilities and service systems and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to this area with respect to utilities and service systems are listed below.
3.19.3 Impact Analysis

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact.

All Project Segments

The Project does not include activities or permanent components that would necessitate new or expanded water, wastewater treatment, stormwater drainage, electrical power, natural gas or telecommunications facilities. According to preliminary investigations of the onshore subsurface facilities, no interaction with existing utilities would occur that would require relocation. The Project decommissioning activities would use limited water for work crew needs and dust control, as necessary, that would not require new or expanded water supplies or facilities. Therefore, there would be no impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact.

All Project Segments

Project activities would occur within onshore staging or work areas as well as onboard the DSV. Water required for Project activities, as discussed under question a), above, would be minimal. Supplies would be portable and brought on-site for the duration of Project activities, and no local water supplies would be affected. No additional water supply usage would be necessary once the Project activities are completed. No new or expanded entitlements would be needed. Therefore, there would be no impact.

c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project’s projected demand in addition to the provider’s existing commitments?

No Impact.
All Project Segments

The Project does not include any components that would require wastewater services or treatment. As described in Section 2.2.3, Shoreline Vault, the standing water would be removed from the shoreline vault using a vacuum truck, and this wastewater would be transported to the appropriate receiving facility for disposal. Therefore, there would be no impact.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact.

All Project Segments

The Project activities would primarily generate solid waste by disposing of the onshore (as feasible) and offshore pipelines, the offshore concrete lattice intake structures, and the shoreline vault with its appurtenant structures. All material removed from the Project site would be tested prior to disposal. Material that is confirmed as non-hazardous waste would be transported to Toland Road Sanitary Landfill in Santa Paula, and any hazardous waste would be transported to the Clean Harbors facilities in Buttonwillow. Both facilities have adequate remaining capacity to accept the waste from Project activities. When feasible, recovered materials would be recycled. Therefore, the impact would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant with Mitigation.

All Project Segments

Solid waste would be disposed of in accordance with local, state and federal laws and regulations as required by the Project plans and specifications. The pipelines, pipe liners, and any associated debris would be recycled to the extent feasible. Non-hazardous waste would be transported to the nearby landfill facility. For detail regarding the potentially hazardous wastes associated with Project decommissioning activities, see Section 3.10, Hazards and Hazardous Materials. Hazardous waste, if improperly disposed, is considered a potentially significant impact. Should any be discovered or generated, MM HAZ-2 ensures the hazardous waste would be disposed of through a permitted hazardous waste treatment, storage, or disposal facility. With the implementation of this measure, the impact would be less than significant.
3.19.4 Mitigation Summary

Implementation of the following mitigation measure would reduce the potential for Project-related impacts to utilities and service systems to less than significant.

3.20 WILDFIRE

**WILDFIRE** - If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### 3.20.1 Environmental Setting

The Project site is located within a very high fire hazard severity zone (Ventura County General Plan – Hazards Appendix 2013). The Ventura County Fire Protection District has responsibility for wildfire suppression on all private land (Ventura County General Plan – Hazards Appendix 2013). The onshore Project area is located within a State Responsibility Area of California Department of Forestry and Fire Protection (CAL FIRE) (State of California 2019). CAL FIRE provides fire protection for California’s privately owned wildlands as well as various emergency services.

### 3.20.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to wildfire that are relevant to the Project. State laws and regulations pertaining to wildfire and relevant to the Project are identified in Appendix A. There are no additional regulations at the local level.

### 3.20.3 Impact Analysis

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

**b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

(a to d) No Impact.

All Project Segments

The Project activities that would occur offshore and within the beach environment would occur outside the fire hazard severity zone. Portions of the shoreline vault and onshore pipeline decommissioning activities would occur within the fire hazard severity zone but would be temporary activities; the active working crew would control any potential combustible materials though standard California Occupational Safety and Health Administration worker protection requirements. No permanent Project impacts would result that could put the Project site or local population at risk for wildfires. Therefore, there would be no impact.

No Project impacts would result that could put the Project site or local population at risk for downstream flooding or landslides. While the Project personnel would be on-site, their short-term presence immediately adjacent to the ocean would not increase the potential risk of people to such potential impacts. Therefore, there would be no impact.

3.20.4 Mitigation Summary

The Project would have no impact to wildfire; therefore, no mitigation is required.
3.21 MANDATORY FINDINGS OF SIGNIFICANCE

The lead agency shall find that a project may have a significant effect on the environment and thereby requires an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where, prior to commencement of the environmental analysis, a project proponent agrees to MMs or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per State CEQA Guidelines, § 15065).

<table>
<thead>
<tr>
<th>MANDATORY FINDINGS OF SIGNIFICANCE –</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a 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.)</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

3.21.1 Impact Analysis

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation.
As analyzed in Biological Resources (Section 3.4), the Project would not significantly adversely affect fish or wildlife habitat, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate plant or animal community, or reduce the number or restrict the range of an endangered, rare, or threatened species. Mitigation measures MM BIO-1 through MM BIO-5, and MM HAZ-1, as well as best management practices, would ensure that the minor, temporary, and localized impacts on special-status species and their habitats would be less than significant.

The Project’s potential effects on historic and archaeological resources are described in Cultural Resources (Section 3.5) and Cultural Resources – Tribal (Section 3.6). Based on cultural resources records of the area, no cultural resources are known to be present within the Project footprint. Implementation of mitigation measures MM CUL-1/TCR-1 and MM CUL-2/TCR-2 would reduce the potential for Project-related impacts on previously undiscovered cultural and Tribal cultural resources to a less than significant level.

b) Does the project have impacts that would be individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact.

As provided in this MND, the Project has the potential to significantly impact the following environmental disciplines: Aesthetics (Section 3.1); Biological Resources (Section 3.4); Cultural Resources (Section 3.5); Cultural Resources – Tribal (Section 3.6); Hazards and Hazardous Materials (Section 3.10); Hydrology and Water Quality (Section 3.11); Recreation (Section 3.17); Transportation (Section 3.18); and Utilities and Service Systems (Section 3.19). However, measures have been identified that would reduce these impacts to less than significant with mitigation.

Ventura County’s pending and approved project lists did not identify any project within the vicinity of the Project site (more than 3 miles west and approximately 5 miles east) that would result in a cumulative impact. Past, present, and reasonably foreseeable projects within the vicinity of the proposed Project are limited to the CSLC Rincon Island Decommissioning Project, located approximately 3.5 to 5 miles west of the Project site (CSLC 2019). There are currently two decommissioning phases of the Rincon Island Decommissioning Project:

• Phase 1 – Well Plug and Abandonment. Phase 1 of the Rincon Project has been to plug and abandon the 75 wells on the former leases: 25 onshore wells and 50 Island wells. At this point in time, approximately 100% of the onshore wells have been plugged, and the Commission has plugged 25 of the 50 Island wells, which lie approximately 5 miles from the Project site. While occurring during the Project’s
anticipated work activities, this ongoing phase is being conducted as part of existing operations of the oil and gas facility.

- Phase 2 – Disposition of Rincon Island, the causeway, and onshore facilities. Phase 2 is still in the planning stage.

For any impact to act cumulatively on any past, present, or reasonably foreseeable projects, these projects would have to have individual impacts in the same resource areas, some at the same time, or occur within an overlapping area as the proposed Project. Phase 1 consists of ongoing existing facility operations that do not have impacts in the same resource areas as the proposed Project. Phase 2 will require environmental analysis under CEQA, extensive and comprehensive public input, discretionary approval by CSLC and other agencies, funding, and hiring a decommissioning contractor; therefore it is not possible for Phase 2 activities to be initiated before completion of the proposed Project and they are not cumulatively considerable. Therefore, the impact is less than significant.

c) Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation.

The Project’s potential to adversely affect human beings is addressed throughout this document. As discussed in Aesthetics (Section 3.1), Public Services (Section 3.16), and Recreation (Section 3.17), the Project would not substantially affect resources used or enjoyed by the public, residents, or others in the area. The Project would have no effect on Agriculture or Forest Resources (Section 3.2); Energy Resources (Section 3.7); Land Use and Planning (Section 3.12); Mineral Resources (Section 3.13); Population and Housing (Section 3.15); or Utilities and Service Systems (Section 3.19).

Potential Project-related effects on public safety and well-being are discussed in sections on Aesthetics (Section 3.1, MM AES-1); Air Quality (Section 3.3); Cultural Resources and Tribal Cultural Resources (Sections 3.5 and 3.6, MM CUL-1/TCR-1 and MM CUL-2/TCR-2); Geology, Soils, and Paleontological resources (Section 3.8); Hazards and Hazardous Materials (Section 3.10, MM HAZ-1 and MM HAZ-2); Hydrology and Water Quality (Section 3.11, MM HAZ-1 and MM HAZ-2); Recreation (Section 3.17, MM REC-1); Transportation (Section 3.18, MM T-1); Utilities and Service Systems (Section 3.19, MM HAZ-2); and Wildfire (Section 3.20). None of these analyses identified a potential adverse effect on human beings that could not be avoided or minimized by implementing the identified mitigation measures or complying with standard regulatory requirements. With mitigation in place, all Project impacts on human beings would be less than significant.
4.0 MITIGATION MONITORING PROGRAM

The California State Lands Commission (CSLC) is the lead agency under the California Environmental Quality Act (CEQA) for the CRC Grubb Lease (PRC 3913.1) Intake/Outfall Structures Decommissioning Project (Project). In conjunction with approval of this Project, the CSLC adopts this Mitigation Monitoring Program (MMP) for implementation of mitigation measures (MMs) for the Project to comply with Public Resources Code section 21081.6, subdivision (a), and State CEQA Guidelines sections 15074, subdivision (d), and 15097.

The Project authorizes California Resources Corporation (CRC or Applicant) to remove the pipelines and appurtenant facilities to fulfill the existing lease requirements and quitclaim the lease in accordance with the terms and conditions of its existing CSLC Lease No. PRC 3913.1.

4.1 PURPOSE

It is important that significant impacts from the Project are mitigated to the maximum extent feasible. The purpose of an MMP is to ensure compliance and implementation of MMs; this MMP shall be used as a working guide for implementation, monitoring, and reporting for the Project’s MMs.

4.2 ENFORCEMENT AND COMPLIANCE

The CSLC is responsible for enforcing this MMP. The Project Applicant is responsible for the successful implementation of and compliance with the MMs identified in this MMP. This includes all field personnel and contractors working for the Applicant.

4.3 MONITORING

CSLC staff may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as necessary. Some monitoring responsibilities may be assumed by other agencies, such as affected jurisdictions (County of Ventura). The CSLC or its designee shall ensure that qualified environmental monitors are assigned to the Project.

Environmental Monitors. To confirm implementation and success of the MMs, an environmental monitor must be on-site during all Project activities with the potential to create significant environmental impacts or impacts for which mitigation is required. Along with CSLC staff, the environmental monitor(s) are responsible for:

- Confirming that the Applicant has obtained all applicable agency reviews and approvals
• Coordinating with the Applicant to integrate the mitigation monitoring procedures during Project implementation

• Confirming that the MMP is followed

The environmental monitor shall immediately report any deviation from the procedures identified in this MMP to CSLC staff or its designee. CSLC staff or its designee shall approve any deviation and its correction.

**Workforce Personnel.** Implementation of the MMP requires the full cooperation of Project personnel and supervisors. Many of the MMs require action from site supervisors and their crews. To facilitate successful implementation, relevant mitigation procedures shall be written into contracts between the Applicant and any contractors.

**General Reporting Procedures.** A monitoring record form shall be submitted to the Applicant, and once the Project is complete, a compilation of all the logs shall be submitted to CSLC staff. CSLC staff or its designated environmental monitor shall develop a checklist to track all procedures required for each MM and shall confirm that the timing specified for the procedures is followed. The environmental monitor shall note any issues that may occur and take appropriate action to resolve them.

**Public Access to Records.** Records and reports are open to the public and are to be provided upon request.

### 4.4 MITIGATION MONITORING TABLE

This section presents the mitigation monitoring table (Table 4-1) for Aesthetics; Biological Resources; Cultural Resources; Cultural Resources – Tribal; Hazards and Hazardous Materials; Hydrology and Water Quality; Recreation; Transportation, and Utilities and Service Systems. All other environmental factors were found to have less than significant or no impacts; therefore, they are not included in the table. The table lists the following information by column:

- Potential Impact
- Mitigation Measure (full text of the measure)
- Location (where impact occurs and where MM should be applied)
- Monitoring/Reporting Action (action to be taken by monitor or Lead Agency)
- Timing (before, during, or after construction, during operation, etc.)
- Responsible Party (entity responsible to ensure MM compliance)
- Effectiveness Criteria (how the agency can know if the measure is effective)
Table 4-1. Mitigation Monitoring Program

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Mitigation Measure (MM)</th>
<th>Location</th>
<th>Monitoring / Reporting Action</th>
<th>Effectiveness Criteria</th>
<th>Responsible Party</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aesthetics</strong></td>
<td><strong>Create a new source of substantial light or glare</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MM AES-1: Nighttime Illumination Shielding.</td>
<td>Offshore and Onshore</td>
<td>Observe nighttime lighting position for compliance</td>
<td>Lighting glare minimized</td>
<td>CRC, L123, and CSLC</td>
<td>During any nighttime work</td>
</tr>
<tr>
<td></td>
<td>Project lighting shall be as low an intensity as allowed by safety requirements and located, designed, and equipped to provide shielding and minimize glare from light sources and diffusers, and to minimize halo and spillover effects.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biological Resources</strong></td>
<td><strong>Marine Wildlife Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MM BIO-1: Marine Wildlife Contingency and Training Plan Implementation.</td>
<td>Offshore</td>
<td>Final MWCTP submitted to CSLC no less than 14 days prior to the start of offshore work activities for review/ approval</td>
<td>Marine wildlife avoided during vessel transit and offshore decommissioning activities</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to and throughout offshore Project activities</td>
</tr>
</tbody>
</table>
|                                                   | The Project Marine Wildlife Contingency and Training Plan (MWCTP) shall be implemented during all offshore Project activities. A Marine Wildlife Monitor (MWM) shall be present on the offshore Project vessel during transit and within the Marine Study Area to monitor designated avoidance zones and have the authority to halt Project activities that may impact marine wildlife. As specified in the MWCTP, the following shall be implemented throughout the Project:  
  • A pre-activity environmental orientation would be conducted for all Project personnel.  
  • Vessel-based monitoring for marine wildlife would be performed by a trained MWM during all offshore Project activities including anchoring and active pipeline recovery activities.  
  • If lighting is required for work in low-light conditions, then specific impact avoidance measures would be implemented as necessary: lighting would be low intensity, directed downward, and green lighting. |                   |                               |                        |                           |                           |                               |
<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Mitigation Measure (MM)</th>
<th>Location</th>
<th>Monitoring / Reporting Action</th>
<th>Effectiveness Criteria</th>
<th>Responsible Party</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial or Marine Wildlife Exposure</td>
<td>Implement MM HAZ-1: Oil Spill Response and Contingency Plan (see below)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitive Species or Habitats</td>
<td>MM BIO-2: Environmental Awareness Training. The approved biological monitor(s) shall be responsible for conducting an 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.</td>
<td>Onshore</td>
<td>Signatures of trained employees for compliance</td>
<td>Sensitive Species Avoidance</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to the start of onshore work activities and as needed for new personnel accessing the Project site</td>
</tr>
<tr>
<td>Sensitive Species or Habitats</td>
<td>MM BIO-3: Onshore Biological Pre-activity Surveys and Monitoring. A qualified biological monitor shall survey the onshore work area for sensitive species or other wildlife that may be present no more than 24 hours prior to the commencement of Project activities. In addition, the biological monitor will provide daily biological clearance prior to the start of work and shall always be on site during Project operations. If at any time during Project decommissioning 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</td>
<td>Onshore</td>
<td>Observation reports</td>
<td>Sensitive Species Avoidance</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to the start of onshore work and throughout onshore Project activities</td>
</tr>
</tbody>
</table>
### Mitigation Monitoring Program

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Mitigation Measure (MM)</th>
<th>Location</th>
<th>Monitoring / Reporting Action</th>
<th>Effectiveness Criteria</th>
<th>Responsible Party</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
<td><strong>MM BIO-4: Delineation of Work Limits.</strong> Prior to the start of the Project, the onshore decommissioning area perimeters shall be clearly flagged to ensure heavy equipment and vehicles stay within the permitted disturbance area and footprints shall be the minimum extent necessary for equipment staging and activity. Natural areas outside of the work zone shall not be disturbed. Designated equipment staging and fueling areas shall also be delineated at this time.**</td>
<td>Onshore</td>
<td>Onsite monitor to verify</td>
<td>Sensitive Species Avoidance</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to the start of and throughout onshore Project activities</td>
</tr>
<tr>
<td><strong>Sensitive Species or Habitats</strong></td>
<td><strong>MM BIO-5: Marine Safety and Anchoring Plan Implementation.</strong> CRC shall implement the Project Marine Safety and Anchoring Plan during offshore activities in order to reduce potential impacts to hardbottom substrate.</td>
<td>Offshore</td>
<td>Implementation of Project Marine Safety and Anchoring Plan</td>
<td>Avoid potential impacts to offshore hardbottom substrate</td>
<td>CRC, L123, and CSLC</td>
<td>Throughout offshore Project activities</td>
</tr>
<tr>
<td><strong>Cultural Resources and Cultural Resources – Tribal</strong></td>
<td><strong>MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources.</strong> Prior to ground-disturbance, the Applicant shall contact culturally-affiliated tribes and retain a culturally-affiliated tribal monitor if requested. The Applicant shall also retain a qualified archaeologist to, jointly with any requested culturally-affiliated tribal monitor, train construction staff to be able to identify potential cultural resources. In the event that potential cultural or tribal cultural resources are uncovered</td>
<td>Offshore and Onshore</td>
<td>Pre-Project training for contractors of cultural and tribal cultural resource sensitivity Training documented to CSLC staff</td>
<td>Reduced potential impacts to unknown cultural resources</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to and throughout Project activities</td>
</tr>
<tr>
<td>Potential Impact</td>
<td>Mitigation Measure (MM)</td>
<td>Location</td>
<td>Monitoring / Reporting Action</td>
<td>Effectiveness Criteria</td>
<td>Responsible Party</td>
<td>Timing</td>
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<tr>
<td>during Project implementation, all earth-disturbing work within 100 feet of the find shall be temporarily suspended or redirected until an approved archaeologist and tribal monitor, if retained, has evaluated the nature and significance of the discovery. In the event that a potentially significant cultural or tribal cultural resource is discovered, CRC, 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 by the archaeologist and, for tribal cultural resources, the culturally-affiliated tribal monitor, and submitted to CSLC staff for review and approval prior to implementation of the plan. If the archaeologist or tribe determines that damaging effects on the cultural or tribal cultural resource would be avoided or minimized, then work in the area may resume.</td>
<td>Onsite qualified archaeologist and tribal monitor (if requested) to verify</td>
<td>Compliance reports as well as notification and follow-up correspondenc e between agencies and CRC if resources are encountered</td>
<td>Document any reported finds including retention of any associated archaeological reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Impact</td>
<td>Mitigation Measure (MM)</td>
<td>Location</td>
<td>Monitoring / Reporting Action</td>
<td>Effectiveness Criteria</td>
<td>Responsible Party</td>
<td>Timing</td>
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<td>--------------------------------------</td>
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</tr>
<tr>
<td>Unknown Human Remains</td>
<td>MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains. 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 Coroner shall notify the Native American Heritage Commission (NAHC) 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.</td>
<td>Offshore and Onshore</td>
<td>Notifications/ Consultations with County Coroner, and NAHC (if applicable)</td>
<td>Reduced impacts to human remains (if found)</td>
<td>CRC, L123, and CSLC</td>
<td>Throughout Project activities</td>
</tr>
</tbody>
</table>

**Hazards and Hazardous Materials**

| Risk of Water or Soil Contamination | MM HAZ-1: Oil Spill Response and Contingency Plan Implementation. The Project Oil Spill Response and Contingency Plan (OSRCP) shall be implemented during all Project activities in the event of a release of oil or contaminants. The OSRCP delineates prevention measures including daily inspection of equipment, refueling at designated stations, and secondary equipment containment for equipment to prevent spills. Additionally, the onshore and offshore work sites shall maintain onsite response equipment to clean up minor spills. In the event of a major spill (greater than five barrels) the OSRCP requires | Offshore and Onshore | OSRCP documentation, including emergency agency notification Onsite spill response team to verify | Reduced risks of water or soil contamination | CRC, L123, and CSLC | Prior to and throughout Project activities |

lands of California is vested in the state and under CSLC jurisdiction. The final disposition of archaeological, and historical, and tribal cultural resources recovered on State lands under CSLC jurisdiction must be approved by the CSLC.
<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Mitigation Measure (MM)</th>
<th>Location</th>
<th>Monitoring / Reporting Action</th>
<th>Effectiveness Criteria</th>
<th>Responsible Party</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of Water or Soil Contamination</td>
<td>CRC to utilize an independent oil spill response contractor (Marine Spill Response Corporation) to provide secondary cleanup.</td>
<td>Offshore and Onshore</td>
<td>CSLC approved monitor to ensure compliance</td>
<td>Reduced risks of water or soil contamination</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to and throughout Project activities</td>
</tr>
<tr>
<td><strong>Risk of Water or Soil Contamination</strong></td>
<td>MM HAZ-2: Hazardous Materials Management and Contingency Plan Implementation. The Project’s Hazardous Materials Management and Contingency Plan shall be implemented during all Project activities which includes identification of appropriate equipment fueling and maintenance areas, testing for potential hazardous materials prior to facility demolition and/or removal, daily equipment inspection schedule, a spill response plan, and maintenance of on-site spill response supplies.</td>
<td>Offshore and Onshore</td>
<td>HMMCP documentation, including lab report results to CSLC for standing water in vault Inspections and testing (if necessary) for asbestos and lead based paint. Lab report results to CSLC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydrology and Water Quality</strong></td>
<td>Implement MM HAZ-1: Oil Spill Response and Contingency Plan Implementation (see above) Implement MM HAZ-2: Hazardous Materials Management and Contingency Plan Implementation (see above)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recreation</strong></td>
<td>MM REC-1: Advanced Notice to Mariners. All offshore operations shall be described in a Local Notice to Mariners to be submitted to the U.S. Coast Guard at least 15 days prior to decommissioning activities. The Notice shall include: •Type of operation (i.e., dredging, diving operations, construction).</td>
<td>Offshore</td>
<td>Publication of Notice</td>
<td>Reduction of potential impact to offshore recreational vessels</td>
<td>CRC and L123</td>
<td>15 days prior to vessel departure to offshore Project area</td>
</tr>
<tr>
<td>Potential Impact</td>
<td>Mitigation Measure (MM)</td>
<td>Location</td>
<td>Monitoring / Reporting Action</td>
<td>Effectiveness Criteria</td>
<td>Responsible Party</td>
<td>Timing</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
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<td>--------------------------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Location of operation, including latitude and longitude and geographical position, if applicable.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Duration of operation, including start and completion dates (if these dates change, the U.S. Coast Guard needs to be notified).</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Vessels involved in the operation.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• VHF-FM radio frequencies monitored by vessels on the scene.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Point of contact and 24-hour phone number.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Chart Number for the area of operation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transportation**

**Onshore Traffic Impacts**

**MM T-1: Traffic Control Plan.** Prior to commencement of onshore Project activities, a Traffic Control Plan shall be submitted to the CSLC, Ventura County Transportation Commission, and Caltrans for review and approval. It shall include measures such as appropriate signage, traffic cones, and flaggers to reduce potential hazards to motorists, bicyclists, pedestrians, and workers during the Project. Additionally, it shall specify that trucks (delivery, hauling and transportation trucks) shall be scheduled outside the a.m. and p.m. peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to the extent feasible to minimize local roadway congestion.

<table>
<thead>
<tr>
<th>Location</th>
<th>Monitoring / Reporting Action</th>
<th>Effectiveness Criteria</th>
<th>Responsible Party</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore</td>
<td>Documentation within compliance monitoring sheets</td>
<td>Minimized risks associated traffic congestion as well as vehicle, bicycle, and pedestrian conflicts</td>
<td>CRC, L123, and CSLC</td>
<td>Prior to Onshore Project activities</td>
</tr>
</tbody>
</table>

**Utilities and Service Systems**

**Appropriate Waste Handling**

Implement **MM HAZ-2: Hazardous Materials Management and Contingency Plan Implementation** (see above)
5.0 OTHER COMMISSION CONSIDERATIONS

In addition to the environmental review required pursuant to the California Environmental Quality Act (CEQA), a public agency may consider other information and policies in its decision-making process. This section presents information relevant to the California State Lands Commission’s (Commission or CSLC) consideration of the Project. The considerations addressed below are:

- Climate change and sea-level rise
- Commercial and recreational fishing
- Environmental justice

Other considerations may be addressed in the staff report presented at the time of the Commission’s consideration of the Project.

5.1 CLIMATE CHANGE AND SEA-LEVEL RISE

Sea-level rise as a function of global climate change is not expected to have any effect on the Project because offshore pipelines would be completely removed, underground onshore pipelines would be removed or abandoned in place, and the shoreline vault structure would be removed to minus 5 feet below ground surface. Riprap would be replaced in the former vault area, consistent with the existing armored structure on either side, to continue to provide shoreline protection from sea-level rise. The following discussion provides background information on climate change and sea-level rise in the Project area.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. CSLC staff evaluated the “high emissions,” “medium-low risk aversion” scenario to apply a conservative approach based on current emission trajectories, the Project location, and the nature of the Project’s decommissioning activities. The Santa Barbara tide gauge was used for the projected sea-level rise scenario, and the Project site could see up to 0.4-foot sea-level rise by 2030, 1 foot by 2050, and 2.0 to 3.1 feet by 2100 (Ocean Protection Council 2018). The range in potential sea-level rise indicates the complexity and uncertainty of projecting these future changes—which depend on the rate and extent of ice melt—particularly in the second half of the century.

Along with higher sea levels, winter storms of greater intensity and frequency resulting from climate change would further affect coastal areas. In open coastal areas and tidally influenced waterways, more frequent and powerful storms can result in storm surge, increased flooding conditions, and damage from storm-generated debris. Climate change
Other Commission Considerations

5.2 COMMERCIAL AND RECREATIONAL FISHING

Impacts to commercial and recreational fisheries would not be considered significant because Project activities would have short-term impacts on the limited suitable fish habitat within the Project site. Offshore recreational fishing typically occurs in areas of hard-bottom habitat and kelp beds (which occur immediately offshore and outside of the Project site). The seafloor habitat inshore of the pipelines’ terminus (located at the 16-foot isobath) includes mixed substrate types consisting of medium-sized cobble (4- to 8-inch-diameter) and small boulders (10- to 15-inch-diameter), as well as low-relief sandstone bedrock and expanses of sand in between bedrock. Hard-bottom substrates in the offshore Project area support low growing, turf algae and lack the topographic relief needed for suitable habitat that would support mature species targeted by nearshore commercial fisheries (Padre 2018). In addition, Project activities would be conducted in water depths shallower than active commercial fishing depths.

Weather systems and extreme storms also can uncover dangerous coastal hazards on shorelines. CSLC implements a program to remove coastal hazards along the California coast (CSLC 2017), similar to the activities being proposed by the Applicant for this Project. Examples of hazards are remnants of coastal structures, piers, oil wells and pilings, and deteriorated electric cables and old pipelines. Many coastal hazards are located on Public Trust lands set aside for commerce, navigation, fishing, and recreation; these hazards can impede coastal uses as well as threaten public health and safety.

Governor Brown’s Executive Order B-30-15 instructed all state agencies to take climate change into account in their planning and investment decisions, and to give priority to actions that build climate preparedness. The preceding discussion of climate change and sea-level rise is intended to provide the local/regional overview and context that the Commission staff considered pursuant to this Executive Order; additionally, it will facilitate the Commission’s consideration of the Project.

and sea-level rise also would affect coastal areas by changing erosion and sedimentation rates. Beaches, coastal landscapes, and near-coastal riverine areas exposed to increased wave force, run up, and total water levels could potentially erode more quickly than before. However, rivers and creeks also are predicted to experience flashier sedimentation pulse events from strong winter storms, punctuated by periods of drought. Therefore, depending on precipitation patterns, sediment deposition and accretion may accelerate along some shorelines and coasts. As of 1979, the U.S. Army Corps of Engineers had already identified Emma Woods State Beach as suffering from erosion and reduced beach width, and suggested beach fill and rock revetment as remedial measures. Any future natural beach loss would be exacerbated by changes in wave direction, occurring from climate change-driven water temperature, wind direction, and ocean current shifts as well as from the existing armored rock structure that protects the Pacific Coast Highway from wave forces.
A bed of giant kelp (*Macrocystis pyrifera*) occurs west of the offshore Project site, but its
density becomes sparse southwest of pipelines’ termini and was not established within
the Project site during the marine biological dive surveys (Padre 2018). Kelp is not present
within the surf zone where wave action disturbs the seafloor.

The lack of rock reef and kelp beds in the Project site greatly reduces the target fish
species density and substantially limits the number of offshore recreational fishermen that
currently use the Project site. In addition, the offshore pipelines have historically
precluded commercial fishing from the area due to the potential hazard for trawling gear.
However, the Project site shoreline could support recreational fishing from the beach. The
offshore Project site is located within California Department of Fish and Wildlife (CDFW)
fishing block number 665 and California Recreational Fisheries Survey block 665-8 and
adjacent to blocks 665-17 and 665-18. Beach fisherman in Ventura County primarily
target surfperch species (*Embiotocidae* spp.), with barred, calico, and shiner perch most
frequently caught, and Pacific mackerel (*Scomber japonicus*) (Pacific States Marine
Fishes Commission 2019). In addition, the recreational California spiny lobster
(*Panulirus interruptus*) fishery is known to set hoop nets (traps) within the kelp beds
adjacent to the Project site. Although the lobster traps should not be located in the
offshore Project area, trap buoys may be along the route used for Project vessel transit.
Recreational lobster 2019/2020 season runs from September 28, 2019, through March
18, 2020; therefore, there could be a small window (approximately 4 weeks), wherein
recreational lobster fisherman may be required to move their traps and be temporarily
restricted in the Project vicinity (CDFW 2019e).

5.2.1 Decommissioning

Pipeline removal within the Offshore Intake and Outfall Pipelines Segment has the
potential to cause a 2-week restriction to recreational fishing activities within the Project
vicinity. Although the diving support vessel would be present within the Project site for a
short period of time, some potential remains for recreational fishers to be temporarily
displaced from a very limited area. Commercial fisheries do not use the Project site, and
therefore are not likely to be impacted by Project activities.

In addition to submitting the required Advanced Notice to Mariners that would alert
commercial and recreational fishers to pending on-water activities, prior to the start of
project activities the offshore crew would inspect for any deployed fishing gear as part of
the pre-Project offshore survey. The type and location of fishing gear (buoys) would be
noted and recorded, and the local CDFW office would be contacted if the fishing gear is
in the Project site. No Project activities would be completed within 100 feet of the
observed fishing gear. The Project crew would not remove or relocate any fishing gear;
removal or relocation would only be conducted by the owner, by California Resources
Corporation (CRC) with owner approval, or by an authorized CDFW agent.
5.2.2 Operations

The Project is a decommissioning project with no operational activities; therefore, there would be no operational impacts to commercial or recreational fishing within the Project vicinity. The offshore pipeline removal would benefit future fishing in the area by eliminating submerged hazards and reducing the likelihood for gear entanglement.

5.3 ENVIRONMENTAL JUSTICE

In keeping with its commitment to environmental sustainability and access to all, California was one of the first states to codify the concept of environmental justice in statute. Beyond the fair treatment principles described in statute, Commission staff would like to include individuals who are disproportionately affected by a proposed project’s effects in the decision-making process. The goal is that, through equal access to the decision-making process, everyone has equal protection from environmental and health hazards and can live, learn, play, and work in a healthy environment.

In 2016, legislation was enacted to require local governments with disadvantaged communities, as defined in statute, to incorporate environmental justice into their general plans when two or more general plan elements (sections) are updated. The Governor’s Office of Planning and Research (the lead state agency on planning issues) is working with state agencies, local governments, and many partners to update the General Plan Guidelines in 2019 to include guidance for communities on environmental justice (Office of Planning and Research 2019).

Environmental justice is defined by California law as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code, § 65040.12, subd. (e)). This definition is consistent with the Public Trust Doctrine principle that the management of trust lands is for the benefit of all people. The Commission adopted an Environmental Justice Policy in December 2018 (Item 75, December 2018) to ensure that environmental justice is an essential consideration in the Commission’s processes, decisions, and programs. Through its policy, the Commission reaffirms its commitment to an informed and open process in which all people are treated equitably and with dignity, and in which its decisions are tempered by environmental justice considerations. Among other goals, the policy commits the Commission to, “Strive to minimize additional burdens on and increase benefits to marginalized and disadvantaged communities resulting from a proposed project or lease.”

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6 See https://www.slc.ca.gov/envirojustice/.
7 Id.
5.3.1 U.S. Census Bureau Statistics

Table 5-1 presents income, employment, and race data of the regional and local study area in the Project vicinity, based on the most recently available information from U.S. Census 2013–2017 American Community Survey 5-Year Estimates.\(^8\) There are no identified communities (or census-designated places) within the Project vicinity, however the site is included within Census Tract No. 12.06 which is specific to this section of coastal Ventura County but also includes upland agricultural areas.

5.3.2 Population and Economic Characteristics

From a regional standpoint, Ventura County has a higher than average medium household income level ($81,972) compared to the State of California ($67,179), but Tract 12.06 is more consistent with the State average ($66,818). Ventura County and Tract 12.06 residents are supported primarily by employment in educational and health care services, as well as professional/management positions and manufacturing, finance, and arts, entertainment and recreational services (U.S. Census Bureau 2019). With respect to populations living below the established poverty level, Ventura County (10.3 percent) and Census Tract 12.06 (7.5 percent) are both significantly lower than the State of California as a whole (15.1 percent).

5.3.3 California Office Of Environmental Health Hazard Assessment (OEHHA)

CalEnviroScreen Results

According to California Office of Environmental Health Hazard Assessment (OEHHA 2019) California Communities Environmental Health Screening Tool (CalEnviroScreen) data (June 2018), the Project site has a score in the 55th to 60th percentile, meaning that 40 to 45 percent of all census tracts in California have greater population vulnerability and/or environmental burdens (Figure 5.3-1). The existing pollution burden for this tract is in the 85\(^{th}\) percentile, with impaired water, pesticides, hazardous waste, solid waste, cleanup sites, and drinking water as factors with the highest scores. This tract, with a population of 941, has a population characteristics (vulnerability) score in the 36\(^{th}\) percentile, which represent biological traits, health factors, or socioeconomic community components that could result in increased pollution vulnerability. This score is derived in part from the low unemployment score, the lowest out of all the California census tracts (meaning that the population has a relatively good level of employment). In addition, the population is 79 percent white/non-minority and has fairly low scores for public health concerns such as asthma and cardiovascular emergencies (i.e., heart attacks).

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\(^8\) U.S. Census 2013–2017 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](http://census.gov/programs-surveys/acs).
## Table 5-1. Environmental Justice Statistics

<table>
<thead>
<tr>
<th>Income and Population</th>
<th>California</th>
<th>Ventura County</th>
<th>Census Tract 12.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>38,982,847</td>
<td>847,834</td>
<td>751</td>
</tr>
<tr>
<td>Median household income</td>
<td>$67,179</td>
<td>$81,972</td>
<td>$66,818</td>
</tr>
<tr>
<td>Percent below the poverty level&lt;sup&gt;1&lt;/sup&gt;</td>
<td>15.1%</td>
<td>10.3%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

### Employment Industry (percentage of total population)

<table>
<thead>
<tr>
<th>Industry</th>
<th>California</th>
<th>Ventura County</th>
<th>Census Tract 12.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, mining</td>
<td>2.3%</td>
<td>5.8%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Construction</td>
<td>6.1%</td>
<td>5.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.5%</td>
<td>10.5%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>3.0%</td>
<td>3.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>10.8%</td>
<td>10.7%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>5.0%</td>
<td>3.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Information</td>
<td>2.9%</td>
<td>2.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Finance and insurance, and real estate and rental and leasing</td>
<td>6.2%</td>
<td>7.8%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Professional, scientific, and management, and administrative and waste management services</td>
<td>13.2%</td>
<td>11.7%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Educational services and health care and social assistance</td>
<td>20.9%</td>
<td>19.5%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation, and accommodation and food services</td>
<td>10.4%</td>
<td>9.6%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Other services, except public administration</td>
<td>5.3%</td>
<td>5.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Public administration</td>
<td>4.4%</td>
<td>4.8%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

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.

Figure 5.3-1. CalEnviroScreen Results
5.3.4 Conclusion

Project decommissioning activities would occur for 73 days during the first quarter of 2020. Work has been scheduled to avoid the summer season and thus minimize potential public access impacts for Solimar Beach users. Regardless, although the Project site would be precluded from the public during decommissioning activities, continued Solimar Beach access would be maintained east and west of the excavation areas.

The Project site is located in a census tract with a moderate CalEnviroScreen environmental burden score. The Project would have only temporary, minor effects on air quality factors (see Sections 3.3, Air Quality, and 3.9, Greenhouse Gas Emissions) and traffic (see Section 3.18, Transportation). The census tract’s population characteristics indicate low vulnerability to pollution, and the Project activities would not exacerbate the existing impaired water, pesticides, hazardous waste, solid waste, cleanup sites, and drinking water burdens. The proposed Project is thus not anticipated create new burdens or add to existing pollution burdens felt by a vulnerable community, with no anticipated factors that would put any of the nearby populations at risk from this Project.
6.0 MND PREPARATION SOURCES AND REFERENCES

This Mitigated Negative Declaration (MND) was prepared by the staff of the California State Lands Commission’s (Commission or CSLC) Division of Environmental Planning and Management (DEPM), with the assistance of Padre Associates, Inc. The analysis in the MND is based on information identified, acquired, reviewed, and synthesized based on DEPM guidance and recommendations.

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6.2 SECTION AUTHORS AND REVIEWERS

<table>
<thead>
<tr>
<th>Name and Title</th>
<th>MND Sections</th>
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<tr>
<td>Padre Associates, Inc.</td>
<td>Complete document</td>
</tr>
<tr>
<td>Simon Poulter, Principal</td>
<td></td>
</tr>
<tr>
<td>Jennifer Leighton, Senior Project Manager</td>
<td>Complete document</td>
</tr>
<tr>
<td>Crystahl Taylor, Senior Project Manager</td>
<td>Complete document</td>
</tr>
<tr>
<td>Michaela Hoffman, Project Biologist</td>
<td>3.4, Biological Resources; 5.2 Commercial and Recreational Fishing</td>
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<td>Matt Ingamells, Senior Project Manager</td>
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</tr>
<tr>
<td>Robert Vander Weele, Geologist</td>
<td>3.3, Air Quality; 3.9, Greenhouse Gas Emissions</td>
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<tr>
<td>Rachael Letter, Senior Archaeologist</td>
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</tr>
<tr>
<td>Annette Varner, Word Processor/Technical Editor</td>
<td>Complete document</td>
</tr>
</tbody>
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6.3 REFERENCES CITED


MND Preparation Sources and References


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