FINAL PROPOSED MITIGATED NEGATIVE DECLARATION FOR THE VENOCO PLATFORM HOLLY POWER CABLE REPLACEMENT PROJECT

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES (on attached CD)

UNITS OF MEASUREMENT

°C	degrees Centigrade	L	liter
°F	degrees Fahrenheit	L_{dn}	Day-Night Average Level
µ	micro	L_{eq}	Energy Equivalent Sound Level
µm	micrometer	m	meter
µPa rms	microPascal root mean square	mg	milligram
A	amp	mg/L	milligrams per liter
dB	decibel	mi	mile
dBA	decibel, A-weighted	min	minute
hp	horsepower	MT	metric ton
hr	hour	MW	megawatt
in	inch	nm	nautical mile
knot	nautical mile per hour	ppb	parts per billion
kV	kilovolt	ppm	parts per million
kW	kilowatt	VdB	vibration decibels

OTHER ABBREVIATIONS AND ACRONYMS

A	AB	Assembly Bill
	AB 32	Assembly Bill 32, the California Global Warming Solutions Act
	APCD	Air Pollution Control District
	APMs	Applicant Proposed Measures
	ATCMs	Airborne toxic control measures
C	CAAQS	California Ambient Air Quality Standards
	Cal-IPC	California Invasive Plant Council
	Caltrans	California Department of Transportation
	CARB	California Air Resources Board
	CBC	California Building Code
	CCC	California Coastal Commission
	CCMP	California Coastal Management Program
	CCRWQCB	Central Coast Regional Water Quality Control Board
	CDFG	California Department of Fish and Game
	CDP	Coastal Development Permit
	CEQ	Council of Environmental Quality
	CEQA	California Environmental Quality Act
	CESA	California Endangered Species Act
	CFCs	Chlorofluorocarbons
	CFR	Code of Federal Regulations
	CGS	California Geological Survey
	CH_4	Methane
	CINMS	Channel Islands National Marine Sanctuary
	CMP	Congestion Management Program
	CNDDB	California Natural Diversity Database
	CNEL	Community Noise Level Equivalent
	CNPS	California Native Plant Society
	CO	Carbon monoxide
	CO_2; CO_{2e}	Carbon dioxide; carbon dioxide equivalent
	CPFV	Commercial passenger fishing vessels

	CRHR	California Register of Historic Resources
	CSC	California Species of Special Concern
	CSLC	California State Lands Commission
	CWA	Clean Water Act
	CZMA	Coastal Zone Management Act
D	DEPM	Division of Environmental Planning and Management
E	EFH	Essential Fish Habitat
	EIR	Environmental Impact Report
	EOF	Ellwood Onshore Facility
	EPA	U. S. Environmental Protection Agency
	ESHA	Environmentally Sensitive Habitat Areas
F	FE	Federal Endangered
	FESA	Federal Endangered Species Act
	FHWG	Fisheries Hydroacoustic Working Group
	FP	Fully Protected
	Frac-out	Drilling Fluid Fracture
	FT	Federal Threatened
G	GHG	Greenhouse gases
	GP/CLUP	General Plan/Coastal Use Plan (City of Goleta)
	GWP	Global warming potential
H	H_2O	Water
	H_2S	Hydrogen Sulfide
	HASC	Habitat Areas of Special Concern
	HDD	Horizontal Directional Drilling
	HDPE	High Density Polypropylene
	HFCs	Hydrofluorocarbons
	HUD	Housing and Urban Development (Department of)
I	IS	Initial Study
L	LCP	Local Coastal Plans/Program
	LNTM	Local Notice to Mariners
	LOS	Level of Service
M	MBTA	Federal Migratory Bird Treaty Act
	MLLW	Mean lower low water
	MLPA	Marine Life Protection Act
	MM	Mitigation measure
	MMP	Mitigation Monitoring Program
	MMPA	Marine Mammal Protection Act
	MND	Mitigated Negative Declaration
	MOU	Memorandum of Understanding
	MPA	Marine Protected Area
	MPRSA	Marine Protection, Research, and Sanctuaries Act
	MTD	Metropolitan Transit District (Santa Barbara)
N	N_2O	Nitrous oxide
	NAAQS	National Ambient Air Quality Standards
	NAHC	Native American Heritage Commission
	NEPA	National Environmental Policy Act
	NHPA	National Historic Preservation Act
	NMFS	National Marine Fisheries Service

	NO	Nitric oxide
	NO_2	Nitrogen dioxide
	NOAA	National Oceanic and Atmospheric Administration
	NO_X	Nitrogen oxides
	NPDES	National Pollutant Discharge Elimination System
O	O_3	Ozone
	OCS	Outer Continental Shelf
	OPA	Oil Pollution Act
	OPR	Governor's Office of Planning and Research
	OSHA	Occupational Safety and Health Administration
	OSPR	Office of Spill Prevention and Response
	OSPRA	Lempert-Keene-Seastrand Oil Spill Prevention and Response Act
P	PFCs	Perfluorocarbons
	PFE	Proposed Federal Endangered
	PFT	Proposed Federal Threatened
	PM	Particulate matter
	$PM_{2.5}$	Particulate matter air pollutants with diameter of 2.5 micrometers or less
	PM_{10}	Particulate matter air pollutants with diameter of 10 micrometers or less
R	REC	Recreation
	RMS	Root mean squared
	ROC	Reactive organic compounds
	ROG	Reactive Organic Gases
	ROV	Remotely Operated Vehicle
	RWQCB	Regional Water Quality Control Board
S	SA	Special Animals
	SBCAG	Santa Barbara County Association of Governments
	SCCAB	South Central Coast Air Basin
	SCE	State Candidate Endangered
	SE	State Endangered
	SF_6	Sulfur Hexafluoride
	SMARA	Surface Mining and Reclamation Act
	SMCA	State Marine Conservation Area
	SMR	State Marine Reserve
	SO_2	Sulfur Dioxide
	SO_x	Sulfur Oxides
	SP	Special Plants
	SPL	Sound pressure level
	spp	Species
	ST	State Threatened
	SWPPP	Stormwater pollution prevention plan
	SWRCB	State Water Resources Control Board
U	UPRR	Union Pacific Railroad
	US-101	U.S. Highway 101
	USACE	United States Army Corps of Engineers
	USC	United States Code
	USCG	United States Coast Guard
	USFWS	United States Fish and Wildlife Service
V	VOCs	Volatile organic compounds

EXECUTIVE SUMMARY

This Initial Study/Mitigated Negative Declaration (MND) has been prepared by the California State Lands Commission (CSLC), as lead agency under the California Environmental Quality Act (CEQA), to analyze and disclose the potential environmental effects associated with the Platform Holly Power Cable Replacement Project (Project). Venoco, Inc. (Venoco or Applicant) proposes to replace the existing power cable that runs from the Ellwood Onshore Facility (EOF) to Platform Holly. Replacement of the Platform Holly power cable was also discussed in the Ellwood Pipeline Line 96 Modification Project Environmental Impact Report (Santa Barbara County 2011).

The EOF is located at 7979 Hollister Avenue in the City of Goleta, Santa Barbara County. The facility is located southwest of the intersection of U.S. Highway 101 and Hollister Avenue and south of the Union Pacific Railroad (UPRR) tracks. Sandpiper Golf Course is located to the east of the facility, and the Bacara Resort and Ellwood Pier are located to the west. Platform Holly is located offshore on State Oil and Gas Lease PRC 3242 and lies in about 211 feet of water in the Pacific Ocean, approximately 2 miles southwest of Coal Oil Point. Figure ES-1 shows the general Project location.

PROPOSED PROJECT

The purpose of the Project is to replace the existing 46-year-old, 16.5 kilovolt (kV) power cable between the EOF and Platform Holly as part of repair and maintenance. The CSLC prepared an MND because it determined that, while the Initial Study identified potentially significant impacts related to the proposed use of Horizontal Directional Drilling (HDD) to install the cable in the nearshore and the Project's proximity to Bell Canyon Creek, which is in the City of Goleta, revisions and other measures have been incorporated into the Project proposal and agreed to by Venoco that avoid or mitigate those effects to a point where no significant effects would occur.

The existing cable is a 16.5 kV submarine cable bundle, 3-3/8 inches in diameter, consisting of a conduit containing three conductors and integral communication cables, shielded by polyethylene inner jackets covered with high density tallow polyethylene and galvanized steel armor wires. The new power cable would be sized as an in-kind replacement, with similar electrical power transmission capability to support existing operations; however, the cable would use newer technology fiber optics to replace the existing wire telecommunications, allowing for improved voice and data signals.

Figure ES-1. Project Location

The replacement cable would follow the general route of the existing cable through existing easements. It would begin at the existing onshore Platform Holly supply transformer at the EOF and be routed underground to a HDD site just west, but outside of the EOF fence. It would then be routed via a HDD-installed 10-inch-diameter High Density Polypropylene (HDPE) conduit under the beach and surf zone and re-surface offshore in a HDD exit pit on the seafloor. The HDD alignment is approximately 2,200 feet long (800 feet onshore and 1,400 feet offshore). The cable would then be laid on the seafloor for the remaining distance (approximately 13,500 feet) to Platform Holly.

The HDD alignment within the City of Goleta is 800 feet in length. At Platform Holly, the cable would either be installed in a new 8-inch-diameter "I" tube riser that would be placed near an existing riser or, if feasible, Venoco would use an existing 6-inch-diameter spare riser that would be converted for use as the new cable riser (in the latter case, the new 8-inch I-tube would not be installed). From there the cable would be connected to new platform cable, installed in a new 6-inch steel conduit, to the existing Platform Holly connection switch that connects to the Platform Holly transformers. This would replace the existing platform cable and conduit. No modifications to the onshore or offshore transformers or switchgear are proposed.

Venoco proposes to disconnect the existing cable and leave it in place at this time, because removal of the existing power cable would disturb ocean habitat and could interfere with other active lines and the newly installed cable. On December 3, 2011, an external Remotely Operated Vehicle (ROV) survey was conducted along the pipeline bundle, adjacent to the power cable. The cable was not visible in the survey results, indicating that it has become buried in the sandy ocean bottom over the years. Final disposition of the cable would be analyzed in a separate CEQA document as part of final Platform Holly decommissioning.

EXISTING CONDITIONS

Onshore Project Sites

Onshore Project sites include the EOF, the Ellwood Pier, and the HDD cable alignment through which the replacement power cable would be installed. The EOF Project site is located immediately west of the EOF and consists of a gravel access road with an adjacent upland area that is regularly used for facilities management and beach access. The adjacent vegetated portion of the EOF Project site is located in the northern part of the site, to the west of the access road. It is currently disturbed, with only ruderal vegetation, and does not contain any native vegetation or other habitat.

The Ellwood Pier Project site is located within the jurisdiction of the County of Santa Barbara immediately north and onshore from Ellwood Pier and consists of an existing asphalt parking lot with two adjacent upland areas that are regularly used for facilities

management. The non-asphalt portion of the Ellwood Pier Project site is currently disturbed and also does not contain any native vegetation or other habitat.

The HDD cable alignment would originate at an entry pit on the gravel access road outside the EOF and continue south approximately 800 feet under part of the Sandpiper Golf Course and beach immediately adjacent to and west of Bell Canyon Creek and estuary, and resurface at an exit pit located approximately 1,400 feet offshore. An upland area at the north end of the proposed HDD is dominated by invasive non-native species. This area is mapped by the City of Goleta (2009) as an Environmentally Sensitive Habitat Area (ESHA), although conditions observed during a pre-Project biological survey indicate that no riparian areas, marshes, or vernal pools lie within the HDD alignment footprint. Above the cable alignment, terrestrial features are largely dominated by the golf course with its ornamental lawn and sand traps. A small area (approximately 1,000 square feet) of sandy shore habitat with a few ornamental palm trees exists at the southern end of the alignment along the ocean.

Offshore Site

The offshore Project site is located in the northern-central portion of the Santa Barbara Basin, adjacent to the City of Goleta, and extends from the shoreline to Platform Holly. Marine habitats within the Project area include a diversity of intertidal, benthic, and open water habitats. This area is also known for its abundant fossil fuel resources. A major commercial shipping channel runs offshore of the Project area, and both commercial and recreational boating activity is common. Although the Project area is not located within federal or State Marine Protected Areas, it is adjacent to the Channel Island National Marine Sanctuary and Campus Point and Naples State Marine Conservation Areas (SMCAs).

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

Table ES-1 shows the anticipated level of Project-related impacts to each resource as determined through the environmental analysis that is detailed in Section 3 of this MND. Table ES-2 lists the Project-specific Applicant Proposed Measures (APMs) and recommended mitigation measures (MMs) designed to reduce or avoid potentially significant impacts identified through the environmental analysis detailed in Section 3. With implementation of the proposed APMs and MMs, all Project-related impacts would be reduced to less than significant.

Table ES-1
Environmental Issues and Potential Impacts

No Impact	Less than Significant Impact	Less than Significant with Mitigation
• Agriculture and Forestry • Mineral Resources • Population and Housing	• Land Use/Planning • Noise • Public Services • Utilities/Service Systems • Recreation • Geology/Soils • Air Quality/Greenhouse Gas Emissions • Commercial and Recreational Fisheries	• Aesthetics • Cultural Resources • Hydrology/Water Quality • Transportation/Traffic • Hazards and Hazardous Materials • Biological Resources

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

APM-1 Measures to Reduce Dust Emissions from Construction	Best available control measures shall be implemented to control PM_{10} generation during construction of the Project, inclusive of: • During construction, water trucks or sprinkler systems will be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption. • Minimize the amount of disturbed area and reduce onsite vehicle speeds to 15 miles per hour or less. • If importation, exportation, and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist or treated with soilbinder to prevent dust generation. • Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads. • After clearing, grading, earthmoving, over-excavation is completed, the disturbed area is paved or otherwise developed so that dust generation will not occur. • The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	• Prior to any land clearance, the Project Applicant shall include, as a note on a separate informational sheet to be recorded as required by the City of Goleta, these dust control requirements. All requirements shall be shown on grading and building plans.
APM-2 Measures to Reduce NO_x Emissions from Construction	Diesel emissions shall be reduced during construction by implementation of the following measures: • Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible. • Diesel powered equipment should be replaced by electric equipment whenever feasible. • If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by the Environmental Protection Agency or CARB. • Construction equipment shall be maintained per the manufacturers' specifications. • Catalytic converters shall be installed on gasoline powered equipment, if feasible. • All construction equipment shall be maintained in tune per manufacturer's specifications. • The engine size of construction equipment shall be the minimum practical size. • The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. • Construction worker trips should be minimized by requiring carpooling and by providing lunch onsite.
APM-3 Geotechnical Report for Horizontal Directional Drilling Installation	At least 30 days prior to start of HDD construction, Venoco shall submit a site-specific geotechnical report certified by a California registered Geotechnical Engineer to the CSLC staff for review and approval, in consultation with the City of Goleta's Building Official and the Coastal Commission staffs and, if the City of Goleta has the legal authority to require approval of the geotechnical report, subject to that approval by the City of Goleta's Building Official. At a minimum, the report shall include the following information: • Boring logs; • Confirmation of fitness of purpose of the HDD method; • Any other pertinent soil properties and parameters per California Building Code requirements; and • Any geotechnical design recommendations for safe HDD installation including any safeguards to minimize risk of inadvertent release of drilling fluids to the surface, groundwater, or ocean.

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

AES-1. Construction Night Lighting Plan	Venoco shall prepare, and submit to California State Lands Commission and City of Goleta staffs for approval, a Construction Night Lighting Plan at least 2 weeks prior to construction. The Plan shall include at least the following measures: • Onshore and offshore lighting shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject area and prevent spill-over onto adjacent areas. Upward directed exterior lighting is prohibited. • Lighting fixtures shall be kept to the minimum number and intensity needed to ensure construction and worker safety. • Lighting shall be not directed towards any Environmentally Sensitive Habitat Area or any neighboring properties to the maximum extent feasible.
BIO-1. Marine Mammal Monitoring	A. A 500-foot (152-meter) Minimum Safety Zone shall be established along the proposed cable alignment. B. Two National Oceanic and Atmospheric Administration Fisheries-approved marine mammal monitors shall be on watch on each Project vessel (cable-lay and support vessels) during offshore horizontal directional drilling (HDD) and cable-laying activities to monitor any marine mammals that enter the established Minimum Safety Zone. In the event a marine mammal approaches within 200 feet during the HDD operation, the monitors shall notify the onsite construction foreman and initiate a cease-work order; the monitors shall have discretion to continue operations if they determine that the mammal is headed away from the HDD construction area. All sightings shall be documented in a monitor logbook. Photographs with a date stamp will also be taken as practical and included in the logbook. C. Cable-laying vessel speeds shall be limited to less than 2 nautical miles per hour (knots), with the speed of support vessels moderated to 3 to 5 knots, to minimize the likelihood of collisions with marine mammals and sea turtles. D. Propeller noise and other noises associated with cable laying activities shall be reduced or minimized (through reduction of vessel speed) to the extent possible.
BIO-2. Onshore Pre-construction Surveys	A. Pre-construction surveys for special-status species and nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code section 3503 shall be conducted by a qualified biologist within 30 days prior to the commencement of Project-related activities. The Project biologist shall recommend if any additional mitigation is necessary to address changes since the original survey was done. In particular, pre-construction surveys should target monarch butterflies, California red-legged frog, tidewater goby, and white-tailed kites as they have high potential to occur within or directly adjacent to the Project area. Appropriate survey methods and timeframes acceptable to California State Lands Commission (CSLC) staff and the City of Goleta (for resources applicable to City jurisdiction) shall be established to

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	ensure that chances of detecting the target species are maximized, i.e., October through February for monarch butterflies, March through June for nesting birds, or as determined by the consulting qualified biologist. B. If aggregations of monarch butterflies are detected within the adjacent areas, avoidance measures in compliance with the City of Goleta General Plan/Coastal Land Use Plan (City 2009) shall be implemented to ensure that aggregations of monarch butterflies are not disturbed. A minimum of a 100-foot buffer, as measured from the outer extent of the tree canopy, shall be established if monarch butterfly aggregations are detected. Construction activities within the designated buffer of the aggregation shall be halted until monarch butterflies have left the site and the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the monarch butterfly habitat. C. If nesting birds are detected, avoidance measures in compliance with the City General Plan and/or County policies shall be implemented to ensure that nests are not disturbed until after young have fledged. Construction activities within the designated buffer of the nest shall be halted until the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the nest. In the event that other listed species are encountered, consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Game (CDFG) and City of Goleta (when work is within their jurisdiction) must be initiated before continuing with work. D. The results of the preconstruction surveys, including graphics showing the locations of any nests detected, and any avoidance measures implemented for special-status species, shall be submitted to CSLC staff, CDFG, USFWS, and the City of Goleta within 14 days of completion of the surveys to document compliance with applicable State and federal laws.
BIO-3. Onshore Biological Monitoring	A. Prior to the start of construction, an Employee Environmental Awareness training program approved by California State Lands Commission (CSLC) staff and the City of Goleta shall be used to train all onsite Project personnel (Applicant employees and contractors) relative to the environmental protection measures of the Project. B. A City of Goleta-approved biological monitor (Project biologist and biological monitors) shall be present during all onshore construction (including during borings) for the portion of the proposed Project located within the jurisdiction of the City of Goleta (the Ellwood Onshore Facility [EOF] Project site and the onshore horizontal directional drilling [HDD] cable alignment). The Project biologist and the Project engineer shall clearly designate “sensitive resource zones” on project maps, construction plans, and at the construction site, consistent with the preconstruction surveys conducted for the presence of sensitive species. Sensitive resource zones are defined as areas where construction would be limited to a 15- to 30-foot corridor, depending on

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	the particular construction requirements, to avoid impacts to special-status biological resources. Similarly, staging and storage areas shall not be placed in areas where sensitive resources are present or nearby, under the direction of the Project biologist. The Project biologist shall ensure the following: 1. Washing of any Project equipment is not allowed near sensitive biological resources. An area designated for washing functions shall be identified on the plans and submitted to the related agencies prior to the Project mobilization. All waste, garbage, and trash created during the Project shall be kept in covered containers and will be removed from the Project site and disposed of in accordance with local and State regulations. 2. Removal of waste occurs as required and does not attract wildlife. 3. Construction personnel do not feed or harass wildlife for the Project duration. 4. Construction occurs during the dry season of the year (i.e., April 15 to November 1) unless an agency-approved erosion control plan, incorporating appropriate best management practices identified in the U.S. Environmental Protection Agency's guidelines for construction site runoff control is in place and all measures therein are in effect. 5. All machinery that cannot be stored offsite, e.g., HDD equipment, shall be stored and fueled only within designated locations approved by the City of Goleta. 6. Disposal of or temporary placement of excess fill or other construction materials are prohibited within 50 feet from the top of the banks for all drainages and other areas known to support special-status species. 7. All HDD work stops and the related plans are properly implemented, under the Project biologists' oversight in the event of a frac-out or construction spill into the Bell Canyon Creek drainage. C. If any special-status species are observed during monitoring, or if Project-related biological resource-focused conditions of approval are violated, the biological monitor shall have the authority to halt construction activities to avoid damaging sensitive resources or violating applicable laws. The Bell Canyon Creek corridor will be inspected during construction at a frequency acceptable to the Project biologist to ensure that possible HDD drilling mud leaks are identified. In the event that a listed species is encountered, authorization from the U.S. Fish and Wildlife Service and California Department of Fish and Game (CDFG), plus the City of Goleta for those portions of the Project located within the jurisdiction of the City of Goleta, must be obtained before continuing with work. If nesting birds are detected, avoidance measures in compliance with the City General Plan and procedures

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	shall be implemented to ensure that nests are not disturbed until after young have fledged. The results of the monitoring, including graphics showing the locations of any nests detected, and any avoidance measures implemented, shall be submitted to the CSLC staff, City of Goleta and CDFG within 14 days of completion of the inspections to document compliance with applicable State and federal laws.
BIO-4. Highly Visible Fencing	Limits of work shall be established in the field with highly visible construction fencing to prevent encroachment into the native habitats adjacent to Project sites. The fencing shall be installed prior to issuance of a development permit. If the fencing is installed during the winter months, it shall be raised to allow for the migration of California red-legged frogs through the Project area. The City of Goleta shall inspect and verify fencing installation for those portions of the proposed Project located within the jurisdiction of the City of Goleta.
BIO-5. Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan	A Spill Response and HDD Fluid Release Monitoring and Contingency Plan (plan) shall be completed and include measures for training, monitoring, worst-case scenario evaluation, equipment and materials, agency notification and prevention, containment, clean up, and disposal of released drilling muds. Preventative measures would include geotechnical investigations to determine the most appropriate HDD depth and drilling mud mixture. The plan shall include, but not be limited to, the following: • The plan shall be submitted to all respective jurisdictions. • In the event of a frac-out or any incident that affects the Bell Canyon Creek drainage, all work in the area shall cease. • Monitoring of the entry and exit pits after construction shall be conducted to determine that excavated areas are restored to pre-construction contours. • Monitoring by a minimum of two biological monitors shall occur throughout the drilling operations to ensure swift response in the event of a release (frac-out). • Methods for detecting and curtailing the accidental release of that fluid shall be developed and shall be implemented during the HOD operations. Drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation. In addition, the HDD operator shall continuously monitor mud returns at the exit and entry pits to ascertain that mud circulation has not been lost. Spotters shall follow the progress of the drill bit during the pilot hole operation, and reaming and pull back operations. • In the event of loss of circulation, without mud surfacing, the mud engineer shall evaluate the weight and viscosity of the fluid and mix in additives to seal off the crossing hole and regain circulation. Similar analysis of the mud shall be performed if surface releases are observed. • Any spills shall be contained to the extent feasible in accordance with approved plans. Containment shall be accomplished through construction of temporary berms/dikes and use of slit fences, straw bales, absorbent pads, straw wattles, and plastic sheeting. Clean

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	up shall be accomplished with plastic pails, shovels, portable pumps, and vacuum trucks. Should the release be onshore in upland or aquatic/creek habitat then the following will be required and presented in more detail in the plan: • Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud. • Consult with the City of Goleta, California Coastal Commission (CCC), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) regarding the next appropriate actions among the following: o A mobile vacuum truck will be used to pump the drilling mud from the contained area and recycled to the return pit. o The drilling mud will be left in place to avoid potential damage form vehicles entering the area. In the event of an unanticipated fluid release and subsequent adverse impacts to offshore coastal waters then the following will be required: • Venoco shall immediately erect an isolation/containment environment (underwater boom and curtain). • Venoco shall consult with the California State Lands Commission staff and CCC, CDFG's Office of Spill Prevention and Response, and National Oceanic and Atmospheric Administration Fisheries regarding the next appropriate action among the following: o Monitor the release for 4 hours to determine if the drilling mud congeals. o If drilling mud congeals, take no other action that would potentially suspend sediments in the water column. • If the release becomes excessively large, a spill response team would be called in to contain and clean up excess drilling mud in the water. Phone numbers of spill response teams in the area will be on site.
BIO-6. Habitat Restoration Plan	In the event of an unanticipated fluid release and subsequent adverse impacts to onshore upland habitat or onshore, native aquatic/creek habitat, a site-specific Habitat Restoration Plan shall be prepared for review and approval by applicable regulatory agencies, including, but not limited to, the CCC, CDFG, and the City of Goleta. If a Habitat Restoration Plan is required, an installation security and a separate performance security shall be immediately posted by the Applicant to the City or County, depending on where the restoration occurs, for (1) tree replacement and mitigation and (2) restoration, whichever applies. The installation security shall be equal to the value of installation and/or replacement of all required items. The performance securities shall be equal to the value of maintenance period of a minimum of 3 years and shall be maintained by the City or County, whichever is responsible for overseeing the restoration/tree replacement, for the required maintenance period of at least 3 years. The

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

	installation securities shall be released upon satisfactory installation of planted and/or seeded stock. The performance securities shall be released once the performance standards are achieved, or after a minimum of 3 years.
BIO-7. Anchoring Plan	Venoco shall submit a Final Anchoring Plan to California State Lands Commission (CSLC) staff for review and approval at least 2 weeks prior to commencement of Project activities. The Anchoring Plan shall include, at a minimum, the following elements: • A list all of the vessels that will anchor during the Project and the number and size of anchors to be set; • Maps showing the anchoring sites identified during pre-construction surveys to identify anchor seclusion zones and ensure that all anchors shall avoid any rocky habitat, kelp beds, submerged cultural resources, and impacts to recreational and commercial boaters; • Descriptions of navigation equipment that would be used to ensure anchors are accurately set and of the anchor handling procedures that would be followed to prevent or minimize anchor dragging; and, • A requirement to be included in appropriate contracts for the Project that contractors shall, whenever feasible, use appropriate installation techniques and procedures described in the Plan that will minimize or avoid environmental impacts such as turbidity and anchor scarring.
BIO-8. Post-Construction Seafloor Survey and Remediation	Venoco shall perform a post-construction remotely operated vehicle or diver video survey along the length of the completed facility, with voice overlay, to verify the as-laid condition of the cable. The survey shall also provide a graphic record of the work accomplished and confirm seafloor cleanup and site restoration including anchor locations.
HAZ-1. Preparation of a Critical Operations and Curtailment Plan (COCP)	Venoco shall submit a Final COCP to CSLC staff for review and approval at least 2 weeks prior to commencement of Project activities. The COCP shall define the limiting conditions of sea state, wind, or any other weather conditions that exceed the safe operation of offshore vessels, equipment, or divers in the water; that hinder potential spill cleanup; or in any way pose a threat to personnel or the safety of the environment. The COCP shall provide for a minimum ongoing 5-day advance favorable weather forecast during offshore operations. The plan shall also identify the onsite person with authority to determine critical conditions and suspend work operations when needed.

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

CUL-1. Construction Monitoring	Onshore subsurface excavations within the Project area shall be monitored by a qualified archaeologist and a Native American monitor from a culturally affiliated tribe recognized by the Native American Heritage Commission for the Project area. In the event that archaeological resources are encountered, work shall be stopped immediately or redirected away from the resources. The California State Lands Commission is the point of contact for unanticipated discoveries and shall be notified immediately to determine further actions that may include recordation, evaluation and data recovery or avoidance through preservation in place. After construction is complete, the Project archaeologist shall prepare a construction monitoring report and submit it to the CSLC, City of Goleta and the Central Coast Information Center.
CUL-2. Unanticipated Archaeological Resources	Should any previously unknown archaeological resources be discovered during construction, work will stop within 100 feet of the find until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with California State Lands Commission (CSLC) staff. If human remains are discovered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. Venoco will notify the county coroner immediately in compliance with State Health and Safety Code section 7050.5 and work in the vicinity may not resume until the coroner has made the necessary findings as to origin and circumstances of the death. The CSLC shall also be notified immediately. If the remains are determined by the coroner to be of Native American origin, the coroner will notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would then contact the most likely descendant of the deceased Native American, who would make a recommendation on how to treat or dispose of the remains with appropriate dignity as set forth in Public Resources Code section 5097.98.
WQ-1. Water Quality Plan/Storm Water Pollution Prevention Plan	Venoco shall prepare a plan to prevent adverse impacts to nearby waterways and riparian areas associated with construction. The plan shall include, but not necessarily be limited to, a description of Best Management Practices (BMPs), including erosion and sedimentation prevention measures, spill prevention measures, spill containment measures and monitoring requirements. Measures shall include, but not be limited to, such BMPs as hay bales, silt fence, waddles and other measures determined appropriate for erosion control within areas of disturbance. General permit requirements for construction site operators to control waste such as discarded building materials, truck washout, chemicals, litters, etc., and sanitary waste at a construction site are to be observed. The Plan shall be submitted to the City of Goleta for review and comment. In the presence of respective City and County representatives, the Applicant shall review the Water Quality/Storm Water Pollution Prevention Plan with appropriate contractor personnel.

Table ES-2
Proposed Project Mitigation Measures and Applicant Proposed Measures

N-1 Noise Reduction Plan	The Applicant shall prepare a noise reduction plan, which shall be approved by the City. The Plan shall include, but not be limited to, the following measures: • Notify residents and landowners about the planned construction activities near their residence/land at least one week before construction at that location. • Ensure that construction activities are reduced during the maximum extent feasible during the Holidays. • Ensure that all internal combustion engines are properly maintained and that mufflers, silencers, or other appropriate noise-control measures function properly.
T-1. Construction Traffic Control Plan	The Applicant shall prepare, provide funding for, and implement a Construction Traffic Control Plan for approval by the City. The Plan shall include, but not be limited to, the following: • Provide traffic controls when lanes are closed due to construction, e.g., flaggers, detour signs, orange safety cones; • Provide traffic controls at the EOF driveway and Hollister Road to allow for left-hand turning of project construction traffic in a safe manner, e.g., flaggers; • Provide detours for emergency vehicles; • Provide alternative routes for bicycles and pedestrians, if feasible; • Notify the residents or owners of any properties within 1,000 feet and/or adjacent to the project route of the constructions schedule at least one week before construction in their vicinity; • Provide access to the affected properties during the construction; if access to businesses is not possible during the work hours, provide lost sales compensation; • Monitor for road damage from construction-related activities and compare the affected roads at the end of the construction to the preconstruction conditions; repair any visible construction-caused damage to restore the road to its pre-construction condition or better; • No construction parking will occur in public parking lots (i.e., Haskells Beach and Ellwood/Mesa/Sperling Preserve Lots). • For construction, Venoco shall limit truck deliveries and commuters/personnel to the west Hollister-Highway 1010 on and off ramps and shall not utilize the Storke Road-Highway 101 on/off ramps during peak hours (peak hours are defined as 6 a.m. to 8 a.m. and 4 p.m. to 6 p.m.).

SECTION 1 – INTRODUCTION

1.1 PROJECT TITLE

Venoco Platform Holly Power Cable Replacement Project

1.2 LEAD AGENCY NAME AND ADDRESS

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Contact person: Cynthia Herzog, Staff Environmental Scientist
Cynthia.Herzog@slc.ca.gov
(916) 574-1310

1.3 PROJECT APPLICANT NAME AND ADDRESS

Venoco, Inc.
6267 Carpinteria Avenue, Suite 100
Carpinteria, CA 93013
Contact person: Bruce Carter

1.4 PROJECT LOCATION

Venoco, Inc. (Venoco or Applicant) proposes to replace the existing power cable that runs from the onshore Ellwood Onshore Facility (EOF) to offshore Platform Holly. The EOF is located at 7979 Hollister Avenue in the City of Goleta, Santa Barbara County. The facility is located southwest of the intersection of U.S. Highway 101 (US-101) and Hollister Avenue and south of the Union Pacific Railroad (UPRR) tracks. Sandpiper Golf Course is located to the east of the facility, and the Bacara Resort and Ellwood Pier (the latter is located within the jurisdiction of Santa Barbara County) are located to the west. Platform Holly is located on State Oil and Gas Lease PRC 3242 in about 211 feet of water in the Pacific Ocean, approximately 2 miles southwest of Coal Oil Point.

The Project alignment would follow the general route of the existing cable and all routing would be through existing easements. It would begin at the onshore supply transformer at the EOF and be routed underground through a conduit installed using Horizontal Directional Drilling (HDD) technology below the beach and surf zone and then be laid on the seafloor to Platform Holly.

1.5 ORGANIZATION OF PROPOSED MND

This MND is intended to provide the California State Lands Commission (CSLC), as lead agency under the California Environmental Quality Act (CEQA), and other

responsible agencies with the information required to exercise their discretionary responsibilities with respect to the Project. The document is organized as follows.

- **Section 1** provides the Project background, Agency and Applicant information, Project objectives and anticipated agency actions, and a summary of the public review and comment process.
- **Section 2** describes the Project—including location, layout, equipment, and facilities—and provides an overview of the Project's operations and schedule.
- **Section 3** provides the Initial Study (IS), including the environmental setting, identification and analysis of potential impacts, and discussion of 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 IS was conducted by the CSLC pursuant to State CEQA Guidelines section 15063.
- **Section 4** includes an environmental justice analysis and discussion consistent with CSLC policy.
- **Section 5** presents the Mitigation Monitoring Program.
- **Section 6** presents information on report preparation and references.
- **Appendices**. The appendices include plans, data, and other information submitted by the Applicant and analyzed in this document.
    - Appendix A: Construction Schedule
    - Appendix B: Biological Resources Assessment Report
    - Appendix C: Cultural Resources Shipwreck Data and Sacred Lands File Database Search
    - Appendix D: Fugro Desktop Study
    - Appendix E: Air Quality and Greenhouse Gas Emissions Technical Appendix

1.6 PROJECT BACKGROUND AND OBJECTIVES

The purpose of the Project is to replace the existing 46-year-old, 16.5 kilovolt (kV) power cable between the EOF and Platform Holly as part of repair and maintenance. The new power cable would be an in-kind replacement, with similar *electrical power transmission capability to support existing operations; however, the* cable would use newer technology fiber optics to replace the existing wire telecommunications, allowing for improved voice and data signals. All routing would be through existing easements and the replacement cable would follow the general route of the existing cable. Venoco also proposes to disconnect the existing cable and leave it in place at this time, to minimize disturbance of ocean habitat and interference with other active lines and the newly installed cable. The existing cable is buried in the sandy ocean bottom and was

not observed on the ocean floor during a December 3, 2011, Remotely Operated Vehicle (ROV) survey; final disposition of the cable would be analyzed in a separate CEQA document as part of final Platform Holly decommissioning. The CSLC prepared an MND because it determined that, while the Initial Study identified potentially significant impacts related to the proposed use of HDD to install the cable in the nearshore and the Project's proximity to Bell Canyon Creek, which is within the City of Goleta, revisions and other measures have been incorporated into the Project proposal and agreed to by Venoco that avoid or mitigate those effects to a point where no significant effects would occur.

The primary objectives of the Project include:

- Replacement of the existing power cable to support operations and utilize current technology.
- Improvement of voice and data signal transmissions.

1.7 PUBLIC REVIEW AND COMMENT

Consistent with the direction in State CEQA Guidelines sections 15072 and 15073, this MND was circulated to agencies and to interested individuals for review and comment. The following entities submitted written comments to the CSLC during the 30-day public review period:

- Native American Heritage Commission (NAHC)
- City of Goleta
- California Coastal Commission (CCC)
- Santa Barbara County Air Pollution Control District (APCD)

The CSLC has considered these comments in preparing this Final Proposed MND.

1.8 PERMITS, APPROVALS AND REGULATORY REQUIREMENTS

In addition to the CSLC, other local, State, and federal agencies have statutory and/or regulatory jurisdiction over various aspects of the Project. Prior to Project implementation, Venoco may need to obtain permits and/or approvals from the agencies listed below.

Local	• City of Goleta
State	• California Coastal Commission
	• California Department of Fish and Game (CDFG)
	• Central Coast Regional Water Quality Control Board (CCRWQCB)
Federal	• National Marine Fisheries Service (NMFS)
	• U.S. Army Corps of Engineers (USACE)
	• U.S. Fish and Wildlife Service (USFWS)

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SECTION 2 – PROJECT DESCRIPTION

2.1 PROJECT NEED

As stated in Section 1, Introduction, Venoco proposes to replace, the existing 46-year-old power cable that provides electrical power to Platform Holly, a self-contained, triple-deck, oil drilling and production platform. Production and control equipment, drilling systems and living quarters on Platform Holly have all been revamped in recent years. The existing power cable operates at 16.5 kV (nominal) and has operated continuously since its installation in 1966. A transformer onshore boosts the 12.47 kV service provided by Southern California Edison up to 16.5 kV for delivery from the EOF, which is located in the City of Goleta, offshore to Platform Holly. Electrical distribution equipment on Platform Holly consists of two main power transformers that reduce the voltage to 2,400 and 480 volts. The replacement power cable would be sized as an in-kind replacement, with similar electrical power transmission capability to support existing operations. (When Platform Holly was first designed, the cable was rated for 200 Amps (A) at 16.5 kV; the replacement cable would also support 200A at 16.5 kV capacity under current industry safety factors.) In addition, the replacement cable would integrally incorporate the latest technology, a fiber optic communications cable, which would replace the existing wire communication cable. This would allow for the improved transmission of voice and data signals, both of which are instrumental for the safe operation of the platform.

The anticipated life of any offshore power cable is subject to many variables, which make long-term life difficult to forecast. These variables include the quantity and severity of voltage transients, loading profile, physical damage, and physical installation stresses. Manufacturers typically only warranty cables for a period of 1 year.

2.2 PROJECT SETTING

2.2.1 Ellwood Onshore Facility and Replacement Cable Alignment

The EOF is located at 7979 Hollister Avenue in the City of Goleta. The facility, which was originally built in 1966, is located 1,600 feet (488 meters [m]) southwest of the intersection of US-101, UPRR, and Hollister Avenue. Sandpiper Golf Course is located to the south and east of the facility. Bell Canyon Creek and Bacara Resort are located to the west. The 4.5-acre site is located approximately 900 feet inland from the Pacific Ocean shoreline. The HDD replacement cable alignment would originate at a temporary entry pit in the gravel access road outside of, but adjacent to, the EOF and continue south under a portion of the Sandpiper Golf Course, under the beach and surf zone to a temporary offshore exit pit.

2.2.2 Ellwood Pier

The Ellwood Pier, which is within the jurisdiction of Santa Barbara County (County), is located west of the EOF and the Bacara Resort. The private pier was rebuilt in 1980 and is about 900 feet long. The pier is used to transport personnel, supplies, and equipment via crew boats and supply boats to platforms in the region. Access is restricted by a fence and an electric gate that is kept closed and locked unless access is required. A security guard posed at the pier shelter communicates with persons at the front gate and on the pier via an intercom system and remotely controls access onto the property and onto the pier (CSLC 2009).

2.2.3 Platform Holly

Platform Holly is located in the Santa Barbara Channel, approximately 1.9 miles southwest of Coal Oil Point. The water depth at the platform is approximately 211 feet.

2.3 PRE-CONSTRUCTION SURVEY WORK

Prior to the initiation of construction, a detailed survey of the proposed subsea route would be performed using "Wide Area" Differential Global Positioning System technology, multi-beam bathymetry, side scan sonar, and/or sub-bottom profiler. The route survey would be used to confirm engineering for the replacement cable installation and to ensure that all bottom features, including submerged cultural resources such as shipwrecks, are identified to minimize disturbances during construction. The seafloor surveys would also identify and document sensitive areas (e.g., areas of hard-bottom habitat, eelgrass), existing pipelines, and cables, etc. to confirm anchor placement and crossings.

2.4 REPLACEMENT POWER CABLE INSTALLATION

2.4.1 Overview

The replacement cable would follow the general route of the existing cable through existing easements and a new HDD alignment (Figure 2.4.1 shows the HDD Drilling Plan and Profile). It would begin at the EOF at the existing onshore Platform Holly supply transformer and run underground to a HDD site outside of the EOF to the west. It would then be routed via a HDD-installed 10-inch High Density Polypropylene (HDPE) conduit under the beach and surf zone and then re-surface offshore in the HDD exit pit on the seafloor, approximately 1,400 feet offshore. The total length of the HDD alignment is approximately 2,200 feet (800 feet onshore and 1,400 offshore). The cable would then be laid on the seafloor for the remaining distance (approximately 13,500 feet) to Platform Holly.

1

Seg #1	Drill Segment Description	Value	Unit		Start STA.	Stop STA.	Start EL.	Stop EL.
1	Entry Angle	80	deg.		0	98.48	10	-7.36
	Entry Tangent Length	100	ft.					
2	Vertical Curve #1 Radius	3794	ft.		98.48	757.25	10	-65
	Vertical Curve #1 Angle Turned	10	deg.					
	Vertical Curve #1 Length	662.1	ft.					
3	Bottom Tangent Angle	90	deg.		757.25	1096.13	-65	-65
	Bottom Tangent Length	1110.8	ft.					
4	Horizontal Curve #1 Radius	2777	ft.		1096.13	1868.01	-65	-65
	Horizontal Curve #1 Angle Turned	16.16	deg.					
	Horizontal Curve #1 Length	782.1	ft.					
5	Vertical Curve #2 Radius	1774	ft.	Compound Radius 1515 ft.	1868.01	2176.14	-65	-38.04
	Vertical Curve #2 Angle Turned	10	deg.					
	Vertical Curve #2 Length	309.7	ft.					
	Horizontal Curve #2 Radius	2777	ft.		1868.01	2176.14	-65	-38.04
	Horizontal Curve #2 Angle Turned	6.84	deg.					
	Horizontal Curve #2 Length	332.41	ft.					
6	Exit Angle	100	deg.		2176.14	2250	-38.04	-25.02
	Exit Tangent Length	100	ft.					
	Total Horizontal Distance	2250	ft.					
	Total Measured Distance (through pipe)	2286	ft.					

J-C GENERAL ENGINEERING INC.
Contractors Lic. # 481089

Installation Of:
10.75" OD DR 7.3 HDPE Casing

FIGURE 2.4-1 PLATFORM HOLLY POWER CABLE REPLACEMENT HORIZONTAL DIRECTIONAL DRILLING PLAN & PROFILE

At Platform Holly, the replacement cable would either be installed in a new 8-inch-diameter "I" tube riser, located near the existing riser or, if feasible, Venoco would use an existing 6-inch-diameter spare riser that would be converted for use as the new cable riser (in the latter case, the new 8-inch I-tube would not be installed). From there the cable would be connected to new platform cable, installed in a new 6-inch steel conduit, to an existing switch that connects to the Platform Holly transformers. No modifications to the onshore or offshore transformers or switchgear are proposed.

The order of Project operations would be as follows. The replacement cable would be delivered to the Project site on a lay barge after the preparatory work was completed both at Platform Holly and onshore. The cable would be pulled from the barge into the EOF through the pre-installed HDPE conduit and trench to a cable termination vault at the existing Platform Holly supply transformer. The cable would then be laid on the seafloor using the lay barge to Platform Holly and connected as described above.

The following discussion presents the proposed approach to the cable installation. Details may vary depending on the specific contractor selected to perform the work. The cable installation process is divided into three phases: (1) Onshore, including Beach and Surf Zone HDD; (2) Offshore HDD; and (3) Holly Platform.

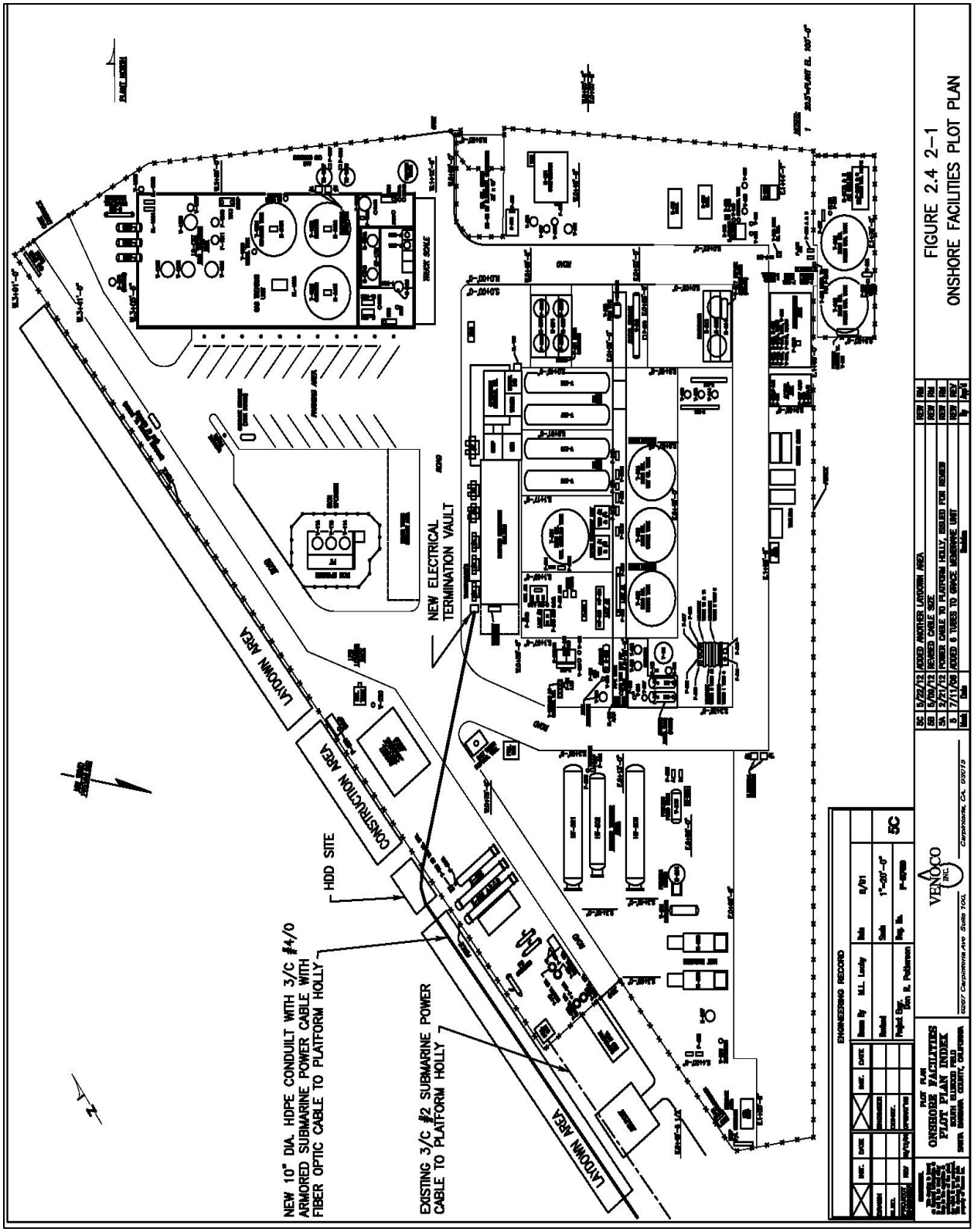
2.4.2 Onshore Installation

Onshore and through the beach and surf zone, the cable would be laid using HDD in the City of Goleta. At the EOF, the existing cable is buried under asphalt surfaces. Trenching would be used to route the cable to a termination vault at the existing transformer. The existing cable will remain buried in place. Laydown and construction areas would be located on the existing access road west of the EOF. The parking lot at the Ellwood Pier would be used for the fabrication of the HDPE conduit string. Ellwood Pier, which is under the County's jurisdiction. The County has stated that no permit would be required for use of the Ellwood Pier Project area during Project construction (Dean Dusette, personal communication, October 2012). Please refer to Figure 2.4.2-1, Onshore Facilities Plot Plan.

Construction equipment delivery and hauling trips would be during daytime non-peak hours. Up to 15 hauling trips are anticipated for Project construction.

Termination Vault

A small concrete vault would be constructed under the south end of the existing Platform Holly supply transformer at the EOF. The vault would be approximately 3 feet by 4 feet by 4 feet, and would allow positioning the replacement cable adjacent to the existing transformer until the final cable connection is made. The vault would take approximately 1 week to construct.


NEW ELECTRICAL TERMINATION VAULT
LAYDOWN AREA
CONSTRUCTION AREA
HDD SITE
NEW 10" DIA. HDPE CONDUIT WITH 3/C #4/0 ARMORED SUBMARINE POWER CABLE WITH FIBER OPTIC CABLE TO PLATFORM HOLLY
EXISTING 3/C #2 SUBMARINE POWER CABLE TO PLATFORM HOLLY
LAYDOWN AREA
N
FIGURE 2.4 2-1
ONSHORE FACILITIES PLOT PLAN
ONSHORE FACILITIES
PLOT PLAN INDEX
VENOCO INC.

Trenching

A trench, approximately 2-feet-wide and 3- to 4-feet-deep, would be excavated from the termination vault to the HDD entry pit. The trench would be temporarily plated with steel traffic plates until the cable has been laid in the trench. Once the cable is installed, the trench would be backfilled, compacted, and finished with replacement concrete paving where it crosses existing roadways. Trenching would take approximately 1 week.

Horizontal Directional Drilling

HDD would be used to install a 10-inch-diameter HDPE conduit from the EOF and under the beach and surf zone for approximately 2,200 feet. HDD equipment would be staged in the access roadway west of the EOF. An approximately 18-inch-diameter bore would be established through drilling and reaming, and the 10-inch-diameter HDPE conduit would be pulled into place from the barge location offshore. The cable would then be pulled through the HDPE conduit from the barge to the HDD site and then routed in the trench to the termination vault at the EOF. Onshore pulling activities would take place from the gravel access road outside of the EOF.

HDD offers advantages over more conventional beach and surf zone cable lay options: the cable would be placed 35 to 50 feet below the beach erosion zone and disturbance to the nearshore seabed and onshore areas would be minimal and temporary.

HDD requires shallow entry and exit pits for the bore. These pits are approximately 10 to 20 feet in width and 20 to 50 feet in length. The entry pit work area would be located in the existing access road east of EOF. The exit pit would be constructed using the barge and a clamshell crane, on the sea floor at the 30-foot ocean depth, approximately 1,400 feet offshore. The exit pit would also serve as the transition trench when the cable is pulled into the conduit. Move in and pit construction is expected to take approximately 1 week. Onshore spoils would be temporarily stored on-site, outside the EOF, and used as backfill. Offshore spoils would be side cast and used to backfill the exit pit.

The HDD rig would be positioned at the entry pit and a 10-inch-diameter pilot hole would be drilled. A pilot hole is generally achieved by excavation and jetting and/or by a down-hole drilling motor. Nonhazardous drilling fluid is pumped through the drill pipe to the drill head at which time it is jetted through or pumped through a drill motor. The end of the drill pipe is used to core the pilot hole. The drill fluid lubricates the drill stem and carries cuttings back to the entrance pit, which doubles as a capture pit for the returned drilling fluid. The fluid is pumped through a treatment system that separates the cuttings from the fluid and re-processes the fluid for re-use. The drill fluid is then recycled and re-injected into the drill stem. The pilot process is expected to take approximately five 24-hour days. Any excess mud accumulating offshore would be contained in the exit pit, pumped with a mud pump, and stored on the barge until Project completion, when it would be properly disposed of at an approved disposal facility.

Once the pilot hole has been completed, the second pass takes place with a reamer. The reamer is attached to the drill string and is rotated and either pushed or pulled from onshore while rotating and drill fluid is pumped to the reamer through the drill pipe. The excavated soil is suspended in the drill fluid and then brought to the entrance pit and recycled. The reaming process, depending upon soil conditions, is expected to take approximately six 24-hour days. Next, a mud pass or packer reamer would be performed to assure that the hole is clean of all excavated material, to allow for a smooth lubricated pull in of the HDPE conduit. This is expected to take approximately 1 day.

The final step is to pull the HDPE conduit into the reamed hole. The HDPE conduit string would be prefabricated onshore in the Ellwood Pier parking lot area, which is within the County's jurisdiction. A pulling cap would be installed on the conduit and a swivel used to attach it to the drill string to keep the conduit from rotating. The conduit would then be pulled from shore using a tug boat, pulled through an engineered temporary launch ramp located on the Ellwood Pier, towed to the exit pit barge location, and then pulled into the reamed hole. Demobilization and clean-up of HDD equipment would then take place. All drilling mud and excavated material would be properly disposed of throughout the drilling process and at final clean-up. There is an overall EOF Oil Spill Contingency and Emergency Action Plan that would be revised as necessary for the Project. A safety plan would also be developed by the contractor for the Project once the contract is awarded. Pulling the HDPE conduit in would take approximately 1 day. Clean up and HDD move out would take approximately 3 days.

The entire HDD operation would take approximately 20 days, of which up to 11 days (drilling and pulling the HDPE into place) is expected to involve round-the-clock drilling operations. HDD operations would be coordinated with the offshore cable lay portion of the work. The HDD Drilling Plan and Profile is provided as Figure 2.4-1.

During construction onshore, an alternate emergency route around the Project work area would be provided through the EOF facility. Vehicles would enter through the main gate, transit through the facility on the existing access road and exit the facility at the south end near the heliport.

2.4.3 Offshore Installation

The HDPE pipe joints would be delivered to the Ellwood Pier parking lot in one truck load of 50-foot-long joints. The pipe joints would be fused together with a portable fusion machine and temporarily stored in three sections approximately 750-feet long, along the east side of the parking lot. When the pipe is ready to be launched, a temporary structural steel launch ramp, which has been fabricated offsite, would be installed on the pier structure. Figure 2.4.2-2 shows a conceptual design of the temporary launch ramp. The temporary launch ramp location would be at the bend in the pier or at the end of the pier as identified in Figure 2.4.2-3, depending on the equipment available.

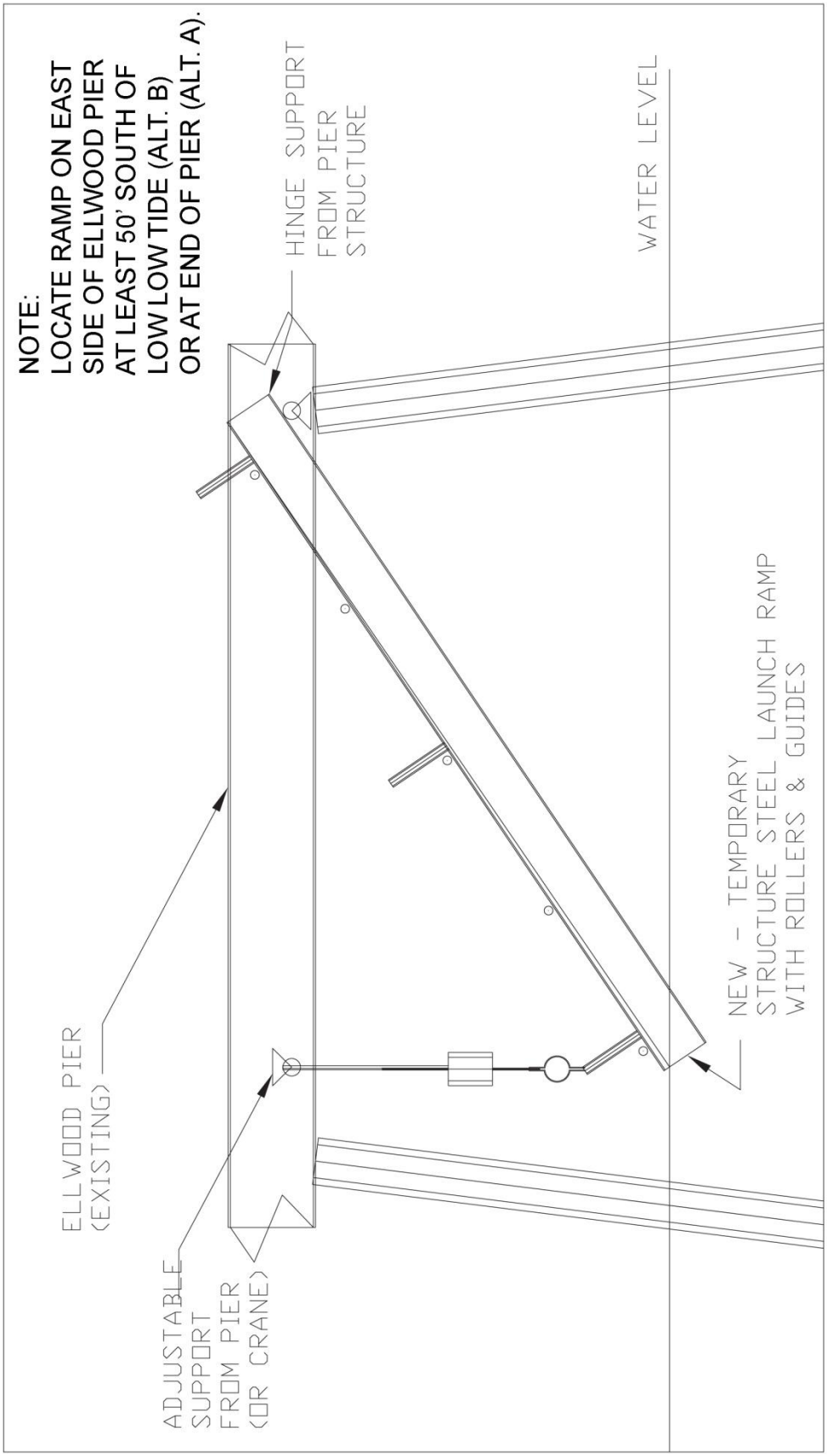
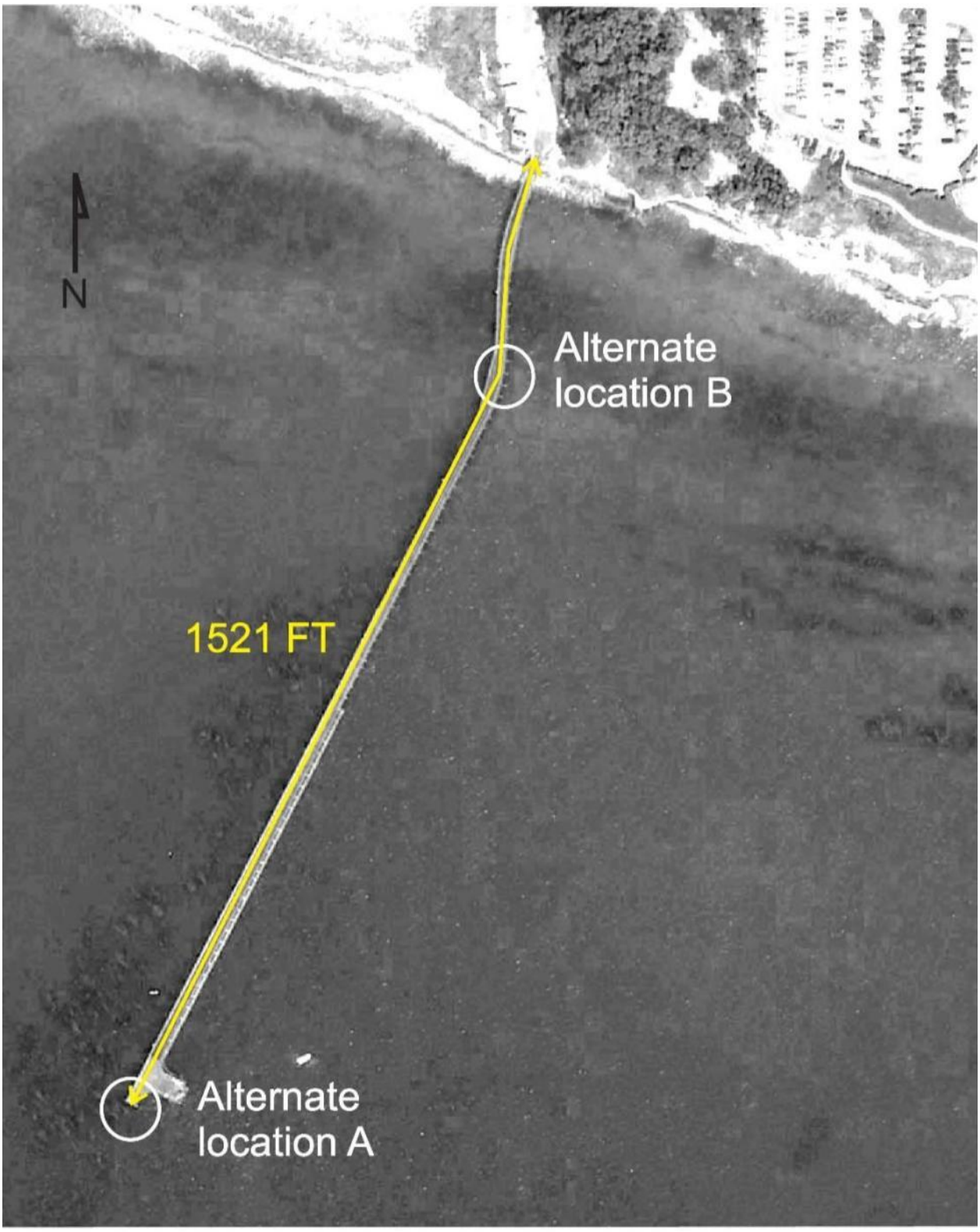


FIGURE 2.4.2-2 PLATFORM HOLLY POWER CABLE HDPE CONDUIT LAUNCH RAMP



Prepared By: VENOCO INC.

FIGURE 2.4.2-3 ALTERNATE LOCATIONS FOR LAUNCH RAMP

The launch ramp would guide the pipe from the top of the pier deck onto the water surface using rollers and guides. The first section of HDPE pipe would be: (1) moved from the parking lot with forklifts and cranes to the launch ramp and connected to a tug boat using a winch line from the tug and a pulling head with swivel connected to the first section of HDPE pipe; (2) slowly pulled with the tug boat until the end of the first section is even with the beginning of the second section; and (3) fusion welded to the second section and allowed to harden and be inspected. The second section would then be pulled from the parking lot and the sequence would be repeated with the third section. A second boat would guide the HDPE pipe string as it is being launched. These boats would tow the string of pipe to the exit pit barge location where it would be connected to the HDD drilling equipment and pulled into the HDD reamed hole.

Offshore, the replacement cable would be laid using a conventional moored cable-lay barge. The moored lay barge would be equipped with the necessary cable laying equipment. This would require a minimum of three, two-drum air controlled winches with torque converter drives. Six anchors would be required in order to ensure that the barge is under a four-point moor at all times. Three anchors would be used on each side of the barge, and the anchors would be deployed approximately 1,000 feet apart. The barge would be capable of moving between 1,000 feet to 1,200 feet between touchdowns. Two anchor handling tugs, each equipped with Differential Global Positioning System technology navigational equipment and stem rollers would be used for anchor deployment. An estimated 100 to 120 anchor touchdowns would be required to complete the cable installation. The cable would be staged on the barge, pulled through the HDPE conduit and trench to the termination vault at EOF, and anchored at the EOF. The barge would be moved toward Platform Holly laying the cable on the ocean floor as it progresses and would lay the cable in a slight serpentine pattern to allow for future retrieval and splicing should this ever be required. Once at Platform Holly, the cable would be prepared for pulling onto the platform. After completion of preparatory work and mobilization, the cable lay is expected to take approximately 2 weeks. Once cable lay begins, it is expected to continue 24 hours per day to prevent damage to the cable. The cable would be laid in the power cable corridor as shown on Figure 2.4-1.

Offshore vessel trips associated with Project construction activities are anticipated to include a derrick barge, bin barge, cable barge, and up to three tugs at one time for worst case conditions.

2.5 PLATFORM HOLLY INSTALLATION

To support the cable connection to Platform Holly, Venoco would either use an existing 6-inch-diameter spare riser that would be converted for use as a cable riser or, if using the existing 6-inch riser is not feasible, an 8-inch I-tube riser and cable hang off would be installed in advance of cable lay to support the cable connection to the platform. An elevation of Platform Holly looking west is provided as Figure 2.5-1.

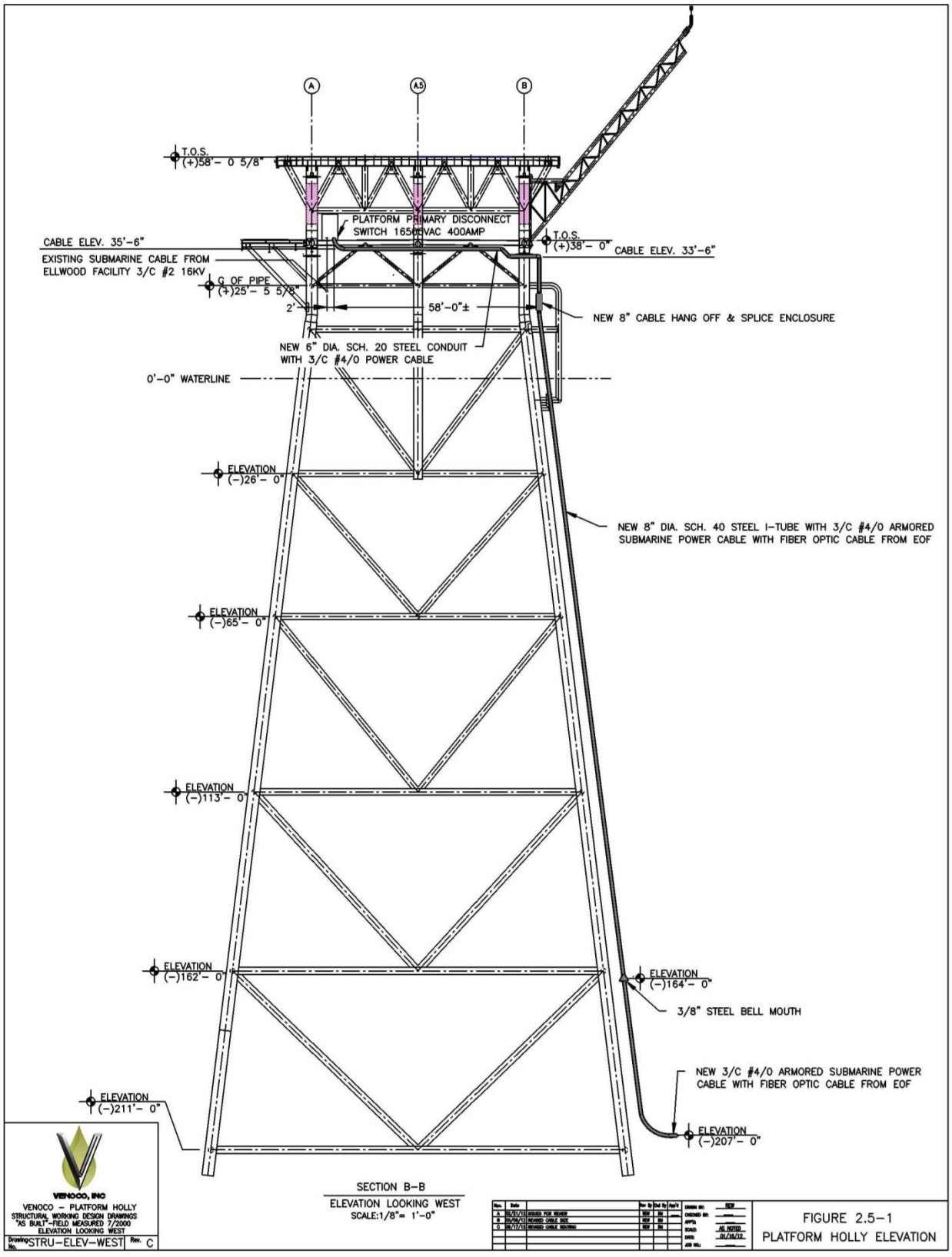


FIGURE 2.5–1
PLATFORM HOLLY ELEVATION

The Platform Holly crane would be used to install the I-tube. Six-inch-diameter conduit with 4/0 conductors would also be installed on Platform Holly in preparation for the cable installation. Installation of the I-tube riser and conduit would take approximately 10 days. Once the cable is positioned by the barge near Platform Holly, it would be pulled through the 8-inch-diameter I-tube riser, or an existing 6-inch-diameter riser, and supported at the top of the I-tube with a cable hang off device. The cable would then be spliced to the previously installed 4/0 platform cable connecting to the existing Platform Holly disconnect switch. Pulling the cable onto Platform Holly, and installation on Platform Holly, would take approximately 1 week.

2.6 TESTING AND CUT-OVER

Once the replacement cable has been installed and positioned between Platform Holly and the EOF, it would be thoroughly tested to insure integrity. After testing, a platform shutdown would be scheduled and the replacement cable would be connected at both ends and energized. Testing would take approximately 1 week. Cut-over would take approximately 1 to 2 days.

2.7 MOVE OUT

Once the replacement cable is installed all construction equipment would be taken off site and the work areas would be restored. The onshore HDD site in the gravel access road outside of the EOF will be restored to pre-construction conditions. Any surplus construction materials would be removed from the work site and the lay down areas. All areas would be restored to pre-construction condition. Move out would take approximately 1 week.

2.8 DEMOLITION

As noted in Section 1.6, the existing power cable has self-buried over the years and was not observed on the ocean floor during a December 3, 2011, ROV survey. Since removal of the existing power cable would disturb ocean habitat and could interfere with other active lines and the newly installed cable, it would be disconnected and left in place at this time. The final disposition of the old cable will be addressed in a separate CEQA document along with the other subsea structures at final Platform Holly and future EOF decommissioning. The original cable will continue to be included in the existing monitoring program for Platform Holly underwater facilities.

2.9 MAJOR EQUIPMENT REQUIRED

Major equipment required for the Project includes: semi-truck tractors, 5-yard dump trucks, 1-ton service trucks, 1-ton pickup trucks, welding rig, 175 cubic feet per minute (CFM) air compressors, Caterpillar (Cat) 950G loader, Cat 315 excavator, Cat 416 backhoe, concrete trucks, pavement saw cut truck and saw, HDD machine, mud-max

recycler, fuel trucks, jack hammers, barge, tugboats, supply boats, survey boats, crew boats, barge winches, crawler crane, skiffs, and cable machine (see Table 2.9-1).

Table 2.9-1. Major Equipment Needed

Onshore Equipment:	#		Offshore Equipment	#
Land-based:			**Boats:**	
Semi-Truck Tractor	1		Tugboat Main Propulsion Cat 3516B (2) - 2,000 HP/each	2
1 Ton Service Truck	1			
3/4 Ton Pickup	2		Tugboat Generator Detroit Diesel 6-71 (2) - 180 HP/each	2
5 yd. Dump Truck	1			
Welding Rig Lincon SA250	1		Tugboat Winch Detroit Diesel 4-41 (1) - 140 HP/each	1
Backhoe Cat 430 D	1			
175 CFM Air Compressor	1		Crew Boat John Deere TFM-75 (2) - 130 HP/each	1
Cat 950G Loader	1			
Cat 315 Excavator	1			
Cat 416 Backhoe	1		**Barge with 30 T Crawler Crane:**	1
Concrete Truck	1		Generators (DD 6-71) [2]	2
Pavement Saw Cut Truck	1		Anchor Winches (DD 6V-71) [3]	3
Pavement Saw	1		Manitowoc 3900 Crawler Crane	1
			Rotoscrew 125 CFM Air Comp (60 hp)	1
HDD:			Aux Skiff (Cummins 6BTA) [2]	1
Ditch Witch JT3020	1		Aux Skiff (Detroit 6-53) [1]	1
Mud Max Recycler	1		Linear Cable Machine (DD 8V71)	1
Welding Rig Lincon SA250	1			
Backhoe Cat 430 D	1			

2.10 WORK SEQUENCE AND SCHEDULE

Construction activities are expected to take place over a 9-week period as noted in Appendix A. All onshore construction activities, including staging equipment for the offshore portion, would take place within this 9-week time period. The schedule illustrates the generalized sequence and duration of construction and abandonment activities for the entire Project. Due to the location of the work (either in disturbed access road, paved surfaces, or under the Pacific Ocean), restoration or re-vegetation programs would not be required. The actual schedule may vary due to various factors, including: the availability of contractors, material and equipment; long-lead time procurement; seasonality considerations; safety considerations (e.g., daylight, weather); and other unforeseen factors.

Platform Holly and the EOF are presently manned and operated on a 24-hour-per-day, 7-day-per-week basis, and much of any proposed nighttime construction activities would be indistinguishable from normal plant operations.

Construction activities would be designed and phased to minimize risk of operational upsets and limit the amount of the facilities' downtime. Although most of the construction is expected to occur during daylight and weekday shifts, once certain activities such as HDD, HDPE conduit pull-in, and cable-laying barge work are started, these activities would be conducted 24 hours per days, for safety and continuity reasons, until the work is completed. In addition, preparatory work requiring only a limited number of workers or resources may be scheduled to occur at night, immediately preceding a daylight shift involving a greater number of workers or equipment.

SECTION 3 – ENVIRONMENTAL ANALYSIS AND CHECKLIST

This Initial Study (IS) has been completed for the Project in accordance with 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 this IS provide the basis for determining the appropriate document needed to comply with CEQA. Based on the analysis and information contained herein, the IS shows that Project construction may have a significant effect on the environment; however, with inclusion of the proposed mitigation, potential impacts would be reduced to a less-than-significant level. In addition, no impacts are associated with the long-term operation of the Project and long-term operations are not further discussed in this IS. Therefore, the CSLC concludes that an MND is the appropriate CEQA document for the Project.

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The evaluation of environmental impacts provided in Section 3.3 of this MND is based, in part, on the environmental impact thresholds provided by State CEQA Guidelines Appendix G. An impact assessment matrix is provided as part of the evaluation for each environmental issue area. The column headings for each impact assessment matrix are defined below.

- **Potentially Significant Impact.** This column has been 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 has been checked when the Project may result in a significant environmental impact, but the incorporation of identified Project-specific mitigation measures into the Project would reduce the identified effect(s) to a less than significant level.
- **Less than Significant Impact.** This column has been checked when the Project would not result in any significant effects. The Project's impact is less than significant even without the incorporation of a Project-specific mitigation measure.
- **No Impact.** This column has been checked when the Project would not result in any impact in the category or the category does not apply.

Descriptions and analyses of Project-specific and cumulative impacts that could result from Project implementation are provided in Section 3.3 of this IS. A summary of the environmental impact analysis conclusions is provided in Table 3.1-1, below.

Table 3.1-1. Environmental Issues and Potential Impacts

No Impact	Less than Significant Impact	Less than Significant with Mitigation
• Agriculture and Forestry • Mineral Resources • Population and Housing	• Land Use/Planning • Noise • Public Services • Utilities/Service Systems • Recreation • Geology/Soils • Air Quality/Greenhouse Gas Emissions • Commercial and Recreational Fisheries	• Aesthetics • Cultural Resources • Hydrology/Water Quality • Transportation/Traffic • Hazards and Hazardous Materials • Biological Resources

3.2 AGENCY DETERMINATION

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

☐ I find that the proposed Project WOULD 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 that will avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

_____ November 26, 2012

Signature Date

Cynthia Herzog
Environmental Scientist
California State Lands Commission

3.3 ENVIRONMENTAL CHECKLIST

3.3.1 Aesthetics

I. AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the Project have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c) Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

3.3.1.1 Environmental Setting

Onshore

The proposed Project consists of replacing an existing power cable between the EOF and Platform Holly. The EOF is located in the City of Goleta between the Bacara Resort and Spa on the west and Sandpiper Golf Course on the east and south, with the Pacific Ocean and beach to the south beyond the golf course, and US-101 and the UPRR to the north. Brush and eucalyptus trees screen some of the EOF facilities from the beach and golf course; however, several structures are taller than the screening landscaping and can be seen from the beach and most western end of the golf course (Figures 3.3.1-1 and 3.3.1-2). Some facility structures can also be seen from the ocean by boaters, and from the access road that leads to the Bacara Resort and Ellwood Pier. The facility is not visible from the beaches of the Bacara Resort due to the vegetation screening and topography (County 2011). Bell Canyon Creek and estuary parallel a gravel access road located immediately adjacent to and west of the EOF site. The Ellwood Pier is located in the County of Santa Barbara to the west of the Bacara Resort (Figure 3.3.1-3) with access restricted by a security gate at the road leading to the pier. Use of the Ellwood Pier would be limited to short-term construction activities.

Offshore

Platform Holly is located approximately 2 miles offshore of Ellwood Beach. The platform stands 60 feet above mean water level, covers approximately 9,600 square feet (about 80 feet by 120 feet), is painted gray-green in color, and has three decks located at the

25-foot, 38-foot, and 60-foot elevations. General machinery and processing equipment is located on the bottom two decks; the top deck includes the drilling rig, hoist and derrick, crane, gas lift, shipping compressors, and a heliport. The platform can be seen from many locations including US-101, public beaches, and public use areas during the day as well as at nighttime due to required safety lighting (Figure 3.3.1-4) (County 2011).

Figure 3.3.1-1. View of Ellwood Onshore Facility from Beach

Figure 3.3.1-2. View of Ellwood Onshore Facility from Southwestern Edge of Sandpiper Golf Course

Figure 3.3.1-3. View from the Beach to the South of the Ellwood Onshore Facility Facing Toward the Ellwood Pier

Figure 3.3.1-4. View of Platform Holly from Beach

3.3.1.2 Regulatory Setting

Federal

There are no federal regulations related to aesthetics relevant to the Project.

State

California Coastal Act

The Coastal Act (Pub. Resources Code, § 30000 et seq.) was enacted in 1976 after State voters approved the Coastal Conservation Act (Proposition 20) in 1972. A key factor that led to passage of the Coastal Act was the visible deterioration of the coastal environment associated with development pressures of a growing population. The Act establishes policies and guidelines that provide direction for the conservation and development of the California coastline, and also established the CCC as the State's coastal management, regulatory, and permitting agency for all development within the California coastal zone. This permitting and regulatory authority is further delegated to the local governments through the process of certified Local Coastal Programs (LCPs). For example, LCPs are developed by counties and municipalities for the portions of the coastal zone that are within their respective jurisdictions. Following certification of an LCP, regulatory (permitting) authority is delegated to the local jurisdiction, while the CCC retains jurisdiction over shoreline areas from the mean high tide line offshore to the 3 nautical mile (nm) limit.

Under the Coastal Act, development in the coastal zone generally requires a Coastal Development Permit (CDP) from either the CCC or local jurisdiction with a certified LCP. In general, the CCC is responsible for determining a Project's consistency with the Coastal Act and/or the California Coastal Management Program (CCMP), for granting CDPs for Projects within the California coastal zone not covered by LCPs, and for certain appeals of local government coastal zone decisions.

Coastal Act section 30251 is pertinent to visual resources preservation, stating: "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting."

Coastal Act section 30253 states, in part, that new development shall "… where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses."

Local

City of Goleta

The City of Goleta General Plan includes a Visual and Historic Resources Element. The policies of the Visual and Historic Resources Element are intended to preserve and protect Goleta's scenic and historic resources to the maximum extent feasible while allowing quality development in conformance with the General Plan provisions (City of Goleta 2006). Polices to protect visual resources include the preservation of scenic resources (VH. 1.1), ocean and island views (VH 1.3) and mountain and foothill views (VH 1.4).

3.3.1.3 Impact Analysis

a) Would the Project have a substantial adverse effect on a scenic vista?

The Project is Located along a Scenic Coastline

The City of Goleta General Plan Scenic Resources Map identifies locations on public roads, trails, parks, open spaces, and beaches that serve as public vantage points for viewing scenic resources and indicates that views from these locations shall be protected (City of Goleta 2006).

US-101 is a designated scenic corridor by the City of Goleta. Views of the EOF and access road for Venoco, and the Bacara Resort are currently obstructed by a natural vegetative buffer of trees and vegetation along this portion of US-101 located closest to the Project site.

Located to the south of the EOF are two City of Goleta designated scenic viewing locations. These oceanfront designated scenic viewing locations are located to the southeast and southwest of the EOF and have protected views from all directions. The majority of the EOF is not visible from the beach given the vegetation surrounding the site. Nonetheless, the facility has several tall structures that are taller than the screening landscaping and can be seen from the beach and the most western end of the golf course. During construction, barges and tugs would be visible offshore and some construction equipment would be visible onshore from the access road to the Bacara Resort and from the western end of the golf course. Given the existing industrial setting of the EOF, Ellwood Pier and Platform Holly, this temporary short-term construction would not be substantially different than the existing conditions. Once construction is complete, the equipment would be removed and there would be no permanent visual change to the existing conditions since the power cable would be located underground or underwater. Therefore, impacts from both construction and long-term operation of the Project would be less than significant.

b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The Project is not located within close proximity to an officially designated State scenic highway as mapped by the California Scenic Highway Mapping System. The closest designated scenic highway is a 19-mile portion of Highway 1/US-101 located approximately 35 miles to the north of the Project site starting from near Las Cruces to near Lompoc. Therefore, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway and no impacts related to this category from both construction and long-term operation of the Project would result.

c) Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The Project is part of repair and maintenance and would be sized as an in-kind replacement. Onshore and nearshore, the cable would be laid using HDD and placed 30 to 50 feet below the beach erosion zone. No modifications to onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements. Since the cable would be underground onshore and through the beach and surf zone, the Project would not substantially degrade the existing visual character or quality of the site and its surroundings as part of long-term operations.

The Project would result in short-term, temporary visual impacts associated with construction activity. During construction there would be coastal views of Project barges and tugs from the beach and surrounding coastal bluffs. As noted in 3.3.1 (a) above; given the existing industrial setting of the EOF and Platform Holly, this temporary short-term construction would not be substantially different than the existing visual conditions. Once construction is complete, the equipment would be removed and there would be no visual change to existing conditions since the power cable would be located underground or underwater. Therefore, Project impacts would be less than significant.

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

The Project would not add any additional permanent lighting to the Project area as part of long-term operations. The EOF is always lit for security and to allow for safe nighttime operation. This lighting does not intrude on the residential communities located north of US-101 or the Bacara Resort due to the distance, topography, and vegetative screening. Platform Holly is located approximately 2 miles offshore from Ellwood Beach. This platform can be viewed from many locations including US-101 and public beaches

both in the daytime and at nighttime, due to the required lighting. Therefore, the Project would not create a substantial new source of light or glare as part of Project operation.

The Project would create an additional lighting source during short-term, temporary, construction activities. Most of the construction is expected to occur during weekday daylight shifts, but once certain activities such as HDD, HDPE conduit pull-in, and cable laying barge work start, such activities would continue for safety and continuity until the work is completed. At such times, these phases would be done 24 hours per day with two 12-hour shifts.

MM AES-1 is proposed to reduce temporary nighttime light and glare impacts onshore to a less-than-significant level. Offshore nighttime construction lighting sources would be from the barges and tugs. A barge typically has floodlights that provide deck lighting and illuminate the water around the barge. The barge lights, which are brighter than the visible lights on Platform Holly, would be visible from the beach and bluffs. However, nighttime lighting associated with the Project is expected to be within normal operating limits for night-operating vessels, such as squid boats and other boats in the Santa Barbara Channel, and existing oil platforms in the Project vicinity. Therefore, with implementation of AES-1, temporary, short-term night lighting impacts associated with Project construction activities while adverse, would also be less than significant.

3.3.1.4 Mitigation and Residual/Cumulative Impacts

Mitigation.

AES-1 **Construction Night Lighting Plan.** Venoco shall prepare, and submit to California State Lands Commission and City of Goleta staffs for approval, a Construction Night Lighting Plan at least 2 weeks prior to construction. The Plan shall include at least the following measures:

- Onshore and offshore lighting shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject area and prevent spill-over onto adjacent areas. Upward directed exterior lighting is prohibited.
- Lighting fixtures shall be kept to the minimum number and intensity needed to ensure construction and worker safety.
- Lighting shall be not directed towards any Environmentally Sensitive Habitat Area or any neighboring properties to the maximum extent feasible.

Residual Impacts. With implementation of MM AES-1, any residual impacts to aesthetics/scenic would be less than significant.

Cumulative Impacts. The project would not contribute to any cumulative impact to aesthetics.

3.3.2 Agriculture and Forest Resources

II. AGRICULTURE AND FOREST RESOURCES: **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 Dept. 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. Would the Project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
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 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?	☐	☐	☐	☒

3.3.2.1 Environmental Setting

The Project would occur both onshore, on land that has a City of Goleta General Plan land use designation of open space/active recreation, and offshore in the Pacific Ocean. The Project area is not located on forest land or timberland nor is it used for agriculture production.

3.3.2.2 Regulatory Setting

Federal

No federal regulations that pertain to agricultural resources are relevant to this Project.

State

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use, and provides landowners with lower property tax assessments. Local government planning departments are responsible for the enrollment of land into Williamson Act contracts. Generally, any commercial agricultural use would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit.

Local

City of Goleta

The City of Goleta General Plan Land Use Element, Policy LU 7, objective is to preserve existing agricultural lands and reserve vacant lands suitable for agriculture to maintain the option of future agricultural uses, including local production of food commodities.

3.3.2.3 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 Resources Agency, to non-agricultural use?

The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly as part of repair and maintenance. The replacement cable would follow the general route of the existing cable and would be sized as an in-kind replacement, with similar electrical power transmission capability. The Project site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the Santa Barbara County Important Farmland Map (2010) prepared pursuant to the Farmland Mapping and Monitoring Program. The onshore portion of the Project area is identified as urban built-up land. Therefore, no Project impact would result.

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

The onshore portion of the Project site has a zoning designation of recreation (REC) and a General Plan land use designation of open space/active recreation. The Project site is not located on land under a Williamson Act Contract (City of Goleta 2006) nor is it located on land zoned for an agricultural use. Therefore, the Project would not conflict with the existing zoning for agricultural use or a Williamson Act contract, and no Project impact would result.

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))?

There is no forest land located within the Project area. Therefore, the Project would not conflict with existing zoning for, or cause rezoning of, any forest land or timberland, and no Project impact on forest resources would result.

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

There is no forest land located within the Project area. Therefore, the Project would not 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?

The Project site is not zoned for agricultural use nor is it located on forest land. Therefore, the Project would not involve changes in the existing environment, which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

3.3.2.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would have no impacts on agriculture or forest resources and no mitigation measures are required.

Residual Impacts. No impacts have been identified and no residual impacts would result.

Cumulative Impacts. The Project would not contribute to any cumulative impact to agriculture and forest resources.

3.3.3 Air Quality and Greenhouse Gas (GHG) Emissions

III. AIR QUALITY: **Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
f) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

This section describes environmental and regulatory settings related to air quality in the Project area, and identifies potential Project-related air quality impacts and potential mitigation measures to reduce such impacts. Appendix E includes the Air Quality and GHG Emissions Technical Appendix.

3.3.3.1 Environmental Setting

The following section includes a description of the physical environmental conditions in the Project area. These baseline physical conditions are the conditions by which the CEQA lead agency for the Project determines whether impacts are significant.

Climate and Meteorology

The Project area is located within the South Central Coast Air Basin (SCCAB) in southwestern Santa Barbara County within the City of Goleta and in offshore waters. The region has a Mediterranean climate characterized by mild winters, and warm, dry summers. The influence of the Pacific Ocean causes mild temperatures year-round along the coast, while inland areas experience a wider range of temperatures. Precipitation is confined primarily to the winter months. Occasionally, tropical air masses result in rainfall during summer months. Annual precipitation in the region

varies widely over relatively short distances, primarily due to topographical effects. Table 3.3.3-1 summarizes the climatic data collected at the weather station located closest to the Project area: Santa Barbara Airport Station (KSBA).

Table 3.3.3-1. Climatic Data for the Project Area

Parameter	Historic Climate Record
Average Maximum Temperature Range	63.8 °F (Feb) – 74.2 °F (Aug)
Average Minimum Temperature Range	39.0 °F (Dec) – 57.6 °F (Jul)
Average Temperature Range	51.7 °F (Dec) – 65.7 °F (Jul)
Average Annual Precipitation	17.56 inches
Average Precipitation Range	0.03 inches (Jul) – 3.92 inches (Jan)

Notes: °F = degrees Fahrenheit
Source: Western Regional Climate Center (WRCC) 2009

The regional climate is dominated by a strong and persistent high-pressure system, which frequently lies off the Pacific Coast (generally referred to as the East Pacific Subtropical High-Pressure Zone or Pacific High). The Pacific High shifts northward or southward in response to seasonal changes or the presence of cyclonic storms. In its usual position to the west, the high produces an elevated temperature inversion. An inversion is characterized by a layer of warmer air aloft and cooler air near the ground surface. Normally, air temperature decreases with altitude. In an inversion, the temperature of a layer of air increases with altitude. The inversion acts like a lid on the cooler air mass near the ground, preventing pollutants in the lower air mass from dispersing upward beyond the inversion "lid." This phenomenon results in higher concentrations of pollutants trapped below the inversion.

Atmospheric stability is a primary factor that affects air quality in the study region. Atmospheric stability regulates the amount of air exchange (referred to as turbulent mixing) both horizontally and vertically. Restricted atmospheric turbulence, that is, a high degree of stability, and low wind speeds are generally associated with higher pollutant concentrations. These conditions are typically related to temperature inversions.

Airflow plays an important role in the movement of pollutants. Regional winds are normally controlled by the location of the Pacific High. Wind speeds typical of the region are generally light, another factor that contributes to higher levels of pollution, since low wind speeds minimize dispersion of pollutants. The sea breeze is typically northwesterly throughout the year. During summer months, these northwesterly winds are stronger and persist later into the night. When the Pacific High weakens, a Santa Ana condition can develop, with air traveling westward into Santa Barbara County from the east. Stagnant air often occurs at the end of a Santa Ana condition, causing a buildup of pollutants offshore. Prevailing wind speeds on the coast range from 3.9 to 6.1 miles per hour (mph), with maximum gusts up to 51 mph (WRCC 2009).

Several types of inversions are common to the area. In winter, weak surface inversions occur, caused by radiation cooling of air in contact with the cold surface of the earth. During spring and summer, marine inversions occur when cool air from over the ocean intrudes under the warmer air that lies over the land. During the summer, the Pacific High can cause the air mass to sink, creating a subsidence inversion. Topography also plays a significant role in affecting the direction and speed of winds. During May to October, inversions commonly form in the Project area. Year round, light onshore winds hamper the dispersion of primary pollutants, and the orientation of the inland mountain ranges interrupt air circulation patterns. Pollutants become trapped, creating ideal conditions for the production of secondary pollutants in the coastal zones.

Air Quality Measurement

Air quality is determined by measuring ambient concentrations of air pollutants that are known to have adverse health effects. For regulatory purposes, standards have been set for some of these air pollutants, and they are referred to as "criteria pollutants." Criteria pollutants are also categorized as inert or photochemically reactive, depending on their subsequent behavior in the atmosphere. Criteria pollutants that are considered to be inert include carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), Particulate Matter (PM) (e.g., PM_{10} [PM with a diameter of 2.5 micrometers (µm) or less] and $PM_{2.5}$ [PM with a diameter of 2.5 µm or less]), lead, sulfates, and hydrogen sulfide (H_2S). By definition, inert pollutants are relatively stable, and their chemical composition remains stable as they move and diffuse through the atmosphere. The photochemical pollutants may react to form secondary pollutants. For these pollutants, adverse health effects may be caused directly by the emitted pollutant or by the secondary pollutants.

For most criteria pollutants, regulations and standards have been in effect, in varying degrees, since the Clean Air Act Extension of 1970, and control strategies are designed to ensure that the ambient concentrations do not exceed certain thresholds. Regulatory air quality standards are based on scientific and medical research. These standards establish minimum concentrations of an air pollutant in the ambient air that could initiate adverse health effects. The degree of air quality degradation for criteria pollutants is determined by comparing the ambient pollutant concentrations to health-based standards developed by the U.S. Environmental Protection Agency (EPA) and other government agencies. The current National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" are listed in Table 3.3.3-2. Ambient air quality monitoring for criteria pollutants is conducted at numerous sites throughout California. Tables 3.3.3-3A and 3.3.3-3B present relevant data from monitoring stations located in the Project area. A summary of the attainment status for Santa Barbara County is provided in Table 3.3.3-4.

1 **Table 3.3.3-2. Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)		(180 µg/m)	Ultraviolet		Same as	Ultraviolet Photometry
	8 Hour	(137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	—	—	35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m3		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO2)[8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 pg/m^3)	—	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[9]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 pg/m^3)	—	Ultraviolet Flourescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm (for certain areas)[9]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[9]	—	
Lead [10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[11]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	**No**		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography	**National**		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography	**Standards**		

See footnotes on next page. Source: California Air Resources Board (CARB) 2012a (http://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
9. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $j.tg/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 3.3.3-3A. Air Quality Data from the Project Area – Goleta Station

Pollutant Standards		2011	2010	2009
Ozone	Max 1-hour (ppm)	0.091	0.072	0.090
	Max 8-hour (ppm)	0.075	0.065	0.077
	Days State 1-hour exceeded	0	0	0
	Days national 8-hour exceeded	0	0	1
Carbon Monoxide	Max 8-hour	0.57	0.56	0.60
	Days State/national 8-hour exceeded	0	0	0
Nitrogen Dioxide	Max 1-hour	0.052	0.044	0.046
	Days State standard exceeded	0	0	0
PM_{10}	Max 24-hour ($\mu g/m^3$)	70.0	45.2	NA
	Days State standard exceeded	2	0	0
	Days national standard exceeded	0	0	0
$PM_{2.5}$	Max 24-hour ($\mu g/m^3$)	18.4	23.6	NA
	Days national standard exceeded	NA	NA	0

NA means there were insufficient data available to determine the value.
Source: CARB 2012b

Table 3.3.3-3B. Air Quality Data from the Project Area – El Capitan Station

Pollutant Standards		2011	2010	2009
Ozone	Max 1-hour (ppm)	0.105	0.084	0.084
	Max 8-hour (ppm)	0.077	0.073	0.064
	Days State 1-hour exceeded	1	0	0
	Days national 8-hour exceeded	1	0	0
Carbon Monoxide	Max 8-hour	NA	NA	NA
	Days State/national 8-hour exceeded	NA	NA	NA
Nitrogen Dioxide	Max 1-hour	0.028	0.042	0.042
	Days State standard exceeded	0	0	0
PM_{10}	Max 24-hour ($\mu g/m^3$)	36.0	41.0	43.1
	Days State standard exceeded	0	0	0
	Days national standard exceeded	0	0	0
$PM_{2.5}$	Max 24-hour ($\mu g/m^3$)	NA	NA	NA
	Days national standard exceeded	NA	NA	NA

NA means there were insufficient data available to determine the value.
Source: CARB 2012b

Table 3.3.3-4. Federal and State Attainment Status for Santa Barbara County, 2010 Summary

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 hour	0.070 ppm	N	0.075 ppm	N*
	1 hour	0.09 ppm (180 µg/m^3)	A	revoked	A
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m^3)	A	9.0 ppm (10 mg/m^3)	A
	1 hour	20.0 ppm (23 mg/m^3)	A	35.0 ppm (40 µg/m^3)	A
Nitrogen Dioxide***	annual average	0.030 ppm (56 µg/m^3)	A	53 ppb	U/A
	1 hour	0.18 ppm (338 µg/m^3)	A	100 ppb	U/A
Sulfur Dioxide	annual average	--	--	Revoked	--
	24 hour	0.04 ppm (105 µg/m^3)	A	Revoked	--
	1 hour	0.25 ppm (655 µg/m^3)	A	75 ppb	****
Particulate Matter (PM_{10})	annual arith-metic mean	20 µg/m^3	N	revoked	A
	24 hour	50 µg/m^3	N	150 µg/m^3	A
Particulate Matter - Fine ($PM_{2.5}$)	annual arith-metic mean	12µg/m^3	U	15 µg/m^3	U/A
	24 hour	--	--	35 µg/m^3 **	U/A
Sulfates	24 hour	25 µg/m^3	A		
Lead	calendar quarter	--	--	1.5 µg/m^3	A
	30 day average	1.5 µg/m^3	A	--	--
	Rolling 3-month average	--	--	0.15 µg/m^3	U
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m^3)	A	--	--
Vinyl Chloride (chloroethene)	24 hour	0.010 ppm (26 µg/m^3)	--	--	--
Visibility Reducing Particles	8 hour (1000 to 1800 PST)	--	A	--	--

A=Attainment; N=Nonattainment; U=Unclassified; U/A=Unclassifiable/Attainment
mg/m^3=milligrams per cubic meter; µg/m^3=micrograms per cubic meter; ppm=parts per million

* EPA strengthened the 8 hour ozone standard from the 1997 level of 0.08 ppm to 0.075 ppm on 5/27/08, but delayed implementation of the standard. In 2011, EPA made initial designations for this standard, and plans to finalize those designations by mid-2012.

** EPA strengthened the 24-hour fine particle standard from the 1997 level of 65 µg/m3 to 35 µg/m3 on 9/21/06.

*** The State Nitrogen Dioxide ambient air quality standard was amended on 2/22/07, to lower the 1-hour standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. On 1/22/10, EPA set a new 1-hour NO_2 standard of 100 ppb and retained the annual NO_2 standard of 53 ppb.

**** CARB is recommending attainment designation for the federal SO_2 1-hour standard as of 6/15/11.

Source: Santa Barbara County APCD 2012

Ambient air quality in the County is generally good, i.e., within applicable ambient air quality standards, with the exception of PM_{10} and ozone (O_3).

Inert Pollutants

Carbon monoxide is formed primarily by the incomplete combustion of organic fuels. Santa Barbara County is in attainment of the California and national 1-hour and 8-hour CO standards. High 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.

Nitric oxide (NO) is a colorless gas formed during combustion processes that rapidly oxidizes to form nitrogen dioxide (NO_2), a brownish gas. The County is in attainment for the California and national NO_2 standards. The highest NO_2 values are generally measured in urbanized areas with heavy traffic.

Sulfur dioxide is a gas produced primarily from combustion of sulfurous fuels by stationary and mobile sources. The County is in attainment of the California and national sulfur dioxide standards.

The largest PM_{10} emissions appear to originate from soils via roads, construction, agriculture, and natural, windblown dust. Other sources of PM_{10} include sea salt, particulate matter released during combustion processes, such as those in gasoline and diesel vehicles, and wood burning. Also, nitrogen oxides (NO_x) and sulfur oxides (SO_x) are precursors in the formation of secondary PM_{10}. Santa Barbara County is in exceedance of the California 24-hour and annual PM_{10} standard (see Table 3.3.3-4). Santa Barbara County is Unclassified for the State $PM_{2.5}$ Standard.

Lead is a heavy metal that in ambient air occurs as a lead oxide aerosol or dust. Since lead is no longer added to gasoline or to paint products, lead emissions have been reduced significantly in recent years. The County is in attainment with the NAAQS and the CAAQS for lead.

Sulfates are aerosols, i.e., wet particulate, that are formed by sulfur oxides in moist environments. They exist in the atmosphere as sulfuric acid and sulfate salts. The primary source of sulfate is from the combustion of sulfurous fuels. The County is in attainment for the California sulfate standard.

Hydrogen sulfide is an odorous, toxic, gaseous compound that can be detected by humans at very low concentrations. Concentrations detectable by smell (this can vary from 0.5 parts per billion [ppb] detected by two percent of the population to 40 ppb, defined as annoying by 50 percent of the population) are significantly lower than concentrations that could affect human health (2 ppm [2,000 ppb]) can cause headaches and increased airway resistance in asthmatics; inhalation of 600 ppm is

lethal). The gas is produced during the decay of organic material and is also found naturally in petroleum and natural gas. The County is in attainment of the H_2S standard.

Photochemical Pollutants

Ozone is formed in the atmosphere through a series of complex photochemical reactions involving NO_x, reactive organic compounds (ROC), and sunlight occurring over a period of 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. Because these ozone-forming reactions take time, peak ozone levels are often found downwind of major source areas. The County is not in attainment for the federal or State 8-hour ozone standards, but is in attainment for the 1-hour ozone standards.

Regional Emissions

Emissions within the County are estimated annually by the Santa Barbara County APCD. Table 3.3.3-5 lists the estimated emissions by source category. In Santa Barbara County, the highest contributors to the ROC and CO emissions are on-road motor vehicles. Emissions of NO_x and SO_x mostly occur due to other mobile sources, primarily ocean going vessels. PM_{10} emissions are mostly due to managed burning and disposal, road dust, and construction and demolition (area-wide sources).

Table 3.3.3-5. Estimated Annual Average Emissions in Santa Barbara County APCD, 2009 Summary (Tons Per Day)

SOURCE CATEGORY	TOG	ROG	CO	NO_X	SO_X	PM	PM_{10}	$PM_{2.5}$
Stationary Sources	35.5	10	6.91	7.28	4.19	1.5	0.95	0.52
Areawide Sources	24.1	10.6	31.97	2.11	0.02	36.3	20.72	7.24
Mobile Sources	19.3	17.6	136.6	80.6	29.4	5.8	5.6	5.21
Grand Total For Santa Barbara County APCD	78.9	38.3	175.5	90	33.6	43.6	27.28	12.98

ROG = reactive organic gas
Source: CARB 2009

Global Climate Change

Global climate change is a change in the average weather of the earth which can be measured by wind patterns, storms, precipitation, and temperature. Scientific research has indicated that the human-related GHG emissions above natural levels are likely a significant contributor to global climate change (IPCC 2007). GHGs are gases that trap heat in the atmosphere and regulate the Earth's temperature and include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perflurocarbons (PFCs), sulfur hexafluoride (SF_6), and O_3. The global warming potential (GWP) of these gases provides a comparison of

the warming influence of different GHGs relative to CO_2 and allows for the calculation of a single consistent GHG emission unit: the "CO_2 equivalent" or CO_{2e}.

In 2009, the transportation sector accounted for approximately 38 percent of the total statewide GHG emissions, thus making it the largest contributor to the total statewide emissions. Emissions from electricity generation, the second largest, accounted for 23 percent of the total emissions with almost equal contributions from in-State and imported electricity, while the industrial sector accounted for approximately 20 percent of the total in 2009. These three sectors accounted for approximately 80 percent of the statewide GHG emissions in 2009. Emissions from agriculture (7 percent), residential (6.3 percent), and commercial (3.1 percent) sectors accounted for approximately 16.5 percent of the total. CH_4 and N_2O emissions from wildfires and soil disturbances (forestry) accounted for approximately 0.04 percent of the total statewide GHG emissions. The remaining 3.5 percent of the gross emissions were mainly due to evaporative losses and use of ozone depleting substance substitutes, which could not be assigned to any specific economic sector in the inventory (CARB 2011).

Climate change could potentially affect other resource areas, including hydrological resources, biological resources, and socioeconomics. Projected impacts to the local region caused by climate change include: decreases in the water quality of surface water bodies, groundwater, and coastal waters; sea level rise; increased flooding and fire events; decline in aquatic ecosystem health; lowered profitability for water-intensive crops; changes in species and habitat distribution; and impacts to fisheries (California Regional Assessment Group 2002).

Water vapor is the most abundant and variable GHG in the atmosphere. It is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves (AEP 2007).

CO_2 is an odorless, colorless GHG. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgasing. Anthropogenic (human caused) sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. The global atmospheric concentration of CO_2 has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005. The atmospheric concentration of CO_2 in 2005 exceeds by far the natural range over the last 650,000 years (180 to 300 ppm) (IPCC 2007).

Methane is a flammable gas and is the main component of natural gas fuel. It has a GWP of about 21. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.

N_2O is a colorless gas that has a GWP of about 310. It is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also emit N_2O. It is used in rocket engines, racecars, and as an aerosol spray propellant.

CFCs, which are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms, are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was banned by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs for automobile air conditioners and refrigerants. PFCs are used in aluminum production and the semiconductor manufacture industry. These various classes of fluorocarbons have GWPs between 140 and 11,700.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas – 23,900. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Ozone is a greenhouse gas; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and therefore is not global in nature. According to the California Air Resources Board (CARB), it is difficult to make an accurate determination of the contribution of ozone precursors (NO_x and volatile organic compounds [VOCs]) to global warming (CARB 2004).

3.3.3.2 Regulatory Setting

Federal, State, and local agencies have established standards and regulations that govern the Project. A summary of the regulatory setting for air quality is provided below.

Federal

Clean Air Act

The federal Clean Air Act, as amended in 1990, establishes federal air quality standards, federal permit requirements for major sources, and regulations for hazardous air pollutants. The main elements of the 1990 Clean Air Act Amendments are summarized below:

- Title I – Attainment and maintenance of NAAQS;
- Title II – Motor vehicles and fuel reformulation;

- Title III – Hazardous air pollutants;
- Title IV – Acid deposition;
- Title V – Facility operating permits (describes requirements for Part 70 permits);
- Title VI – Stratospheric ozone protection; and
- Title VII – Enforcement.

The EPA is responsible for implementing the federal Clean Air Act and establishing the NAAQS for criteria pollutants, shown in Table 3.3.3-4. Many of the federal programs and emissions standards are incorporated locally in Santa Barbara County APCD's Rules and Regulations and are implemented and enforced as part of the APCD's permitting and compliance programs, including the Clean Air Plan.

State

California Health & Safety Code, Section 39606

CARB establishes ambient air quality standards as authorized by the California Health & Safety Code, section 39606. The standards are established for protection of public health, safety and welfare, and consider protection for even the most sensitive individuals in our communities. The California standards are generally more health protective than the federal standards, and also include standards for some pollutants that are not addressed by federal standards.

CARB established the first CAAQS in 1969. Comparison of the criteria pollutant concentrations in ambient air to the CAAQS determines State attainment status for criteria pollutants in a given region. CARB has jurisdiction over all air pollutant sources in the State; it has delegated to local air districts the responsibility for stationary sources and has retained authority over emissions from mobile sources. CARB also regulates air pollutants from consumer products such as household cleaners and beauty products and establishes motor vehicle fuel specifications for gasoline and diesel fuel to minimize air quality impacts.

In order to reduce emissions from toxic air contaminants, CARB has implemented airborne toxic control measures (ATCMs) that apply to a variety of industries. As part of its Diesel Risk Reduction Plan, CARB has implemented a number of ATCMs that apply specifically to diesel engines and diesel vehicles to minimize the carcinogenic health risk that results from emissions of diesel particulate matter.

CARB, in partnership with the local air quality management districts within California, has developed a pollutant monitoring network to aid attainment of the CAAQS. The network consists of numerous monitoring stations located throughout California that monitor and report various pollutants' concentrations in ambient air.

In recent years, California has also implemented laws and regulations targeting emissions of GHGs. In 2002, Assembly Bill (AB) 1493 was signed into law in California, requiring CARB to implement regulations requiring reductions in GHG emissions from cars and trucks in the State.

Global Warming Solutions Act (AB 32)

In September 2006, AB 32 became law. AB 32 makes CARB responsible for monitoring and reducing GHG emissions in the State and requires CARB to establish a statewide GHG emissions cap for 2020 that is based on 1990 emissions levels. CARB determined this cap to be 427 million tons of CO_{2e}. CARB also developed and has begun implementation of the AB 32 Scoping Plan, which identifies regulations and market mechanisms to reduce emissions. As of January 1, 2012, the State implemented a Cap-and-Trade Program to reduce GHG emissions from major contributors.

Significance of GHG emissions under CEQA is an evolving policy area. As CARB and other State agencies and offices develop policies and regulations to address GHG emissions, the interface between CEQA and these other programs may change. The California Office of Planning and Research (OPR) developed amendments to the CEQA Guidelines, which were adopted by the California Natural Resources Agency on December 30, 2009, and became effective March 18, 2010. These amendments establish a framework for addressing global climate change impacts in the CEQA process, and include revisions to the Environmental Checklist Form (Appendix G) as well as to the Energy Conservation appendix (Appendix F). A new section (§ 15064.4) was added that provides an approach to assessing impacts from GHGs.

Local

Local APCDs in California have jurisdiction over stationary sources in their respective areas and must adopt plans and regulations necessary to demonstrate attainment of federal and State air quality standards. As directed by the federal and State Clean Air Acts, local air districts are required to prepare plans with strategies for attaining and maintaining State and federal ozone standards. In the Project area, air quality rules and regulations are promulgated by the Santa Barbara County APCD.

Santa Barbara County APCD has jurisdiction over air quality attainment in the Santa Barbara County portion of the SCCAB. All aspects of the Project occurring in Santa Barbara County must obtain an APCD permit, if applicable. The APCD also has jurisdiction over Outer Continental Shelf (OCS) sources located within 25 miles of the seaward boundaries of the State of California (Rule 903). Currently, neither the County nor the APCD have daily or quarterly quantifiable emission thresholds established for short-term construction emissions; however, the Santa Barbara County APCD uses 25 tons per year for ROG or NO_X as a guideline for determining the significance of construction impacts.

Santa Barbara County APCD staff is in the process of developing a proposal to adopt GHG thresholds of significance for stationary source projects. A public workshop was held on February 24, 2011, in Buellton, California. The presentation from the February 24th workshop is available for viewing through the Santa Barbara County APCD website (http://www.sbcapcd.org/). The APCD's Community Advisory Council received a briefing on this topic on May 11, 2011 (presentation available through the Santa Barbara County APCD website). An updated list of questions and answers, entitled "CEQA Significance Thresholds for GHGs - Questions and Answers," provides further insight on this topic. The APCD is considering adoption of GHG thresholds for stationary sources of 10,000 metric tons CO_{2e} ($MTCO_{2e}$) per year to provide a standard methodology for GHG impact analysis.

3.3.3.3 Impact Analysis

Significance Criteria

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

The Project would be consistent with the Santa Barbara County APCD Clean Air Plan. The stated purpose of the Clean Air Plan is to chart a course of action that will ensure clean, healthful air for the residents and environment of Santa Barbara County. The Project would be consistent with emission control measures identified in the Clean Air Plan to reduce air emissions. The Project would have no long-term impacts on transportation in Santa Barbara County and would not conflict with the Clean Air Plan's objectives to reduce air emissions from transportation sources. The Project is a replacement power cable and during short-term, temporary Project construction activities, off-road equipment would be the primary source of Project air emissions. This equipment would be registered through the CARB Diesel Off-road On-line Reporting System. Fleet owners would be responsible for compliance with CARB fleet average emission factors. Therefore, impacts applicable to the implementation of the air quality plan for both onshore and offshore portions of the Project would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The Project would not violate air quality standards or contribute substantially to an existing or Project air quality violation. During short-term, temporary construction activities, an increase in air emissions is expected. However, these increases are short-term and it is not anticipated that any ambient air quality standard violation would result. No changes in facility operations are proposed; therefore, no change in emissions would result from the Project's long-term operations.

Emissions from construction activities would be short-term and temporary. Currently, neither the County nor the APCD have daily or quarterly quantifiable emission

thresholds established for short-term construction emissions; however, the Santa Barbara County APCD uses 25 tons per year for ROG or NO_X as a guideline for determining the significance of construction impacts. The estimated emissions of criteria pollutants due to Project construction are summarized in Table 3.3.3-6. Table 3.3.3-6 shows that thresholds are not expected to be exceeded as part of Project short-term construction activities. Therefore, Project impacts to air quality standards for both onshore and offshore portions of the Project would be less than significant.

Table 3.3.3-6. Estimated Emissions of Criteria Pollutants due to Proposed Project Construction (tons)

Construction Activity	ROG	NO_x	SO_2	CO	PM_{10}
Land Based Equipment:	0.09	0.25	0.00	2.48	0.01
Horizontal Directional Drill:	0.12	0.85	0.00	2.08	0.04
Tugboat Peter M (4,000 HP):	0.05	1.38	0.00	0.34	0.10
Tugboat Jeffrey M (2,000 HP):	0.07	0.49	0.00	0.60	0.03
Survey / Crew Boat Wahoo	0.01	0.06	0.00	0.07	0.00
Derrick Barge Valhalla:	0.21	1.47	0.00	1.81	0.09
Barge with 30 T Crawler Crane:	0.29	2.03	0.00	2.50	0.12
Worker Commuting	0.01	0.04	0.00	0.35	0.00
Total	0.86	6.58	0.01	10.23	0.40
Significance Threshold	25.00	25.00	25.00	25.00	25.00
Are Thresholds Exceeded?	No	No	No	No	No

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Santa Barbara County is classified as a non-attainment area for the California State PM_{10} standard and 8-hour O_3 standard. Although Project construction activities would result in emissions of PM_{10} and O_3 precursors, these emissions are short-term in nature and below the 25 tons per year threshold set by the Santa Barbara County APCD. After construction completion, there would be no additional emissions of these pollutants. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant and Project impact is less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

The emissions for the Project are less than the local thresholds; therefore, the Project would not expose any sensitive receptors to substantial air pollutants. Impacts to public health would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

There are no new sources of odor which would affect a substantial number of people. Therefore, no project impacts would result from either onshore or offshore portions of the Project.

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

Santa Barbara County APCD is considering adoption of GHG thresholds for stationary sources of 10,000 $MTCO_{2e}$ per year to provide a standard methodology for GHG impact analysis. No threshold has been established for mobile sources. For the purposes of this analysis, estimated Project GHG emissions are compared to the proposed 10,000 $MTCO_{2e}$ threshold. Estimated GHG emissions associated with Project construction are shown in Table 3.3.3-7.

Table 3.3.3-7. Total GHG Emissions through Project Duration (metric tons)

Construction Activity	CO_2	CH_4	N_2O	CO_{2e}
Land Based Equipment:	15	0.00	0.00	16
Horizontal Directional Drill:	49	0.00	0.01	51
Tugboat Peter M (4,000 HP):	80	0.00	0.03	90
Tugboat Jeffrey M (2,000 HP):	38	0.00	0.01	42
Survey / Crew Boat Wahoo	4	0.00	0.00	5
Derrick Barge Valhalla:	106	0.01	0.02	111
Barge with 30 T Crawler Crane:	146	0.01	0.03	156
Worker Commuting	29	0.00	0.01	31
Total	468	0.03	0.11	502
Proposed Significance Threshold	--	--	--	10,000
Are Thresholds Exceeded?	N/A	N/A	N/A	No

Emissions of GHGs during Project construction are below the proposed 10,000 $MTCO_{2e}$ threshold. Total GHG emissions for Project construction from onshore and offshore sources combined are estimated to be 502 $MTCO_{2e}$. These emissions are 9,498 $MTCO_{2e}$ below the proposed 10,000 $MTCO_{2e}$ threshold. Impacts to air quality due to Project construction are less than significant for onshore and offshore activities both individually and combined. There would be no change to GHG emissions from Project operation (No Impact).

g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The Project is a replacement power cable. It is expected that the Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs. Any impacts would be less than significant.

3.3.3.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would have no long-term impacts on air quality; therefore, no mitigation measures are required. However, the following APMs are provided to further reduce impacts to air quality.

APM-1. Measures to Reduce Dust Emissions from Construction. Best available control measures shall be implemented to control PM_{10} generation during construction of the Project, inclusive of:

- During construction, water trucks or sprinkler systems will be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Minimize the amount of disturbed area and reduce onsite vehicle speeds to 15 miles per hour or less.
- If importation, exportation, and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist or treated with soilbinder to prevent dust generation.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earthmoving, over-excavation is completed, the disturbed area is paved or otherwise developed so that dust generation will not occur.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.
- Prior to any land clearance, the Project Applicant shall include, as a note on a separate informational sheet to be recorded as required by the City of Goleta, these dust control requirements. All requirements shall be shown on grading and building plans.

APM-2. Measures to Reduce NO_x Emissions from Construction. Diesel emissions shall be reduced during construction by implementation of the following measures:

- Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible.
- If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by the Environmental Protection Agency or CARB.
- Construction equipment shall be maintained per the manufacturers' specifications.
- Catalytic converters shall be installed on gasoline powered equipment, if feasible.
- All construction equipment shall be maintained in tune per manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing lunch onsite.

Residual Impacts. No short or long-term impacts have been identified and no residual impacts would result.

Cumulative Impacts.

Criteria Pollutants

Per the City's Environmental Thresholds and Guidelines Manual, a project's contribution to cumulative air quality impacts is considered significant if the project's total emissions of either NO_X or ROCs exceed the long term threshold of 25 pounds/day. The Project's long-term contribution to NO_X and ROCs emissions would be far less than this

threshold, and therefore the Project's contribution to cumulative air quality impacts involving NO_X and ROCs would be considered less than significant.

Construction Emissions/Fugitive Dust

Project construction related contributions to cumulative NO_X, ROCs, and $PM_{10/2.5}$ exhaust and fugitive dust emissions would also be considered adverse, but less than significant, as these emissions are adequately incorporated into the 2010 Clean Air Plan in terms of the overall emissions inventory for construction activities.

3.3.4 Biological Resources

IV. BIOLOGICAL RESOURCES: **Would the Project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Biological resources within the Project area have been identified through both literature and database searches and field surveys. In 2012, URS biologists performed a literature review to identify sensitive plants, animals, or habitats that could occur within the onshore Project areas. The literature review included topographic maps (U.S. Geological Survey [USGS] 1995), aerial photographs (Google Earth 2012), the City of Goleta's General Plan/Coastal Land Use Plan (City 2009), and publicly available environmental documentation for other recent projects in the region (Marine Research Specialists [MRS] and SAIC 2010). In addition, a search of the California Native Plant Society (CNPS) Inventory of Rare Plants Database (CNPS 2001 and 2012) and a 5-mile radius query of the California Natural Diversity Database (CNDDB; CDFG 2012a) were performed. These resources were used to identify documented occurrences special-status plants and wildlife species within or in the vicinity of the Project area. The CNDDB 5-mile query also provided locations of designated critical habitat for federally

listed species, sensitive natural communities, ecologically sensitive areas, and State-managed lands. The results of the CNDDB query for the 5-mile radius are presented in Table 3.3.4.1. In addition, Figure 3.3.4-1 at the end of Section 3.3.4 identifies the CNDDB query at a 0.5-mile radius from the Project area.

An onshore biological field survey was conducted on the EOF and Ellwood Pier Project sites on June 4, 2012, by URS Senior biologist Julie Love. The Project sites were assessed for present and potential biological resources, including, but not limited to, wetlands and vernal pools. In those areas with suspected wetlands features, a USACE Wetland Delineation Data Form and sampling point was conducted in accordance with the Wetland Delineation Manual (Environmental Laboratory 1987) and the Arid West Regional Supplement to that manual (USACE 2008) to confirm the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Habitat suitability for special-status species was also assessed. The Project sites were surveyed on foot. Additionally, adjacent lands, inclusive of the onshore HDD cable alignment, were visually observed from the location of the Project sites. Biological resources and conditions that were visible during this time of year and that could be identified within the limitations of a reconnaissance-level survey effort were documented in the field. Information obtained from the field surveys was cross-referenced with CNDDB query results. A Biological Resources Report for the onshore Project areas (URS 2012) has been included in Appendix B.

Offshore marine biological resources were assessed by review of publicly available reports and environmental documentation, such as the Field Survey Report: Marine Resources Offshore Ellwood California (MRS 2008), and the Marine Map Decision Support Tool (http://southcoast.marinemap.org/marinemap), an online public mapping resource that offers users web-based access to all of the data, methods and analyses that scientists use to evaluate Marine Protected Areas (MPAs).

3.3.4.1 Environmental Setting

Offshore Site

The offshore Project site is located in the northern-central portion of the Santa Barbara Basin, adjacent to the City of Goleta. This area is known for its biological diversity and abundant fossil fuel resources. A major commercial shipping channel runs offshore of the Project area, and both commercial and recreational boating activity is common. Although the Project area is not located within federal or State Marine Protected Areas, it is adjacent to the Channel Island National Marine Sanctuary, Campus Point State Marine Conservation Area (SMCA) and the Naples SMCA.

The Santa Barbara Channel is located off the coast of southern California along the western edge of the Ventura Basin. The semi-arid coastal area is characterized by seasonal precipitation. With the exception of the Ventura and Santa Clara Rivers, most

rivers that flow into the Santa Barbara channel are dry through a majority of the year (County 2011).

The offshore Project site extends from the shoreline to Platform Holly, approximately 2 miles off Coal Oil Point at the University of California, Santa Barbara. The marine habitats within the Project area are diverse, including a diversity of intertidal, benthic, and open water habitats. Local substrate type is a major factor in determining species assemblages in a given area.

Intertidal and Marine Habitats

Sandy Beaches. Sandy beaches in the Project are habitat for a variety of macro invertebrates such as sand crabs (*Emerita analoga*), isopods (*Excirolana chiltoni* and *Tylos punctata*), worms and molluscs. Species richness, measured for a number of Santa Barbara-area sandy beaches, varied from 11 to 37 species of macrofauna, from invertebrates to fish eggs (Dugan et al. 2000). Invertebrates provide an important food source for shorebirds, which in the Project area would include sanderlings (*Calidris alba*), willets (*Catoptrophorus semipalmatus*), marbled godwits (*Limosa fedoa*), black-bellied plovers (*Pluvialis squatarola*), and whimbrels (*Numenius phaeopus*) (Dugan 2006). Marine mammals, including harbor seals (*Phoca vitulina*), elephant seals (*Mirounga angustirostris*), or California sea lions (*Zalophus californianus*), may occasionally haul ashore to rest on sandy beach habitats within the Project area, although the Project area does not support a regular haul-out community.

Rocky Intertidal and Subtidal. Rocky habitat is found in the nearshore intertidal and subtidal zones along the Santa Barbara Channel in the Project area (Marine Map 2012; MRS 2008). Common species found in the rocky intertidal zone include the California mussels (*Mytilus californianus*), sea stars (*Pisaster ochraceus*), sea urchins (*Strongylocentrus purpuratus*), limpets, barnacles and snails, and light to heavy overgrowth of red, green, brown and corraline algae including rockweed (*Fucus* sp. and *Pelvetia* sp.) and turfweed (*Endocladia* sp.) (County 2011). Several families of fish and their young find refuge within the algae understory or within rocky crevices. Although neither the black nor the white abalone (*Haliotis* cracherodii and *H.* sorenseni) are currently abundant in the Project area, red abalone can still be found.

Soft Bottom Subtidal. Soft-bottom subtidal areas generally appear within the Project area as stretches of sand or mud, punctuated by occasional outcrops of rocky reef, or bordered by areas of kelp forest. They support benthic (bottom dwelling) organisms which include eels, bottom dwelling fish such as flatfish or leopard sharks, and invertebrates including polychaetes, nematodes and crabs (County 2011). Organisms which dwell in soft bottom subtidal habitats tend to either bury themselves for protection, or are highly mobile and able to swim quickly away from disturbances.

Kelp Forest. Kelp forest is a subtidal habitat dominated by *Macrocystis pyrifera*, or giant kelp. Within the relatively calm conditions of the Santa Barbara Channel, kelp forests grow on both rocky and sandy substrates (County 2011), and extensive kelp forests are mapped within the Project area (Marine Map 2012; MRS 2008). Kelp forests provide habitat for a greater diversity of marine plant and animal species than almost any other marine habitat. These include dozens of less dominant, but abundant kelp and algae species, a rich and dense invertebrate and fish community, and marine mammals including seals, sea lions, whales and otters, seabirds and shorebirds.

Eelgrass Beds. Eelgrass within the Project area occurs exclusively subtidally, and is dominated by *Zostera marina,* or Pacific eelgrass*.* Eelgrass meadows provide important nursery grounds for invertebrate and fish species, including commercially harvested species such as crab and scallop.

Pelagic Zone. The open water, or pelagic zone, encompasses the entire water column extending from the surface to seabed. A number of communities are associated with open water habits over both rocky and sandy substrates.

Plankton are defined as free-floating organisms, a classification that includes both microscopic plants and animals. Plankton represent the lowest levels of the food web and thus provide the food, and oxygen, which supports a healthy marine habitat. Phytoplankton are simple, often microscopic, plants that represent the base of the marine food web. Zooplankton consist of microscopic and larger animals that either free-float or swim feebly, and includes the eggs and larval forms of many marine invertebrates and fishes, such as rockfish species and white croaker. Within the Santa Barbara Channel, plankton productivity differs between the coastline and open water and exhibits seasonal and inter-annual variability (County 2011).

Common fish species found within the Project area and associated Santa Barbara Channel include sharks, sword fish (*Xiphias gladius*), northern anchovy (*Engraulis mordax*) and the Pacific sardine (*Sardinops sagax*). Trawls within the “mainland shores of the Santa Barbara Channel” identified three dominant fish taxa: lanternfish, California smoothtongue (*Leuroglossus stibius*) and northern anchovy (Love et al. 1999, County 2011). In contrast, surveys at Platform Holly identified sardines, Jack mackerel (*Trachurus symmetricus*) and silversides (*Menidia beryllina*) as the dominant species (Schroeder 1999).

The Santa Barbara Channel is an important commercial fishery for a variety of fish (i.e., squid, sardine, anchovy and rockfish) and invertebrate (i.e., sea urchins, lobster and crab) species. A survey of the commercial fish catches between 1996-2005 showed the primary catch near Platform Holly consisted of sea urchins and shrimp. In contrast, the primary catch associated with the recreational fishery within the Santa Barbara Channel is rockfish (*Sebastes* spp.) (County 2011).

The Santa Barbara Channel's proximity to the Channel Islands, puts it within Southern California's largest concentration of breeding seabirds, a suite of native and migratory marine birds can be found there year-round, including nationally and globally significant numbers of ashy storm-petrels, Brandt's cormorants, California brown pelicans, western gulls, and Xantus' murrelets, all which forage in the surrounding waters (National Audubon Society 2012). Additionally, the Santa Barbara Channel's location within a transition zone between warm and cool waters contributes to a high avian diversity where the northern extent of the California brown pelican and Xantus's murrelets' nesting colonies coincide with the southern range of boreal species such as pigeon guillemot (*Cepphus columba*), common murre (*Uria aalge*), and rhinoceros auklet (*Cerorhinca monocerata*)

As with marine birds, the diversity of marine mammal species is due in part to the location of the Santa Barbara Channel with the transition zone between the cooler northern and warmer southern waters. The Channel Islands and Santa Barbara Channel are globally significant in that they contain the highest concentrated diversity of pinnipeds in the world (Stewart et al. 1993). Resident populations of northern fur seals, northern elephant seals and California sea lions occur within the Santa Barbara Channel. These species haul out along the Channel Islands in addition to breeding and pupping on San Miguel Island. Whale species, such as the gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*) and blue whale (*Balaeoptera musculus*) are also found moving through the Project area year round. Special-status marine mammals are discussed in further detail in the following sections.

Marine Protected Areas

Channel Islands National Marine Sanctuary is located approximately 14 miles due south of the Project area (CINMS). Designated a National Marine Sanctuary in 1980, the CINMS encompasses the four Channel Islands and extends seaward for 6 nm.

Campus Point SMCA is located 0.74 mile east of Platform Holly. This 10.6 square mile Conservation Area is designated as a no-take zone. Take of all living marine resources is prohibited except for take pursuant to activities authorized under California Code of Regulations, Title 14, section 632, subdivision (b)(77)(C), which states: "Operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, State and local permits, or as otherwise authorized by the department."

Naples SMCA is located approximately 1.8 miles west of the Project area. This 2.6 square mile conservation area prohibits take of all living marine resources except:

- The recreational take of pelagic finfish including Pacific bonito, and white seabass by spearfishing is allowed.

- The commercial take of giant kelp by hand harvest, or by mechanical harvest under limited conditions.
- Take pursuant to activities authorized under California Code of Regulations, Title 14, section 632, subdivision (b)(76)(C) which states: "Operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, State and local permits, or as otherwise authorized by the department."

Special-Status Marine Habitats

Essential Fish Habitat. The Santa Barbara Channel is designated as Essential Fish Habitat (EFH) by the Pacific Fisheries Management Council to protect and enhance habitat for coastal marine fish and macroinvertebrate species that support commercial fisheries. Managed EFH in the study area is addressed by the Pacific Groundfish Management Plan (National Oceanic and Atmospheric Administration [NOAA] 2011). Managed fish found within the study area, include but are not limited to rockfish, market squid and Albacore (PFMC 2008).

Habitat Areas of Special Concern (HASC) are a sub-set of EFH that have been designated based on the following (PFMC 2005):

- The importance of the ecological function provided by the habitat
- The extent to which the habitat is sensitive to human-induced environmental degradation
- Whether, and to what extent, development activities are will be stressing the habitat type
- Rarity of the habitat type

There are three distinct HASCs within the Project area: Rocky Reef, Seagrass, and Kelp Canopy. The Rocky Reef HASC includes the "waters, substrates and other biogenic features associated with hard substrate (bedrock, boulders, cobble, gravel, etc.) to MHHW [mean higher high water]." The Seagrass HASC include either eelgrass (*Zostera marina*.), widgeongrass (*Ruppia maritima*) or surfgrass (*Phyllospadix* spp.) and the associated waters and substrate. Similarly, the Kelp Canopy HASC consists of the waters and substrate where canopy forming species, such as giant kelp and bullwhip kelp (*Nereocystis luetkeana*) occur (PFMC 2005). Rocky reef, Seagrass, and Kelp Habitats are described above under "Intertidal and Marine Habitats."

Special-Status Marine Species

The designation of a special-status species is determined by municipal, county, State, and/or federal regulations. For the purposes of this document, marine special-status

species are those listed as threatened or endangered under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA), or are protected by the Marine Mammal Protection Act (MMPA) of 1972.

Special-status species that occur, or have the potential to occur, in the study area were identified from several sources, including the following: the CNDDB (CDFG 2010), CNPS's online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001), the USFWS' 2010 Sacramento Office's Endangered and Threatened Species list and the USFWS online species databases (queried for the Dos Pueblos Canyon, Goleta, Santa Barbara, and Santa Cruz Island A, B, and C USGS 7.5-minute quadrangles). Federally or State-listed species with high potential to occur in the study area include the black abalone, Xantus's murrelet, southern sea otter, blue whale and humpback whale. Other special status species with a high potential to occur are gray whale, bottlenose dolphin, common dolphin, California sea lion, harbor seal, northern elephant seal, and northern fur seal, which are protected under the MMPA. In addition, special-status birds may pass through the study area during migration or to forage, but do not nest within the study area (CDFG 2012a, City 2009).

Federal and State Listed Marine Species

Black Abalone. Black abalone are federally listed as endangered under the FESA. Black abalone are a marine gastropod which occur between the lower intertidal area to approximately - 9.7 feet mean lower low water (MLLW). Black abalone has a planktonic larval and benthic adult life stage. After spawning, planktonic larvae are suspended for 3 to 10 days before settling on benthic substrate. After settlement, black abalone begins metamorphosis into their adult, benthic life form (Federal Register 2011). Due to overfishing coupled with the spread of "withering foot syndrome," the population of black abalone along the mainland shore of the Santa Barbara Channel has decreased. The few black abalones that are still present are believed to occur within the protected waters of the Channel Islands (County 2011). Critical habitat for black abalone was designated in 2011 (Federal Register 2011). The Project area is not located within designated critical habitat, and the species has low potential to occur.

Xantus's Murrelet. The Xantus's murrelet is a federal candidate for listing and a State threatened species. Over 30 percent of the world population of this species occurs in the Channel Islands west of the Santa Barbara Channel, and the world's largest colony of the northern subspecies is on Santa Barbara Island (Karnovsky et al. 2005; B. Keitt and D. Whitworth in litt. 2003). Nesting takes place from February to mid-June, during which murrelets forage around the islands (Jones et al. 2005). A small CINMS-established exclusion zone was created to protect Xantus's murrelets in 2003. Although these zones are well outside the Project area, foraging murrelets may have low potential to occur in the waters near Platform Holly from February through June. Non-breeding Xantus's murrelets, which generally feed along pelagic convergent lines

(Hamilton et al. 2004), are rare close to shore and have little potential to occur within the Project area from July to January.

Southern Sea Otter. The southern sea otter is considered a threatened population under FESA, a fully protected species under Fish & Game Code section 4700, and is protected by the MMPA. Currently, about 2,200 individuals exist in the southern sea otter range, and have expanded their range to north of Santa Cruz. Sea otters spend their entire lives at sea in coastal waters, coming ashore only if sick or injured. Their populations correlate strongly with kelp beds, in which they forage and sleep.

Although federally threatened, their legal protection was limited south of Point Conception in 1986, when the USFWS instituted a "no otter zone" which allowed for the transport and removal of otters into more northern waters. The Project area falls within the existing no otter zone: however this zone has not been recently enforced, and both USFWS and the CCC have recently moved towards lifting the no otter zone, which would allow full protection to otters along the length of California's coast. Sea otters have potential to occur within the Project area.

Blue Whale. Blue whales are federally endangered and are protected by the MMPA. A 2011 NOAA study of whale densities in the Santa Barbara Channel estimated the predicted density of blue whales with the Project area to be medium to medium-high (Redfern et al. 2011). Blue whale habitat and prey surveys in 1995 and 1996 identified the waters just north of San Miguel and Santa Rosa Islands, within 3 miles or less of the Project area, to be a vital aggregation and feeding area for the world's largest stock of blue whales (Fiedler et al. 1998). Blue whales are frequently sighted near the 200-meter isobath within the Santa Barbara Channel. Platform Holly sits in water slightly shallower than, and just north of, the 200-meter isobar. Blue whales are typically first observed around the Channel Islands in June and July (Calambokidis et al. 1990; Calambokidis 1995) and are seen with regularity from July through October. Observations of females with calves off California occur primarily in June and July (CINMS 2011).

Humpback Whale. Humpback whales are federally endangered and are protected by the MMPA. A NOAA study of whale densities in the Santa Barbara Channel estimates the predicted density of humpback whales with the Project area to be high (Redfern et al. 2011). Humpback whales are marine mammals that are frequently sighted at and inshore of the 200-meter isobath within the Santa Barbara Channel, and are known to occur in waters surrounding Platform Holly. Concentrations of humpback whales occur within 5 miles from the platform, and occurrences have been recorded within 1 mile of Platform Holly (CINMS 2011). Between June and December, 58 percent of humpback sightings occur within the 200-meter isobath within the Channel Islands Marine Sanctuary, indicating the most likely times for humpback whales to be seen in shallow waters surrounding Platform Holly. Densities lower to 23 percent of sightings within the 200-meter isobath in January and May.

Other Special-Status Marine Species

Although not protected under the FESA or CESA, all marine mammals within the U.S. are protected under the MMPA. Seven species (gray whale, bottlenose dolphin, common dolphin, California sea lion, harbor seal, northern elephant seal, and northern sea lion) have potential to occur within the Project area. Another 12 cetaceans are found around the Channel Islands, but are considered unlikely to be affected by this Project because they are extremely rare, are commonly found primarily in deeper offshore waters, or are rarely found in shallow bay waters such as those of the Project area. These species are fin whales (*Balaenoptera physalus*), sperm whales (*Physeter macrocephalus*), Baird's beaked whales (*Berardius bairdii*), pilot whales (*Globicephala macrorhynchus*), killer whales (*Orcinus orca*), sei whales (*Balaenoptera borealis*), Bryde's whales (*Balaenoptera edeni*), right whale (*Eubalaena glacialis*), minke whale (*Balaenoptera acutorostrata*), Dall's porpoise (*Phocoenoides dalli*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and northern right-whale dolphin (*Lissodelphis borealis*). Species with some potential to occur are described below.

Gray Whale. In 1994, the California gray whale, or eastern north Pacific gray whale population, was delisted due to recovery to levels near the estimated original population size (Allen and Angliss 2011). Over a third of the gray whales migrating through the Santa Barbara area migrate nearshore, in water less than 600 feet, including within the 200-meter isobath. Abundant sightings in the water surrounding and inshore of Platform Holly (CINMS 2011) indicate that this species has a high potential to occur within the Project area. Migrating gray whales may be seen year-round within the Santa Barbara Channel, with highest concentrations occurring mid-December through mid-March (CINMS 2011). Calving, beginning in January and February, occurs in the Channel Islands (CINMS 2010) and young whales may also linger in the kelp beds within the Santa Barbara Channel during spring months (CINMS 2010). Juvenile and adult gray whales have a high potential to occur within the Project area.

Bottlenose Dolphin. Bottlenose dolphins in California belong to two separate populations (Lowther 2006): the California Coastal stock and the California/Oregon/ Washington Offshore stock. Bottlenose dolphins of the Santa Barbara Channel belong to the California coastal stock nearshore California stock, representing a population of roughly 300 (Dudzik et al. 2006) to 500 (Frohoff 2010) individuals which extends between San Francisco and San Quentin, Mexico. Studies within the Santa Barbara Channel indicate that this population occurs year-round, and forages between 0 to 500 m from the shore (Frohoff 2010, Hanson and Defran 1993), suggesting a high potential to occur in the water near Platform Holly.

Long-beaked Common Dolphin. The long-beaked dolphin distribution in the Santa Barbara channel is represented by a California stock which is endemic to Southern California and Northern Mexico. They are among the most abundant marine mammals

in Southern California and frequent nearshore waters year-round (CINMS 2011, Barlow 2010). Long-beaked common dolphins have a high potential to occur in the waters around Platform Holly.

Short-beaked Common Dolphin. Short-beaked common dolphins are the most abundant and widely-distributed Californian cetacean (Dohl et al. 1986; Barlow 1995; Forney et al. 1995). This species is found nearshore to 300 nm offshore, and is frequently reported in the waters surrounding Platform Holly (CINMS 2011). The short-beaked common dolphin has a high potential to occur within the Project area.

California Sea Lion. The California sea lion is probably the most common pinniped in California. Although pupping in the Channel Islands is restricted to May through August (Stewart and Yochem 1984), haul-outs are assembled year-round, on the islands, mainland, and even man-made structures such as wharfs and buoys. They are frequently seen in waters around Platform Holly (CINMS 2011) and have a high potential to occur within the Project area.

Pacific Harbor Seal. Pacific harbor seals are the smallest pinnipeds found in the Santa Barbara Channel. They are widely distributed along the California coast and breed along the mainland and offshore islands. In California, harbor seal breeding occurs from March to May, and pupping between April and May depending on local populations. A known harbor seal haul out is located approximately 2 miles north of the proposed exit pit (Figure 3.3.4-4 at the end of this section). Harbor seals primarily feed on fish (e.g., herring, cod, flounder), cephalopods (e.g., octopus), and invertebrates (e.g., shrimp and amphipods), foraging several miles from their haul-out sites daily, and therefore harbor seals are expected to occur within the Project area.

Northern Elephant Seal. Northern elephant seals are a CDFG fully protected species, the largest seal in the Northern Hemisphere, and can occur along the full length of the California coast. They are the second most abundant pinniped species in California, and their population is increasing. The estimated population in 2001 in California was 101,000 seals. They spend much of the year, generally about 9 months, in the ocean. They are usually underwater, diving to depths of about 1,000 to 2,500 feet with only short breaks at the surface. They are rarely seen at sea for this reason. While on land, they prefer sandy beaches and are known to breed in the Channel Islands. However, no haul-outs or rookeries are reported along the mainland coast within the Project vicinity. In the Channel Islands, breeding occurs from December to March and pups are born in early winter from December to January. Adults or juveniles may occur occasionally within the Project area.

Northern Fur Seal. Northern fur seals are members of the "eared seal" family, like sea lions. Northern fur seals primarily use two types of habitat: the open ocean for foraging and rocky beaches for reproduction. Adult fur seals spend more than 300 days per year

(about 80 percent of their time) foraging at sea. In the open ocean, concentrations of fur seals may occur around major oceanographic features such as seamounts, canyons, valleys, and along the continental shelf break because of the availability of prey in those places.

They breed on San Miguel Island, arriving in May with peak pupping in early July. Pups are weaned in late October or November, whereupon fur seals migrate south for the winter. Some fur seals may spend all year around San Miguel Island. Adults or juveniles may occur occasionally within the Project area.

Onshore Project Sites

The Project includes two onshore sites (the EOF Project site and the HDD cable alignment), both located within the jurisdiction of the City of Goleta, and one onshore site (the Ellwood Pier Project site) located within the jurisdiction of the County of Santa Barbara. The EOF Project site is located immediately west of the EOF and consists of a gravel access road with an adjacent disturbed access road shoulder. The HDD cable alignment originates at the entry pit located within the gravel access road and adjacent disturbed road shoulder located between Bell Canyon Creek to the west and the EOF to the east and continues south under the riparian/marsh ESHA and a portion of the Sandpiper Golf Course, under the beach crossing and the surf zone to the offshore exit pit. The Ellwood Pier Project site is located immediately north and onshore from Ellwood Pier and consists of an existing asphalt parking lot with two adjacent upland areas that are regularly used for facilities management. The following is a discussion of the Project sites' environmental setting, including regional terrestrial habitats, on-site terrestrial habitats, special-status habitats, and special-status species.

Regional Terrestrial Habitats

The Project's onshore sites are located in the western most part of Goleta. There are four biogeographic regions in and near the City of Goleta: Mountain Region, Foothill, Coastal Plain, and Coastal Mesa. The City of Goleta and the onshore Project sites are situated on coastal terraces in the Coastal Mesa Region, in the middle of a narrow ecological transition area that extends from the top of the Santa Ynez Mountains to the intertidal zone of the Pacific Ocean (City 2009). The EOF Project site is located along the coast immediately east of Bell Canyon Creek and west of the EOF within the jurisdiction of the City of Goleta. The Ellwood Pier Project site is located along the coast in the County of Santa Barbara between Eagle Canyon to the west and the western City of Goleta limits to the east. The Bacara Resort and Spa and Tecolote Creek are east of the Ellwood Pier, both within the jurisdiction of the City.

On-site Terrestrial Habitats

The EOF Project site consists of an existing gravel access road with a disturbed, mostly unvegetated ruderal road shoulder. Adjacent to and west of the gravel access road and shoulder is a dense riparian canopy associated with Bell Canyon Creek.

The Ellwood Pier Project site is comprised of an existing asphalt parking lot with a smaller adjacent sparsely ruderal vegetated area, which would be avoided during construction activities. The non-asphalt portion of the Ellwood Pier Project site is currently disturbed and does not contain any native vegetation or other habitat. Mostly bare ground and a few ruderal species occur in the middle to northern part of the Project site, to the east of the parking lot. Additionally, a few eucalyptus (*Eucalyptus* spp.) provide an overstory on the northeast side of the Project site. All Project work would be conducted within the asphalt area.

The ruderal habitat within the EOF and Ellwood Pier Project sites is highly disturbed and dominated by non-native species such as plantain (*Plantago* sp.), short podded mustard (*Hirschfeldia incana*), and Italian thistle (*Carduus pycnocephalus*). Short podded mustard and Italian thistle are listed as invasive by the California Invasive Plant Council (Cal-IPC) (2012). Other abundant non-native species included fennel (*Foeniculum vulgare*), Bermuda grass (*Cynodon dactylon*), sow thistle (*Sonchus asper*), cheeseweed (*Malva parviflora*), Italian ryegrass (*Lolium multiflorum*), and red brome (*Bromus madritensis* ssp. *rubens*).

The HDD onshore cable alignment is located underground, beginning immediately west of the EOF Project site and extending south towards the ocean. Aboveground, at the northern end of the HDD site, there is a “Riparian/Marsh” ESHA adjacent to Bell Canyon Creek, and a “Sage Scrub/Dune/Bluff Scrub” ESHA, as identified in the Goleta General Plan Figure 4-1 Special Status Species and Environmentally Sensitive Habitat Areas (City 2006), and similarly mapped in the ARCO Pipeline Removal Project Final MND (County of Santa Barbara 2010). The terrestrial habitat above the cable alignment is largely dominated by a golf course with an ornamental lawn and a few sand traps. At the southern end of the alignment along the ocean, there is a small area (approximately 1,000 square feet) of sandy shore habitat with a few ornamental palm trees (*Washingtonia/Phoenix* sp.).

Adjacent Terrestrial Habitats

Native terrestrial habitats occur adjacent to the Project sites. Discussion of these terrestrial habitats is include herein as they are sensitive and/or provide habitat for special-status species.

Vegetation Communities

Arroyo Willow Thicket. An Arroyo willow thicket is located adjacent to the southern boundary of the EOF Project site, on the west side of the access road. This willow riparian habitat forms the outer canopy of the Bell Canyon Creek and Bell Canyon Creek estuary ESHA. No Arroyo willow thickets are located adjacent to the Ellwood Pier Project site.

Arroyo willow thicket habitat is dominated by Arroyo willow (*Salix lasiolepis*) and most closely corresponds to Sawyer et al.'s (2009) Arroyo willow thickets (*Salix lasiolepis* shrubland). Arroyo willow thickets are a CDFG sensitive natural community (CDFG 2010). The Arroyo willows adjacent to the EOF Project site are mature, with a varied understory of native shrubs such as coyote brush (*Baccharis pilularis*), quailbush (*Atriplex lentiformis*), and California rose (*Rosa californica*), native herbs and vines such as clematis (*Clematis* spp.), California blackberry (*Rubus ursinus*), Douglas nightshade (*Solanum douglasii*), and non-native herbs such as cape ivy (*Delairea odorata*), fennel, black mustard (*Brassica nigra*), and short podded mustard. Plants are less than 33 feet (10 m) tall. Arroyo willow thickets are found in stream banks and benches, slope seeps, and stringers along drainages. Elevation ranges from 0 to 7,119 feet (0 to 2,170 m) (Sawyer et al. 2009).

Coast Live Oak Woodland. Coast live oak woodland habitat is located adjacent to the northern boundary of the EOF Project site, on the west side of the access road. No coast live oak woodlands are located adjacent to the Ellwood Pier Project site.

Coast live oak habitat is dominated by coast live oak (*Quercus agrifolia*) most closely corresponds to Sawyer et al.'s (2009) coast live oak woodland (*Quercus agrifolia* woodland alliance). The coast live oak woodland habitat adjacent to the EOF Project site is protected as an ESHA in the Goleta General Plan (City 2006). The coast live oaks in this area are mature, with a varied understory of native shrubs such as California rose, native herbs such as giant ryegrass (*Elymus* [*Leymus*] *condensatus*), and non-native herbs such as cape ivy, fennel, black mustard, and short podded mustard. Trees are less than 98 feet (30 m) tall. Coast live oak woodland is found in alluvial terraces, canyon bottoms, stream banks, slopes, and flats. Associated soils are deep, sandy or loamy with high organic matter. Elevation ranges from 0 to 3,937 feet (0 to 1,200 m) (Sawyer et al. 2009).

Coyote Brush Scrub. Coyote brush scrub habitat is located adjacent to the middle portion of the EOF Project site, on the west side of the access road. The coyote brush scrub habitat is also located along the entirety of the adjacent hillside outside of the Ellwood Pier Project site, on the east side of the parking lot. This habitat is dominated by coyote brush (*Baccharis pilularis*) and most closely corresponds to Sawyer et al.'s (2009) coyote brush scrub (*Baccharis pilularis* shrubland). The coyote brush scrub

habitat adjacent to the Project sites is mature, with a varied understory of native vines such as California blackberry, and non-native herbs such as cape ivy, fennel, castor bean (*Ricinus communis*), and short podded mustard. Shrubs are less than 10 feet (3 m) tall. Coyote brush scrub is found in river mouths, stream sides, terraces, stabilized dunes of coastal bars, spits along coastline, coastal bluffs, open slopes, and ridges. Associated soils are variable, with sandy to relatively heavy clay. Elevation ranges from 0 to 4,921 feet (0 to 1,500 m) (Sawyer et al. 2009).

Environmentally Sensitive Habitat Areas. The EOF and Ellwood Pier Project sites do not contain any native habitat and are not located within an ESHA. However, ESHAs are present immediately to the west of the EOF Project site along Bell Canyon Creek and the Bell Canyon Creek estuary, and adjacent to the Ellwood Pier Project site. An ESHA is also present along a specific portion of the onshore HDD alignment, and adjacent to the entire onshore HDD alignment See Figures 3.3.4-2 and 3.3.4-3 for a map of the ESHAs.

The EOF Project site and related gravel access road is located immediately adjacent to the riparian/marsh ESHA for Bell Canyon Creek and Bell Canyon Creek estuary. Above ground, at the northern end of the HDD site, is a “Riparian/Marsh” ESHA associated with Bell Canyon Creek, and a “Sage Scrub/Dune/Bluff Scrub” ESHA, as identified in the Goleta General Plan Figure 4-1 Special Status Species and Environmentally Sensitive Habitat Areas (City 2006) and similarly mapped in the ARCO Pipeline Removal Project Final MND (County of Santa Barbara 2010). Bell Canyon Creek, Bell Canyon Creek estuary, and the beach-associated ESHA parallel the entire onshore HDD alignment. The EOF Project site and the onshore HDD cable replacement alignment are also located in close proximity to several other ESHAs. A monarch butterfly/raptor roosting habitat ESHA is located on the west side of Bell Canyon creek, approximately 160 feet to the west of the EOF Project site and immediately paralleling the HDD alignment. This ESHA continues west and then south along Tecolote Creek. A sage scrub/dune/bluff scrub ESHA is located immediately west and adjacent to the monarch butterfly/raptor roosting habitat ESHA on the west side of Bell Canyon creek and to the northeast of the Project site, approximately 130 feet on the other side of the entrance road. This ESHA continues to the southeast and southwest along the shoreline and along Tecolote Creek. An open water ESHA is located at the mouth of Bell Canyon Creek, approximately 200 feet south of the EOF Project site. A beach and shoreline ESHA is located along the coastline, approximately 400 feet south of the EOF Project site. This ESHA continues along the shoreline to the west.

The Ellwood Pier Project site is located immediately adjacent to several ESHAs. A sage scrub/dune/bluff scrub ESHA is located at the southern end of the Project site, immediately to the east of the pier and paralleling the shoreline. This ESHA continues along the shoreline to the east and into Tecolote Creek and Bell Canyon Creek as described above. A beach and shoreline ESHA is located at the southern end of the

Project site, immediately to the east of the pier along the shoreline. This ESHA continues along the shoreline to the east. The Ellwood Pier Project site is located in unincorporated County of Santa Barbara lands, outside of the City of Goleta boundaries. The County of Santa Barbara Conservation Element indicates that the Project site does not support any "unusual or delicate habitat" or "endangered species" (County 2010).

Critical Habitat. The EOF, onshore HDD cable alignment, and Ellwood Pier Project sites do not contain any habitat designated as critical habitat; however, several critical habitats are located adjacent or in close proximity to the Project sites. Critical habitat for the tidewater goby (*Eucyclogobius newberryi*) is located along Bell Canyon Creek, 33 feet to the west of the EOF Project site and immediately west of the HDD alignment to the west. The Project site is separated from the critical habitat by the adjacent arroyo willow thickets, coast live oak woodland, and coyote brush scrub along the banks of Bell Canyon Creek. This same critical habitat is located 0.6 mile along the shoreline to the east of the Ellwood Pier Project site. Critical habitat for the western snowy plover (*Charadrius alexandrinus nivosus*) is located along the shoreline, 1.25 miles along the shoreline to the east of the EOF Project site and 1.9 miles along the shoreline to the east of the Ellwood Pier Project site.

Special-Status Terrestrial Species

The term "special-status species," as used in this MND, includes:

- Those plants and wildlife species listed, proposed for listing, or candidates for listing as threatened (FT) or endangered (FE) by the USFWS under the FESA.
- Those plants and wildlife species listed or candidates for listing as threatened (ST) or endangered (SE) by the CDFG under the CESA.
- Those birds, mammals, reptiles and amphibians, and fishes listed as "fully protected" (FP) by the California Fish and Game Code (§§ 3511, 4700, 5050, and 5515, respectively).
- Wildlife species identified by the CDFG as California Species of Special Concern (CSC) or Special Animals (SA).
- Plant species identified by the CDFG as Special Plants (SP).
- Plants occurring on Lists 1, 2, and 4 of the CNPS Inventory of Rare and Endangered Plants (CNPS 2001) and the on-line Inventory of Rare and Endangered Plants (CNPS 2012).

Common avian species that receive protection under the Migratory Bird Treaty Act during the nesting season, but otherwise maintain no sensitivity designation, are not treated as special-status species in this report.

Special-status species that occur, or have the potential to occur, within the Project area were identified from a 5-mile radius query of the CNDDB (CDFG 2012a), a survey that was conducted within the onshore Project areas (URS 2012), and other resources. These resources were used to identify documented occurrences of special-status plants and wildlife species, and provided locations of designated critical habitat for federally listed species, sensitive natural communities, ecologically sensitive areas, and State-managed lands. Special-status species with a high potential to occur within the Project area include monarch butterfly (*Danaus plexippus*, SA), California red-legged frog (*Rana draytonii,* FT/CSC), and white-tailed kite (*Elanus leucurus,* FP). In addition, tidewater goby (*Eucyclogobius newberryi*, FE/CSC) is known to occur directly adjacent (33 feet to the west) of the EOF Project site and immediately to the west of the HDD cable alignment. The results of the CNDDB query for the 5-mile radius are presented in Table 3.3.4.1-1. In addition, Figure 3.3.4-1 (at the end of Section 3.3.4) identifies the CNDDB query at a 0.5-mile radius from the Project area.

Table 3.3.4-1 CNDDB 5-Mile Radius Results

Common Name		Scientific Name
Wildlife	Belding's savannah sparrow	*Passerculus sandwichensis beldingi*
	California red-legged frog	*Rana draytonii*
	Ferruginous hawk	*Buteo regalis*
	Globose dune beetle	*Coelus globosus*
	Light-footed clapper rail	*Rallus longirostris levipes*
	California brackishwater snail (mimic tryonia)	*Tryonia imitator*
	Monarch butterfly	*Danaus plexippus*
	Sandy beach tiger beetle	*Cicindela hirticollis gravida*
	Southern Steelhead	*Oncorhynchus mykiss*
	Tidewater goby	*Eucyclogobius newberryi*
	Western pond turtle	*Emys marmorata*
	Western snowy plover	*Charadrius alexandrinus nivosus*
	White-tailed kite	*Elanus leucurus*
Plants	Black-flowered figwort	*Scrophularia atrata*
	Contra Costa goldfields	*Lasthenia conjugens*
	Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*
	Coulter's saltbush	*Atriplex coulteri*
	Davidson's saltscale	*Atriplex serenana var. davidsonii*
	Estuary seablite	*Suaeda esteroa*
	Mesa horkelia	*Horkelia cuneata var. puberula*
	Santa Barbara honeysuckle	*Lonicera subspicata var. subspicata*
	Sonoran maiden fern	*Thelypteris puberula var. sonorensis*
	Southern tarplant	*Centromadia parryi ssp. australis*

Federal and State Listed Threatened and Endangered Species

The habitat requirements and potential to occur for those plants and wildlife species listed, proposed for listing, or candidates for listing as threatened or endangered under FESA or CESA identified by the CNDDB search are discussed below. See Section 3.3.4.2 Regulatory Framework for information about the FESA or CESA.

Plants

Contra Costa goldfields - FE, CNPS. List 1B.1 (seriously endangered). Habitat for Contra Costa goldfields includes valley and foothill grassland, vernal pools, and cismontane woodland. It has been extirpated from most of its range. Elevations range from 1 to 445 m (CNPS 2012). The CNDDB lists the occurrence as extirpated from the area, therefore, Contra Costa goldfields are not expected to occur within the Project area due to lack of suitable habitat and occurrence history.

Wildlife

Belding's savannah sparrow – SE. Belding's savannah sparrows are a year-round resident in salt marshes dominated by pickleweed (*Salicornia pacifica* [*S. virginica*]). The CNDDB occurrence is from more than 0.5 mile away in the Goleta Slough, an area dominated by pickleweed. Due to the lack of suitable habitat and occurrence history, Belding's savannah sparrow is not expected to occur within the Project area.

California red-legged frog - FT, CSC. California red-legged frogs are found in freshwater ponds or perennial streams providing deep pools with emergent vegetation. They can also occur along coastal lagoons. There is no suitable habitat for California red-legged frog on the EOF Project site due to disturbed nature of the site. However, suitable habitat is located adjacent to the EOF Project site and the onshore HDD cable replacement alignment in Bell Canyon Creek (City 2009), as there is a 2008 CNDDB occurrence in the creek (CNDDB 2012). Other populations are previously known to occur in Tecolote Creek and a pond on the Sandpiper Golf Course. Although no habitat occurs on the EOF Project site, California red-legged frogs are likely to make overland excursions between the drainages in this region (USFWS 2009); therefore, due to this species mobility and known proximity to the EOF there is a high potential for it to occur on the EOF Project site during certain times of the year, as well as a high potential for the species to occur adjacent to the EOF and the onshore HDD alignment. The closest occurrence of California red-legged frog to the Ellwood Pier Project site is 1,700 feet east in Tecolote Creek (City 2009, CNDDB 2012). Consequently, there is no potential for California red-legged frog to occur at the Ellwood Pier Project site due to lack of suitable habitat and occurrence history.

Light-footed clapper rail - FE, FP, SE. Light-footed clapper rails prefer tidal marshes and are associated with habitats dominated by very specific plants. The CNDDB lists the

occurrence as extirpated from the area. According to Santa Barbara Museum of Natural History records, light-footed clapper rail has not been recorded in Santa Barbara County since 2004 and is thought to be extirpated as a breeder from the area. Lehman (1994) notes that this species has not occurred here or at any other site in the county outside Carpinteria Salt Marsh in "several decades." Light-footed clapper rails are not expected to occur within the Project area due to lack of suitable habitat and occurrence history.

Tidewater goby - FE, CSC. Habitat for the tidewater goby includes sandy-bottomed brackish coastal lagoons. The tidewater goby have been documented in the estuaries of Bell Canyon Creek, Tecolote Creek, and Eagle Canyon Creek (City 2006, Venoco 2001, CNDDB 2012). No aquatic habitat is located within the immediate footprint of the onshore portion of the Project area. However, a known population of tidewater goby, which is also within an area considered to be critical habitat for the species by the USFWS, is located 33 feet to the west of the EOF Project site and immediately to the west of the HDD cable alignment. Subsurface geology may connect the HDD cable alignment to the Bell Canyon Creek drainage, as was the case during the construction of the Line 96 Modification Project and related HDD drilling fluid fracture (frac-out) into the nearby Bell Canyon Creek in 2011. As such, although tidewater goby are not expected to occur within the Project area due to lack of suitable habitat, there is a high potential for the tidewater goby to occur directly adjacent to the Project area.

Southern Steelhead - FE, CSC. The essential elements of suitable freshwater steelhead habitat include cool, clear water with evenly distributed areas of pool and riffle habitat, abundant vegetative cover, and clean gravel for spawning (URS 2012). The Tecolote Creek drainage has the potential to support southern steelhead, as it is designated critical habitat for this species and steelhead have been documented there in the past. Bell Canyon Creek, however, is not included in the most recent southern steelhead critical habitat designation, and a review of available literature did not indicate any historic steelhead occurrences in this creek. Occurrence of southern steelhead in Bell Canyon Creek is therefore unlikely. A Biological Resources Technical Report (Appendix B) has been prepared for the Project, and describes the potential for steelhead to occur in the Tecolote and Bell Canyon Creeks in greater detail.

Because the proposed project would not result in any surface disturbance, hydrologic alteration, or vegetation removal in the Tecolote Creek or Bell Canyon Creek drainages, planned operations would not affect aquatic resources in these areas. In the event that a frac-out or other upset condition was to occur, impacts to steelhead would result only if drilling muds were to enter the aquatic environment at a time when steelhead are present. Due to the low probability of an upset condition occurring, combined with the low probability for steelhead to occur in Bell Canyon Creek and the distance (more than ¼ mile) between the proposed HDD alignment and Tecolote Canyon Creek, a substantial effect on this species is not a reasonably foreseeable consequence of the proposed project. Therefore, impacts on the southern steelhead would be less than

significant. These impacts would be further reduced in probability and magnitude by mitigation measures proposed in the Draft MND, particularly Mitigation Measure BIO-5 (Spill Response and HDD Fluid Release Monitoring and Contingency Plan) and BIO-6 (Habitat Restoration Plan).

Western snowy plover - FT, CSC (nesting). Western snowy plovers occur in sandy beach habitat, as they need sandy, gravelly or friable soils for nesting. Western snowy plovers are not expected to occur at the EOF and Ellwood Pier Project sites due to lack of suitable habitat and occurrence history. Western snowy plovers reside to the east along the shoreline at Coal Oil Point Reserve, approximately 2 miles east of the EOF Project site and approximately 3 miles east of the Ellwood Pier Project site (City 2009). Critical habitat for the western snowy plover is located 1.25 miles along the shoreline to the east of the EOF Project site and 1.9 miles along the shoreline to the east of the Ellwood Pier Project site. Although suitable habitat is located within the onshore HDD cable replacement alignment along the shoreline, records indicate the adjacent shoreline is not used by western snowy plover (City 2009, CNDDB 2012), and the underground activity associated with the alignment would not disturb the surface beach habitat.

Other Special-Status Terrestrial Species and Resources

The habitat requirements and potential to occur for other special-status species and resources (i.e., FP, CSC, SA, SP, and CNPS listed species) identified by the CNDDB search are discussed below. The results of the CNDDB query for the 5-mile radius are presented in Table 3.3.4.1. In addition, Figure 3.3.4-1 identifies the CNDDB query at a 0.5-mile radius from the Project area.

Plants

Black-flowered figwort – SP, CNPS List 1B.2 (fairly endangered). Habitats for black-flowered figwort include closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub. Associated soils include sand, diatomaceous shales, and soils derived from other parent materials that occur around swales and in sand dunes. Elevation ranges from 10 to 250 m (CNPS 2012). Although suitable habitat exists adjacent to the Project area, black-flowered figwort is not expected to occur within the Project area due to occurrence history, which indicates that the only CNDDB occurrences are from 1957 and 1958.

Coulter's goldfields – SP, CNPS List 1B.1 (seriously endangered). Habitats for Coulter's goldfields include coastal salt marshes, playas, valley and foothill grassland, and vernal pools. It typically occurs on alkaline soils in playas, sinks, and grasslands. Elevation ranges from 1 to 1,400 m (CNPS 2012). The CNDDB occurrence is from 1982 and is more than 0.5 mile away, therefore, Coulter's goldfields are not expected to occur within the Project area due to lack of suitable habitat and occurrence history.

Coulter's saltbush – SP, CNPS List 1B.2 (fairly endangered). Habitats for Coulter's saltbush include coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland. It typically occurs on ocean bluffs, ridge tops, as well as alkaline low places. Elevation ranges from 10 to 440 m (CNPS 2012). Although suitable habitat exists adjacent to both Project sites, the CNDDB occurrence is from 1992 and is more than 0.5 mile away, therefore, Coulter's saltbush is not expected to occur on the Project sites due to occurrence history.

Davidson's saltscale – SP, CNPS List 1B.2 (fairly endangered). Habitats for Davidson's saltscale include coastal bluff scrub, coastal scrub. Associated soils are alkaline. Elevations range from 3–250m (CNPS 2012). Although suitable habitat exists adjacent to the Project area, the CNDDB occurrence is from 1948 and is more than 0.5 mile away. Davidson's saltscale is not expected to occur within the Project area due to occurrence history.

Estuary seablite – SP, CNPS List 1B.2 (fairly endangered). Habitats for estuary seablite include marshes and swamps. It is typically found in coastal salt marshes in clay, silt, and sand substrates. Elevations range from 0 to 5 m (CNPS 2012). A single CNDDB occurrence is from 1948 and is more than 0.5 mile away, consequently, Estuary seablite is not expected to occur within the Project area due to lack of suitable habitat and occurrence history.

Mesa horkelia – SP, CNPS List 1B.1 (seriously endangered). Habitats for mesa horkelia include chaparral, cismontane woodland, and coastal scrub. It typically occurs on sandy or gravelly sites. Elevations range from 70 to 810 m (CNPS 2012). Although suitable habitat exists adjacent to both Project sites, elevation requirements do not exist at either Project site and the CNDDB occurrence is from 1981 and more than 0.5 mile away, as a result, Mesa horkelia is not expected to occur on the Project sites due to occurrence history.

Santa Barbara honeysuckle – SP, CNPS List 1B.2 (fairly endangered). Habitats for Santa Barbara honeysuckle include chaparral, cismontane woodland, and coastal scrub. Elevations range from 35 to 1,000 m (CNPS 2012). No suitable habitat occurs on either the EOF or Ellwood Pier Project sites and elevation requirements do not exist on either site; however, suitable habitat is located adjacent to the Project sites, so there is a low potential for Santa Barbara honeysuckle to occur within the Project area.

Sonoran maiden fern – SP, CNPS List 2.2 (fairly endangered in California, but common elsewhere). Habitats for Sonoran maiden fern include meadows and seeps. It typically occurs along streams and seepage areas. Elevations range from 50 to 550 m (CNPS 2012). The CNDDB occurrence is from 1890 and more than 0.5 mile away, therefore, Sonoran maiden fern is not expected to occur within the Project area due to lack of suitable habitat, elevation requirements, and occurrence history.

Southern tarplant – SP, CNPS List 1B.1 (seriously endangered). Habitats for southern tarplant include marshes and swamps (margins), and valley and foothill grassland. It often occurs in disturbed sites near the coast at marsh edges; also in alkaline soils and sometimes with saltgrass. Elevations range from 0 to 425 m (CNPS 2012). The CNDDB occurrence is from 2005 and from within 0.5 mile away, consequently, there is a low potential to occur within the Project area due to suitable disturbed on-site habitat and occurrence history.

Wildlife.

Ferruginous hawk – WL (nonbreeding/wintering). Habitats for ferruginous hawk include open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats. The CNDDB occurrence is from 1992. Ferruginous hawk is not expected to occur on the Project sites due to lack of suitable habitat and occurrence history.

Globose dune beetle – SA. The globose dune beetle is an inhabitant of coastal sand dune habitat, from Bodega Head in Sonoma County south to Ensenada, Mexico. The Goleta General Plan, Figure 4-1, identifies globose dune beetle on the beach just south of Tecolote Creek (City 2006), adjacent to, but outside of, the Ellwood Pier Project site in the jurisdiction of the County. It inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation. The CNDDB occurrence is from more than 0.5 mile away. As a result, Globose dune beetle is not expected to occur in the Project site due to lack of suitable habitat and occurrence history.

Mimic tryonia (California brackishwater snail) – SA. Mimic tryonia inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. It is found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities. The CNDDB occurrence is from 1966 and more than 0.5 mile away. Mimic tryonia is not expected to occur in the Project site due to lack of suitable habitat and occurrence history.

Monarch butterfly – SA. Monarch butterfly winter roost sites extend along the coast from northern Mendocino, California to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus [*Eucalyptus* spp.], Monterey pine [*Pinus radiate*], and cypress [*Hesperocyparis* spp. and *Cupressus* spp.]), with nectar and water sources nearby. Suitable habitat is located adjacent to the EOF Project site in the riparian area of Bell Canyon Creek. Suitable habitat is located on the Ellwood Pier Project site in the eucalyptus trees located on the east side of the Project site. Known aggregation sites are identified in the Goleta General Plan Figure 4-1 adjacent to the EOF Project site at Bell Canyon Creek and in close proximity to the Project area at Tecolote Creek (City 2009). Additionally, the EOF Project site and onshore HDD cable alignment is located in

close proximity to a monarch butterfly habitat ESHA that is located on the west side of Bell Canyon Creek, approximately 160 feet to the west of the EOF. This ESHA continues west and then south along Tecolote Creek. Although larval monarch butterflies are not expected to be on-site since milkweed (*Asclepias* spp.), the host plant for monarch butterfly larvae, was not observed on-site; however, there is a high potential for adult monarch butterflies to be present within the Project area due to suitable adjacent and on-site habitat and occurrence history.

Sandy beach tiger beetle (Cicindela hirticollis gravida) – SA. Sandy beach tiger beetles inhabit areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Sandy beach tiger beetles require clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action. The CNDDB lists the occurrence as extirpated from the area; therefore, Sandy beach tiger beetles are not expected to be present within the Project area due to lack of suitable habitat and occurrence history.

Western pond turtle — CSC. Western pond turtles are found in permanent and intermittent aquatic habitats primarily in freshwater. Suitable habitat is located adjacent to the EOF Project site in Bell Canyon Creek; however no suitable habitat is present on the site. In addition, the CNDDB occurrence is located more than 0.5 mile away, a greater distance than Western pond turtle are known to travel (CDFG 1994). The Western pond turtle is also not expected to occur at the Ellwood Pier Project site due to lack of suitable on-site habitat and occurrence history (as noted above).

White-tailed kite – FP. White-tailed kite are a Fully Protected species pursuant to California Department of Fish and Game Code section 3511, and nest sites are protected in California under Fish and Game Code section 3503.5. White-tailed kite habitat includes rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. White-tailed kites prefer open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Suitable perching habitat occurs adjacent to the EOF in the riparian area surrounding Bell Canyon Creek, consistent with the Goleta General Plan raptor roosting ESHA designation in the creek (City 2006). No suitable nesting or foraging habitat occurs on the EOF Project site; however, a CNDDB occurrence from 2005 is located approximately 1 mile to the west of the EOF and a documented nest occurs 0.9 mile to the east (City 2009). Lack of suitable habitat suggests that white-tailed kites would not use the EOF Project site for nesting or foraging; however, due to the high mobility of this species and suitable adjacent perching habitat, there is low potential for fly overs to occur above the Project site to access adjacent perching habitat. As a result, there is a low potential for white-tailed kites to occur on the EOF Project site due to suitable adjacent perching habitat and occurrence history.

Suitable perching habitat occurs on the Ellwood Pier Project site in the eucalyptus trees on the east side of the Pier. Potentially suitable nesting habitat may occur in the eucalyptus trees as well since there is neighboring suitable foraging off-site habitat to the west of the Pier; however, no nests are documented on-site and the closest documented nest occurs 1.5 miles to the east (City 2009). Additionally, a CNDDB occurrence from 2005 is located approximately 0.5 mile to the west of the Project site. The suitable on-site perching and nesting habitat in close proximity to foraging habitat in conjunction with the high mobility of the species and a documented CNDDB occurrence within 0.5 mile indicate a high potential for occurrence of white tailed kites on the Project site.

3.3.4.2 Regulatory Framework

This section identifies and discusses the regulations and policies administered by resource agencies pertaining to those biological resources that are known to exist and/or have the potential to occur within the Project sites and the adjacent areas.

Federal

Endangered Species Act

The FESA, administered by the USFWS and the NOAA Fisheries, provides protection to species listed as Threatened or Endangered, or proposed for listing as Threatened (PFT) or Endangered (PFE). Section 9 of the FESA prohibits the "take" of any member of a listed species. Take is defined as

> *…to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."* Harass is *"an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering."* Harm is defined as *"…significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.*

When Applicants are proposing projects with a federal nexus that "may affect" a federally listed or proposed species, the federal agency is required to consult with USFWS or NOAA Fisheries, as appropriate, under Section 7 of the FESA. Section 7 of the FESA provides that each federal agency must ensure, in consultation with the Secretary of the Interior or Commerce, that any actions authorized, funded, or carried out by the agency are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of areas determined to be critical habitat.

Magnuson-Stevens Fishery Conservation and Management Act and Sustainable Fisheries Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 United States Code [USC] § 1801 et seq.), is intended to implement procedures to conserve and manage fishery resources. Further, as amended by the Sustainable Fisheries Act of 1996, review of projects whose business is conducted pursuant to federal permits and licenses must consider the designation, promotion and protection of EFH for those species included in a federal Fishery Management Plan, as established pursuant to 16 USC §§ 1851-1863. Specifically, section 303(a)(7) of the Magnuson-Stevens Act, as amended, requires that EFH be properly described and identified.

Essential Fish Habitat is defined as "*…those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."* As used in this definition, *"waters"* 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."*

Marine Protection, Research, and Sanctuaries Act

The Marine Protection, Research, and Sanctuaries Act (MPRSA) establishes a framework for the control of dumping material in the territorial sea and seaward and includes specific criteria and conditions for permissible dumping. The MPRSA is the primary federal environmental statute governing the discharge of dredged material in the ocean.

Based on an evaluation of compliance with the regulatory criteria of 40 Code of Federal Regulations (CFR) Part 227, both EPA and the U.S. Army Corps of Engineers (USACE) may prohibit or restrict disposal of material that does not meet the criteria. The EPA and the USACE also may determine that ocean disposal is inappropriate because of Ocean Dredged Material Disposal Site management restrictions or because options for beneficial use(s) exist(s). Site management guidance is provided in 40 CFR 228.7-228.11.

Marine Mammal Protection Act (16 USC § 1361 et seq.)

The MMPA of 1972, as amended, establishes a national policy designed to protect and conserve marine mammals and their habitats. MMPA section 101(a)(5)(D) provides for the issuance of Incidental Take Authorizations for non-listed marine mammals. This act also specifies and defines actions that are considered harassment and provides for

agency-mandated compliance with mitigations to reduce impacts to the protected species.

Migratory Bird Treaty Act (16 USC § 703 et seq., as amended)

The Migratory Bird Treaty Act (MBTA) was agreed to by the U.S. and Canada in 1918; the 1936 Convention for the Protection of Migratory Birds and Animals, between the U.S. and Mexico; and subsequent amendments to these Acts provide legal protection for almost all breeding bird species occurring in the U.S. The MBTA restricts the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. Certain game bird species are allowed to be hunted for specific periods determined by federal and State governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey.

Rivers and Harbors Act (33 USC § 401)

Section 10 of the Rivers and Harbors Act limits the construction of structures and the discharge of fill into navigable waters of the U.S. This regulation is used by the USACE to control, and permit, the placing of structures or the operation of vessels within the waters of the U.S. Several Nationwide Permits, which are used to authorize specific activities that have been previously assessed under the National Environmental Policy Act (NEPA), provide an expedited permitting process for the more “routine” in-water construction activities such as placing scientific equipment, construction of pipelines, and placing shoreline protective devices.

The Clean Water Act

The Clean Water Act (CWA) is a comprehensive piece of legislation that generally includes reference to the federal Water Pollution Control Act of 1972, its substantial supplementation by the CWA of 1977, and subsequent amendments. Overall, the CWA seeks to protect the nation’s water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S., which are enforced by the EPA. The CWA also provides for a permitting system to control discharges to surface waters. State operation of the program is encouraged. The USACE issues permits for the placement of dredged or fill material into waters of the U.S. pursuant to CWA section 404. As defined in 33 CFR 328.3(a)(3), waters of the U.S. are those that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands; and territorial seas.

The Marine Plastic Pollution Research and Control Act (33 USC § 1901 et seq.)

The Marine Plastic Pollution Research and Control Act prohibits the disposal of plastics and non-biodegradable material into marine waters.

The National Aquatic Invasive Species Act

This act was originally passed in 1990 in response to the invasion of the zebra mussel and other species that damaged the Great Lakes. That law brought much-needed attention to the global movement of aquatic species. It also established the federal interagency Aquatic Nuisance Species Task Force, which became a key resource for regional and State efforts. The 2005 reauthorization specifies the requirements related to the exchange/discharge of ballast water from ocean-going vessels that enter federal waters or U.S. lakes.

The Oil Pollution Act (OPA 90) (33 USC § 2712)

This act requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of OPA 90 directed California to pass a more stringent spill response and recovery regulation and to create the State Office of Spill Prevention and Response (OSPR) to review and regulate oil spill plans and contracts.

State

California Aquatic Invasive Species Management Plan

In 2008, California developed a plan to control the introduction and spread of non-native species within the aquatic and marine waters of the State. That plan proposes management actions for addressing aquatic invasive species threats to California. It focuses on the non-native algae, crabs, clams, fish, plants and other species that continue to invade California's creeks, wetlands, rivers, bays and coastal waters.

California Coastal Act

The Coastal Act requires anyone who proposes any development in the coastal zone to secure a CDP from either the CCC or local jurisdiction with a certified LCP. In general, the CCC is responsible for determining a project's consistency with the Coastal Act and/or the CCMP and for granting CDPs for projects within the California coastal zone not covered by LCPs. The City of Goleta does not have a certified LCP for the portion of the City within the Coastal Zone and, therefore, the CCC has permit authority for the proposed project; however, the County of Santa Barbara does have a certified LCP;

therefore, the County's coastal policies are applicable to the onshore portion of the Project within the County's jurisdiction.

California Endangered Species Act (Fish & G. Code, § 2050 et seq.)

The CDFG administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the CESA that regulates the listing and take of State endangered (SE) and threatened species (ST). Under section 2081 of CESA, CDFG may authorize the take of an Endangered and/or Threatened species, or candidate species by a permit or Memorandum of Understanding (MOU) for scientific, educational, or management purposes, or for the incidental take associated with implementation of a project.

CDFG administers other State laws designed to protect wildlife and plants. Under sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, CDFG designates species that are afforded FP status. Under this protection, CDFG may authorize take or capture of a designated species for *"…necessary scientific research, including efforts to recover fully protected, threatened, or endangered species"* and *"…live capture and relocation of those species pursuant to a permit for the protection of livestock."* Section 3503 of the Fish and Game Code prohibits the needless destruction of the nests and eggs of all birds; section 3503.5 protects all birds-of-prey, their eggs, and their nests.

The California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.)

CDFG also manages the California Native Plant Protection Act of 1977 (Fish & G. Code, § 1900 et seq.), which was enacted to identify, designate and protect rare plants. In accordance with CDFG guidelines, California Native Plant Society 1B list plants are considered "rare" under the Act, and are evaluated under CEQA.

California Harbors and Navigation Code, Sections 1-7340

The California Harbors and Navigation Code describes and defines provisions and legislative policy for California harbors, navigable waters, traffic, cargo, wrecks and salvage, marinas, construction/improvements, and harbor and port mitigation.

Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA)

The OSPRA established OSPR within the CDFG to provide protection of California's natural resources from the potential effects of an oil spill within the ocean waters. The Act covers all aspects of marine oil spill prevention and response in California. It established an Administrator who is given broad powers to implement the provisions of the Act. The Act requires that the CDFG, the Administrator of OSPR, establishes rescue and rehabilitation stations for seabirds, sea otters, and other marine mammals.

Marine Life Protection Act (MLPA) (Fish & G. Code, § 2850 et seq.)

The MLPA directs the State to redesign California's system of Marine Protected Areas (MPAs) to function as a network in order to: increase coherence and effectiveness in protecting the State's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance. There are six goals that guide the development of MPAs in the MLPA planning process: 1) Protect the natural diversity and abundance of marine life, and the structure, function and integrity of marine ecosystems; 2) Help sustain, conserve and protect marine life populations, including those of economic value, and rebuild those that are depleted; 3) Improve recreational, educational and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity; 4) Protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic values; 5) Ensure California's MPAs have clearly defined objectives, effective management measures and adequate enforcement and are based on sound scientific guidelines; and 6) Ensure the State's MPAs are designed and managed, to the extent possible, as a network.

To help achieve these goals, three types of MPA designation types are used: State Marine Reserves (SMRs), State Marine Conservation Areas (SMCAs), and State marine parks. Public Resources Code section 36710 lists the restrictions applied to SMR and SMCA areas (the Project area does not include any MPAs).

- *SMRs*: In a SMR, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a permit or specific authorization from the Commission for research, restoration, or monitoring purposes.
- SMCAs: In a SMCA, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes except as specified in section 632, subdivision (b) in Title 14 of the California Code of Regulations, areas and special regulations for use. The Commission may permit research, education, and recreational activities, and certain commercial and recreational harvest of marine resources, provided that these uses do not compromise protection of the species of interest, natural community, habitat, or geological features.

Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.)

This Act mandates that waters of the State shall be protected, such that activities which may affect waters of the State shall be regulated to attain the highest quality. This Act

establishes the State Water Resources Control Board (SWRCB) as the principal State agency for the coordinated control of water quality in California. The SWRCB provides regulations that mandate a "non-degradation policy" for State waters, especially those of high quality. The SWRCB is divided into local regional boards which have been delegated authority to issue permits or waive water quality conditions under section 401 of the CWA (see above) for the USACE permitting process.

Local

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan serves to protect coastal resources within the Santa Barbara County Coastal Zone, including coastal waters. The Plan is provided to assure that "Uses of the marine environment shall be carried out in a manner that would sustain the biological productivity of coastal waters and that would maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

Section 30233 (a) determines that filling, or dredging of open coastal waters shall be permitted where there is no feasible less environmentally damaging alternative and where required, mitigation measures have been provided to minimize adverse environmental effects. A limited number of such activities are allowed, and include fill and dredge for expanded energy and coastal-dependent industrial facilities, in open coastal waters. This requires that dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation.

In addition, section 30240 (a) states that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Section 30240. (b) states that development in areas adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30607.1 states that where fill development is permitted in wetlands, mitigation measures shall not be required for temporary or short-term fill, provided, that a bond or other evidence of financial responsibility is provided to assure that restoration would be accomplished in the shortest feasible time.

Environmentally Sensitive Habitat Areas, City of Goleta

The City of Goleta General Plan/Coastal Land Use Plan (Goleta General Plan) includes policies that protect and preserve biological resources within the City by designating specific resources and areas as protected, including ESHA, restricting activities and

uses in protected areas, providing for the management of the resources on City lands, specifying impact avoidance and mitigation requirements for types of activities and by type of biological resource, and providing guidance for development and conservation decisions over the long-term. The policies anticipate the potential impacts to biological resources from the land uses and activities that will occur under the General Plan and serve to avoid, reduce, and/or mitigate those impacts. The key policies regarding biological resources are in the Conservation, Open Space, and Land Use Elements

3.3.4.3 Impact Analysis

a) Would the Project 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 Game or U.S. Fish and Wildlife Service?

Marine

As identified above in the environmental setting (section 3.3.4.1), several species have the potential to occur within the Project area including black abalone, Xantus's murrelet, California sea lion, and Pacific harbor seals.

The temporary physical disturbance from the excavation of the HDD exit pit and transition trench, laying of the cable, anchoring, and the presence of work boats on the surface would likely cause both listed and non-listed species of fish, foraging seabirds, and marine mammals to avoid the immediate work area and areas of increased turbidity during excavation of the exit pit and trench, and laying of the cable.

Benthic and Pelagic

The total impact area to the seafloor would be not more than 110 feet by 200 feet, to include the HDD exit pit, transition trench and side cast area. Following placement of the cable through the trench area, sidecast materials would be replaced by using a clamshell crane to backfill the exit pit to restore the area to pre-Project topography. A diver or ROV would then be sent down to ensure that backfill and restoration are successful. Sediment disturbing work for the exit pit and trench would be timed to avoid periods of storms and heavy seas, so as to minimize sediment dispersal and the potential for chemical spills (refer to MM HAZ-1). Black abalone, which occur on the seafloor in rocky areas, would not be expected to occur in the soft bottom areas affected by exit pit construction activities. Sediment plumes in the water column, generated during excavation and laying of the cable, are expected to be less than significant. The sediments are predominantly sandy, which tend to settle quickly and do not generate large or long-lasting sediment plumes.

These effects would be temporary, with construction disturbance at the excavation site lasting approximately 3 weeks, and laying of the cable lasting approximately 2 weeks, and would be limited to the immediate excavation area and would not substantially limit the available habitat for fish. Side casting of dredged material would not be placed over, on, or near rocky reef areas where protected black abalone might be buried; therefore, no impact to these species is anticipated.

Marine Mammals

Under the MMPA, the NMFS has defined levels of harassment for marine mammals.

- Level A harassment is defined as "*Any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.*"
- Level B harassment is defined as, "*Any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including but not limited to migration, breathing, nursing, breeding, feeding or sheltering.*"

Noise may impact marine mammals within the Project vicinity. Since 1997, NMFS has used generic exposure level criteria in issuing permits. The injury (Level A) threshold level is 180 dB_{RMS} for cetaceans and 190 dB_{RMS} for pinnipeds. The disturbance (Level B) threshold level is 160 dB_{RMS} for cetaceans and pinnipeds for impulse sounds and 120 dB_{RMS} for continuous sounds. Project noise levels are not expected to approach the lower limits for Level B or Level A harassment of marine mammals.

Project boat traffic, anchoring, and laying of cable are not expected to interfere with the movements of, or disrupt the behavioral patterns of any marine mammal in the Project area. Exit pit construction activities would be limited to the immediate excavation area and would not substantially limit the available habitat for marine mammals in the Project vicinity. Project activities would occur in an area where regular boating traffic is common and would not add substantially to the level of boat traffic within the Project vicinity. However, MM BIO-1 would require a Marine Mammal Contingency Plan to avoid impacts to marine protected species during Project construction. Implementation of MM BIO-1 would reduce this impact to less than significant.

Marine Birds

The temporary physical disturbance from the excavation of the HDD exit pit and transition trench, laying of the cable, anchoring, and the presence of work boats on the surface may cause foraging seabirds to avoid the immediate work area, but is not expected to interfere with the movements of, or disrupt the behavioral patterns of any marine bird. Exit pit construction activities would be limited to the immediate excavation

area and would not substantially limit the available habitat for foraging seabirds; therefore, no impact to marine birds would result.

Terrestrial

As described in Section 3.3.4.1 Environmental Setting, the EOF and Ellwood Pier Project sites include disturbed surfaces that are adjacent to ESHA. There is little to no wildlife habitat value present within these sites; however, suitable habitat for special-status wildlife species exists adjacent to the Project sites. Similarly, there is little plant habitat value within the two sites; however, suitable habitat for special-status plant species also exists within the adjacent areas/ESHA. The literature review and biological site visit combined with habitat requirements indicate that there are two four wildlife species with a high potential to occur within, or directly adjacent to, the Project area, including monarch butterfly (SA), California red-legged frog (FT, CSC), tidewater goby (FE, CSC), and white-tailed kite (FP). There are no plant species with a high potential to occur.

Monarch Butterfly (SA)

There is a high potential for monarch butterfly to occur within the Project area due to suitable adjacent and on-site habitat and occurrence history. Suitable habitat is located adjacent to the EOF Project site and HDD alignment in the riparian area of Bell Canyon Creek. Suitable habitat is located on the Ellwood Pier Project site in the eucalyptus trees located on the east side of the Pier. Known aggregation sites have been documented by the City of Goleta, occurring adjacent to the EOF Project site at Bell Canyon Creek and in close proximity to both Project sites at Tecolote Creek (City 2009). Additionally, the EOF Project site is located in close proximity to a monarch butterfly habitat ESHA that is located on the west side of Bell Canyon Creek, approximately 160 feet to the west of the Project site. The suitable adjacent and on-site habitat for both Project sites could potentially be used by adult monarch butterflies. Larval monarch butterflies are not expected to be on-site since milkweed (*Asclepias* spp.), the host plant for monarch butterfly larvae, was not observed on-site.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No suitable adult roosting habitat or larval habitat would be removed or altered within the Project area, therefore direct impacts would be less than significant. Adult monarch butterflies are mobile and would be expected to leave the Project sites or the adjacent area if disturbed by Project activities; therefore mortality is not expected from direct impacts. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities and the distance between the Project sites and the nearest monarch butterfly habitat ESHA - located on the west side of Bell Canyon Creek, approximately 160 feet to the west of the EOF Project site and on the west side of Tecolote Creek, approximately 0.3 mile

east of the Ellwood Pier Project site. Potential impacts due to construction would be further reduced through implementation of MM BIO-2 Pre-construction Surveys,BIO-3 Biological Monitor, and BIO-4 Highly Visible Fencing.

California Red-Legged frog (FT, CSC)

There is no suitable habitat for California red-legged frog on the EOF Project site due to disturbed nature of the site. However, suitable habitat is located adjacent to the EOF Project site and the onshore HDD cable replacement alignment in Bell Canyon Creek (City 2009), as well as a 2008 CNDDB occurrence in the creek (CNDDB 2012). Other populations are previously known to occur in Tecolote Creek and a pond on the Sandpiper Golf Course. Although no habitat occurs on the EOF Project site, California redlegged frogs are likely to make overland excursions between the drainages in this region (USFWS 2009); therefore, due to this species mobility and known proximity to the EOF there is a high potential for it to occur on the EOF Project site during certain times of the year, as well as a high potential for the species to occur adjacent to the EOF and the onshore HDD alignment. The closest occurrence of California red-legged frog to the Ellwood Pier Project site is 1,700 feet east in Tecolote Creek (City 2009, CNDDB 2012). Consequently, there is no potential for California red-legged frog to occur at the Ellwood Pier Project site due to lack of suitable habitat and occurrence history.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No habitat would be removed or altered within the Project area, therefore direct impacts would be less than significant. Adult red-legged frogs are mobile and would be expected to leave the Project sites or the adjacent area if disturbed by Project activities; therefore mortality is not expected from direct impacts. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities. Potential impacts due to construction activity, drilling mud frac-out, or construction-related fluid releases that could impact the species would be further reduced through implementation of MM BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, MM BIO-5 Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan and BIO-6 Habitat Restoration Plan.

Tidewater goby (FE, CSC)

Habitat for the tidewater goby includes sandy-bottomed brackish coastal lagoons. The tidewater goby have been documented in the estuaries of Bell Canyon Creek, Tecolote Creek, and Eagle Canyon Creek (City 2006, Venoco 2001, CNDDB 2012). No aquatic habitat is located within the immediate footprint of the onshore portion of the Project area. However, a known population of tidewater goby, also considered as critical habitat for the species by the USFWS, is located 33 feet to the west of the EOF Project site and

immediately to the west of the HDD cable alignment. Subsurface geology may connect the HDD cable alignment to the Bell Canyon Creek drainage, as was the case during the construction of the Line 96 Modification Project and related HDD drilling mud frac-out into the nearby Bell Canyon Creek in 2011. As such, although tidewater goby are not expected to occur within the Project area due to lack of suitable habitat, there is a high potential for the Tidewater goby to occur directly adjacent to the Project area.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No habitat would be removed or altered within the Project area, therefore direct impacts would be less than significant. Construction activities would not take place in aquatic environments; therefore mortality is not expected from direct impacts. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities. Potential impacts due to the potential for a drilling mud frac-out or construction-related fluid releases that could impact the species, would be further reduced through implementation of MM BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, BIO-5 Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan, and BIO-6 Habitat Restoration Plan.

White-Tailed Kite (FP)

There is a high potential for white-tailed kites to occur on the Ellwood Pier Project site due to suitable adjacent perching and nesting habitat, suitable off-site foraging habitat in close proximity, occurrence history, and the mobility of the species. Suitable perching habitat occurs in the eucalyptus trees on the east side of the Project site. These trees may also provide potentially suitable nesting habitat, since there is neighboring suitable foraging habitat off-site to the west of the Project site; however, no nests are documented on-site and the closest documented nest occurs 1.5 miles to the east (City 2009). Additionally, a CNDDB occurrence from 2005 is located approximately 0.5 mile to the west of the Project site. The EOF Project site is bordered by a raptor roosting ESHA along Bell Canyon Creek and potentially supports white-tailed kites in the City of Goleta.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No suitable perching, nesting, or foraging habitat would be removed or altered on-site, therefore direct impacts would be less than significant. White-tailed kites are mobile and would be expected to leave the Project site or the adjacent area if disturbed by Project activities, therefore mortality is not expected from direct impacts. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities and the distance between the Project sites and the nearest white-tailed kite habitat documented with a CNDDB occurrence - located on the west side of Eagle Canyon Creek, approximately 1 mile to the west of the EOF Project site and approximately 0.4 mile west of the Ellwood

Pier Project site. Potential impacts would be further reduced through implementation of MMs BIO-2, Pre-construction Surveys, BIO-3 Biological Monitor, and BIO-4 Highly Visible Fencing**.** Implementation of the mitigation measures would reduce construction impacts to less than significant.

b) Would the Project 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 Game or U.S. Fish and Wildlife Service?

Marine

The marine portion of the Project would not impact riparian habitats. The Project would be conducted in the vicinity of rocky reef, eelgrass and kelp canopy, which have been identified as HASCs by the PFMC (see above).

Physical disturbance to these HASC habitats, such as dredging, placement of dredged materials, or anchoring within them could result in significant adverse effects. Boat anchors placed in these habitats could scrape benthic organisms and associated eelgrass and kelp from the bottom. Dredging would remove these habitats and side-casting would bury them. In order to avoid these potential impacts, the Project design calls for dredging, side casting, and anchoring activities that avoid these habitat types entirely through the use of pre-construction benthic surveys and avoidance planning. Cable would not be laid within kelp forests or eelgrass beds. Cable laydown would avoid rocky reef habitat to the maximum extent practicable. However, should cable be laid over rocky reef areas, the disturbance to this habitat would be temporary. The cable itself would be expected to serve as an additional attachment area for rocky reef organisms, which would gradually colonize the cable. Project construction would have a less than significant impact to marine resources.

Terrestrial

As described in Section 3.3.4.1 Environmental Setting, the EOF and Ellwood Pier Project sites include disturbed surfaces that are adjacent to ESHAs. Only ruderal vegetation occurs within the areas that can support vegetation, with the addition of a few eucalyptus trees at the Ellwood Pier Project site. No riparian habitat or other sensitive natural communities occur on either site. The riparian/marsh ESHA for Bell Canyon Creek is located immediately to the west of the access road and occupies the entire western border outside of the EOF Project site and the HDD cable alignment. The portion of the riparian habitat classified as Arroyo willow thickets, a City of Goleta and California Coastal Commission wetland and a CDFG sensitive natural community (CDFG 2010), are located along the southern border outside of the Project site on the west side of the access road. The portion of the riparian habitat classified as coast live oak woodland is located along the northern border outside of the Project site on the

west side of the access road adjacent to the EOF Project site and the HDD cable alignment. A small portion of a riparian/marsh ESHA is located aboveground of the underground HDD cable alignment. No riparian habitat or other sensitive natural communities would be removed or altered in this area, therefore, direct impacts would be less than significant. MM BIO-4 Highly Visible Fencing would exclude workers from the adjacent ESHAs and reduced potential impacts to these resources. In addition, potential impacts to this area due to a fluid release would be further reduced through implementation of MM BIO-5 Fluid Release Contingency Plan and BIO-6 Habitat Restoration Plan.

Project construction activities at the EOF Project site would be temporary and ground disturbance would be limited to the immediate lay down area, where no riparian habitat or other sensitive natural communities exist, therefore direct impacts would be less than significant, except in the event of a possible frac-out or construction-related spill release into the adjacent Bell Canyon Creek, impacts would be potentially significant but avoidable. Impacts could be reduced to less than significant with the incorporation of BIO-5 (Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan) and BIO-6 (Habitat Restoration Plan). Indirect impacts to adjacent areas due to noise/vibration, fugitive dust, etc. would also be less than significant due to the temporary nature of Project activities. Potential impacts would be further reduced through implementation of MMs BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, and implementation of industry standard erosion control measures for construction. Implementation of the mitigation measures would reduce construction impacts to less than significant.

c) Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Marine

No federally protected waters or wetlands would be removed or hydrologically interrupted. Placement of cable within waters of the U.S. and of the State would constitute permanent fill. Although the cable would be placed, and construction activities would occur within coastal waters under the jurisdiction of federal and State agencies, as discussed above, the cable is expected to serve as an attachment site for reef-building organisms, and is not expected to have a substantial adverse effect on habitat.

Placement of sidecast materials would constitute temporary fill of soft bottom material (sand) over soft bottom (sand). Benthic habitat would be temporarily disturbed during the construction of the HDD exit pit and transition trench and during the installation of the cable. Excavated materials would be placed next to the trench (sidecast) and would be used to backfill the trench after completion of the Project. Excavation activities are

expected to take approximately 3 weeks, following which the area would be restored to pre-disturbance topography as described in MM BIO-8.

Burrowing or sessile benthic organisms may be lost due to direct removal and burial in adjacent areas during excavation of the HDD exit pit and transition trench. However, following the completion of the Project, disturbed areas would be recolonized, usually beginning with opportunistic species (Newell et al. 1998). These species are typically characterized by rapid growth and reproduction. Marine benthic invertebrates usually colonize disturbed sedimentary habitats via pelagic larvae that settle from the water column. Studies conducted to investigate the effects of dredging and burial of benthic fauna have found that recolonization and recovery of the disturbed area begins almost immediately upon cessation of the disturbance. Studies have reported that areas disturbed by dredging activities usually recolonize quickly (within 1 month to 1 year), with original levels of biomass and abundance developing within 1 to 3 years (Newell et al. 1998). For example, Oliver et al. (1977) reported that of recovery of benthic infaunal[1] communities disturbed by dredging and dredged material disposal in the Monterey Bay area varied from approximately 1 to 3 years depending on the level of disturbance. Project construction would have a less than significant impact to wetland resources.

Terrestrial

The Project area does not contain any federally protected wetlands, with the exception of a possible wetland occurring within an area located above the HDD alignment that the City of Goleta (2006) has identified as the Bell Canyon Creek riparian/marsh ESHA, which will remain unimpacted by construction activities unless a frac-out were to occur at this location. As noted above, the EOF Project site and the onshore HDD cable alignment are located immediately adjacent to/below the riparian/marsh ESHA for Bell Canyon Creek. The riparian/marsh ESHA for Bell Canyon Creek is located immediately to the west of the access road and occupies the entire western border of the EOF Project site.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. As no wetlands and/or waters of the U.S. exist within the Project's area of disturbance, direct impacts would be less than significant. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities. Potential impacts would be further reduced through implementation of MMs BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, and implementation of industry standard erosion control measures for construction. With the implementation of the mitigation measures, impacts due to construction would have a less than significant impact.

[1] Infauna are organisms living in the sediment, such as polychaete worms.

d) Would the Project 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?

Marine

Migration routes and corridors would not be impacted by this Project. Native wildlife nursery sites include eelgrass beds and kelp forests, which would be avoided.

The Project would temporarily increase noise and light levels locally from work vessels. Cable laydown at sea would proceed 24-hours-per-day for a period of approximately 2 weeks. During this time, increased night time light and round-the-clock noise could temporarily disturb marine species, particularly seabirds, within the Project area. Studies have shown changes in light intensity and duration can result in behavioral changes and mortality in seabirds (Rich and Longcore 2006). However, nighttime lighting associated with the Project is expected to be within normal operating limits for night-operating vessels and existing oil platforms within the Project vicinity. Marine fish and invertebrates are frequently attracted to night time lights and are not expected to be disturbed by nighttime operations. Cable laydown is scheduled to proceed slowly, allowing any pelagic species, including fish, marine mammals and seabirds, to move out of the way of the descending cable. The actual placement of cable in any one area would be a temporary impact which would not impede the movement of migratory or resident species.

Given the frequent boating activity in the Project area and the slow-moving nature of Project boating activities, the presence of Project boats and laying of cable is not expected to disrupt the movements or behavioral patterns of any marine mammal. However, MM BIO-1 would require marine mammal monitoring to avoid impacts to marine protected species during Project construction; therefore, impacts would be less than significant.

Terrestrial

As described in Section 3.3.4.1 Environmental Setting, the Project sites include disturbed surfaces that are adjacent to ESHAs. There is little to no wildlife habitat value present on-site; however, suitable wildlife habitat exists adjacent to the Project sites.

The EOF Project site does not support aquatic habitat for migratory fish, wildlife corridor characteristics, native nursery sites; however, habitat for native resident tidewater gobies is located in close proximity in Bell Canyon Creek, 33 feet to the west of the Project site, the riparian area of Bell Canyon Creek serves as a suitable localized wildlife corridor and the riparian area of Bell Canyon Creek serves as a suitable aquatic and terrestrial nursery site for native wildlife species.

Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No native wildlife corridors or wildlife nursery sites would be removed or altered on-site, therefore direct impacts would be less than significant. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities. However, potential impacts to Bell Canyon Creek and related habitats would be further reduced through implementation of MMs BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, and WQ-1 Water Quality Plan.

The Ellwood Pier Project site does not support aquatic habitat for migratory fish, and does not support wildlife corridor characteristics or native nursery site. However, the adjacent contiguous coyote brush scrub serves as a suitable localized wildlife corridor and a suitable terrestrial nursery site for native wildlife species. Project site activities would be temporary and ground disturbance would be limited to the immediate lay down area. No native wildlife corridors or wildlife nursery sites would be removed or altered on-site, therefore direct impacts would be less than significant. Indirect impacts from noise/vibration, fugitive dust, etc. would be less than significant due to the temporary nature of Project activities; however, potential impacts to the adjacent habitats would be further reduced through implementation of MMs BIO-2 Pre-construction Surveys, BIO-3 Biological Monitor, BIO-4 Highly Visible Fencing, and implementation of industry standard erosion control measures for construction; therefore, impacts due to construction would be less than significant.

e) Would the proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Marine

The Project would not conflict with local ordinances regarding marine resources. The Project conforms to the requirements of the Santa Barbara County Coastal Land Use Plan and therefore, no impact would result due to construction.

Terrestrial

The Project conforms to the requirements of the Santa Barbara County General Plan, including the Coastal Land Use Plan (County 2009) and Conservation Element (County 2010). The Project conforms to the requirements of the City of Goleta General Plan/Coastal Land Use Plan (City 2009). See Section 3.3.4.2 Regulatory Framework for information about applicable local policies and ordinances and Section 3.3.4.1 Environmental Setting for information about how these local policies and ordinances affect on-site biological resources. The Project does not conflict with any local policies and ordinances regarding terrestrial resources, and therefore, no impact would result due to construction.

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

Marine

The Project is within the vicinity, but outside the borders, of two State Marine Protected Areas protected under the MLPA, and one National Marine Sanctuary. Project activities would not impact habitat or species within these protected areas.

Terrestrial

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans applicable to the Project sites or in Santa Barbara County (CDFG 2012b), therefore, there is no conflict with said plans, and no impact would result due to construction.

3.3.4.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would result in less-than-significant impacts to biological resources with the inclusion of WQ-1 Water Quality Plan and the following measures:

BIO-1. Marine Mammal Monitoring

A. A 500-foot (152-meter) Minimum Safety Zone shall be established along the proposed cable alignment.

B. Two National Oceanic and Atmospheric Administration Fisheries-approved marine mammal monitors shall be on watch on each Project vessel (cable-lay and support vessels) during offshore horizontal directional drilling (HDD) and cable-laying activities to monitor any marine mammals that enter the established Minimum Safety Zone. In the event a marine mammal approaches within 200 feet during the HDD operation, the monitors shall notify the onsite construction foreman and initiate a cease-work order; the monitors shall have discretion to continue operations if they determine that the mammal is headed away from the HDD construction area. All sightings shall be documented in a monitor logbook. Photographs with a date stamp will also be taken as practical and included in the logbook.

C. Cable-laying vessel speeds shall be limited to less than 2 nautical miles per hour (knots), with the speed of support vessels moderated to 3 to 5 knots, to minimize the likelihood of collisions with marine mammals and sea turtles.

D. Propeller noise and other noises associated with cable laying activities shall be reduced or minimized (through reduction of vessel speed) to the extent possible.

BIO-2. Onshore Pre-construction Surveys

A. Pre-construction surveys for special-status species and nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code section 3503 shall be conducted by a qualified biologist within 30 days prior to the commencement of Project-related activities. The Project biologist shall recommend if any additional mitigation is necessary to address changes since the original survey was done. In particular, pre-construction surveys should target monarch butterflies, California red-legged frog, tidewater goby, and white-tailed kites as they have high potential to occur within or directly adjacent to the Project area. Appropriate survey methods and timeframes acceptable to California State Lands Commission (CSLC) staff and the City of Goleta (for resources applicable to City jurisdiction) shall be established to ensure that chances of detecting the target species are maximized, i.e., October through February for monarch butterflies, March through June for nesting birds, or as determined by the consulting qualified biologist.

B. If aggregations of monarch butterflies are detected within the adjacent areas, avoidance measures in compliance with the City of Goleta General Plan/Coastal Land Use Plan (City 2009) shall be implemented to ensure that aggregations of monarch butterflies are not disturbed. A minimum of a 100-foot buffer, as measured from the outer extent of the tree canopy, shall be established if monarch butterfly aggregations are detected. Construction activities within the designated buffer of the aggregation shall be halted until monarch butterflies have left the site and the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the monarch butterfly habitat.

C. If nesting birds are detected, avoidance measures in compliance with the City General Plan and/or County policies shall be implemented to ensure that nests are not disturbed until after young have fledged. Construction activities within the designated buffer of the nest shall be halted until the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the nest. In the event that other listed species are encountered, consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Game (CDFG) and City of Goleta (when work is within their jurisdiction) must be initiated before continuing with work.

D. The results of the preconstruction surveys, including graphics showing the locations of any nests detected, and any avoidance measures implemented for special-status species, shall be submitted to CSLC staff, CDFG, USFWS, and the City of Goleta within 14 days of completion of the surveys to document compliance with applicable State and federal laws.

BIO-3. Onshore Biological Monitoring

A. Prior to the start of construction, an Employee Environmental Awareness training program approved by California State Lands Commission (CSLC) staff and the City of Goleta shall be used to train all onsite Project personnel (Applicant employees and contractors) relative to the environmental protection measures of the Project.

B. A City of Goleta-approved biological monitor (Project biologist and biological monitors) shall be present during all onshore construction (including during borings) for the portion of the proposed Project located within the jurisdiction of the City of Goleta (the Ellwood Onshore Facility [EOF] Project site and the onshore horizontal directional drilling [HDD] cable alignment). The Project biologist and the Project engineer shall clearly designate "sensitive resource zones" on project maps, construction plans, and at the construction site, consistent with the preconstruction surveys conducted for the presence of sensitive species. Sensitive resource zones are defined as areas where construction would be limited to a 15- to 30-foot corridor, depending on the particular construction requirements, to avoid impacts to special-status biological resources. Similarly, staging and storage areas shall not be placed in areas where sensitive resources are present or nearby, under the direction of the Project biologist. The Project biologist shall ensure the following:

1. Washing of any Project equipment is not allowed near sensitive biological resources. An area designated for washing functions shall be identified on the plans and submitted to the related agencies prior to the Project mobilization. All waste, garbage, and trash created during the Project shall be kept in covered containers and will be removed from the Project site and disposed of in accordance with local and State regulations.
2. Removal of waste occurs as required and does not attract wildlife.
3. Construction personnel do not feed or harass wildlife for the Project duration.
4. Construction occurs during the dry season of the year (i.e., April 15 to November 1) unless an agency-approved erosion control plan, incorporating appropriate best management practices identified in the U.S. Environmental Protection Agency's guidelines for construction site runoff control is in place and all measures therein are in effect.
5. All machinery that cannot be stored offsite, e.g., HDD equipment, shall be stored and fueled only within designated locations approved by the City of Goleta.

6. Disposal of or temporary placement of excess fill or other construction materials are prohibited within 50 feet from the top of the banks for all drainages and other areas known to support special-status species.
7. All HDD work stops and the related plans are properly implemented, under the Project biologists' oversight in the event of a frac-out or construction spill into the Bell Canyon Creek drainage.

C. If any special-status species are observed during monitoring, or if Project-related biological resource-focused conditions of approval are violated, the biological monitor shall have the authority to halt construction activities to avoid damaging sensitive resources or violating applicable laws. The Bell Canyon Creek corridor will be inspected during construction at a frequency acceptable to the Project biologist to ensure that possible HDD drilling mud leaks are identified. In the event that a listed species is encountered, authorization from the U.S. Fish and Wildlife Service and California Department of Fish and Game (CDFG), plus the City of Goleta for those portions of the Project located within the jurisdiction of the City of Goleta, must be obtained before continuing with work. If nesting birds are detected, avoidance measures in compliance with the City General Plan and procedures shall be implemented to ensure that nests are not disturbed until after young have fledged. The results of the monitoring, including graphics showing the locations of any nests detected, and any avoidance measures implemented, shall be submitted to the CSLC staff, City of Goleta and CDFG within 14 days of completion of the inspections to document compliance with applicable State and federal laws.

BIO-4. Highly Visible Fencing. Limits of work shall be established in the field with highly visible construction fencing to prevent encroachment into the native habitats adjacent to Project sites. The fencing shall be installed prior to issuance of a development permit. If the fencing is installed during the winter months, it shall be raised to allow for the migration of California red-legged frogs through the Project area. The City of Goleta shall inspect and verify fencing installation for those portions of the proposed Project located within the jurisdiction of the City of Goleta.

BIO-5. Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan. A Spill Response and HDD Fluid Release Monitoring and Contingency Plan (plan) shall be completed and include measures for training, monitoring, worst-case scenario evaluation, equipment and materials, agency notification and prevention, containment, clean up, and disposal of released drilling muds. Preventative measures would include geotechnical investigations to determine the most

appropriate HDD depth and drilling mud mixture. The plan shall include, but not be limited to, the following:

- The plan shall be submitted to all respective jurisdictions.
- In the event of a frac-out or any incident that affects the Bell Canyon Creek drainage, all work in the area shall cease.
- Monitoring of the entry and exit pits after construction shall be conducted to determine that excavated areas are restored to pre-construction contours.
- Monitoring by a minimum of two biological monitors shall occur throughout the drilling operations to ensure swift response in the event of a release (frac-out).
- Methods for detecting and curtailing the accidental release of that fluid shall be developed and shall be implemented during the HOD operations. Drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation. In addition, the HDD operator shall continuously monitor mud returns at the exit and entry pits to ascertain that mud circulation has not been lost. Spotters shall follow the progress of the drill bit during the pilot hole operation, and reaming and pull back operations.
- In the event of loss of circulation, without mud surfacing, the mud engineer shall evaluate the weight and viscosity of the fluid and mix in additives to seal off the crossing hole and regain circulation. Similar analysis of the mud shall be performed if surface releases are observed.

Any spills shall be contained to the extent feasible in accordance with approved plans. Containment shall be accomplished through construction of temporary berms/dikes and use of slit fences, straw bales, absorbent pads, straw wattles, and plastic sheeting. Clean up shall be accomplished with plastic pails, shovels, portable pumps, and vacuum trucks.

Should the release be onshore in upland or aquatic/creek habitat then the following will be required and presented in more detail in the plan:

- Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.
- Consult with the City of Goleta, California Coastal Commission (CCC), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) regarding the next appropriate actions among the following:

- A mobile vacuum truck will be used to pump the drilling mud from the contained area and recycled to the return pit.
- The drilling mud will be left in place to avoid potential damage form vehicles entering the area.

In the event of an unanticipated fluid release and subsequent adverse impacts to offshore coastal waters then the following will be required:

- Venoco shall immediately erect an isolation/containment environment (underwater boom and curtain).
- Venoco shall consult with the California State Lands Commission staff and CCC, CDFG's Office of Spill Prevention and Response, and National Oceanic and Atmospheric Administration Fisheries regarding the next appropriate action among the following:
  - Monitor the release for 4 hours to determine if the drilling mud congeals.
  - If drilling mud congeals, take no other action that would potentially suspend sediments in the water column.
- If the release becomes excessively large, a spill response team would be called in to contain and clean up excess drilling mud in the water. Phone numbers of spill response teams in the area will be on site.

BIO-6. Habitat Restoration Plan

In the event of an unanticipated fluid release and subsequent adverse impacts to onshore upland habitat or onshore, native aquatic/creek habitat, a site-specific Habitat Restoration Plan shall be prepared for review and approval by applicable regulatory agencies, including, but not limited to, the CCC, CDFG, and the City of Goleta. If a Habitat Restoration Plan is required, an installation security and a separate performance security shall be immediately posted by the Applicant to the City or County, depending on where the restoration occurs, for (1) tree replacement and mitigation and (2) restoration, whichever applies. The installation security shall be equal to the value of installation and/or replacement of all required items. The performance securities shall be equal to the value of maintenance period of a minimum of 3 years and shall be maintained by the City or County, whichever is responsible for overseeing the restoration/tree replacement, for the required maintenance period of at least 3 years. The installation securities shall be released upon satisfactory installation of planted and/or seeded stock. The performance securities shall be released once the performance standards are achieved, or after a minimum of 3 years.

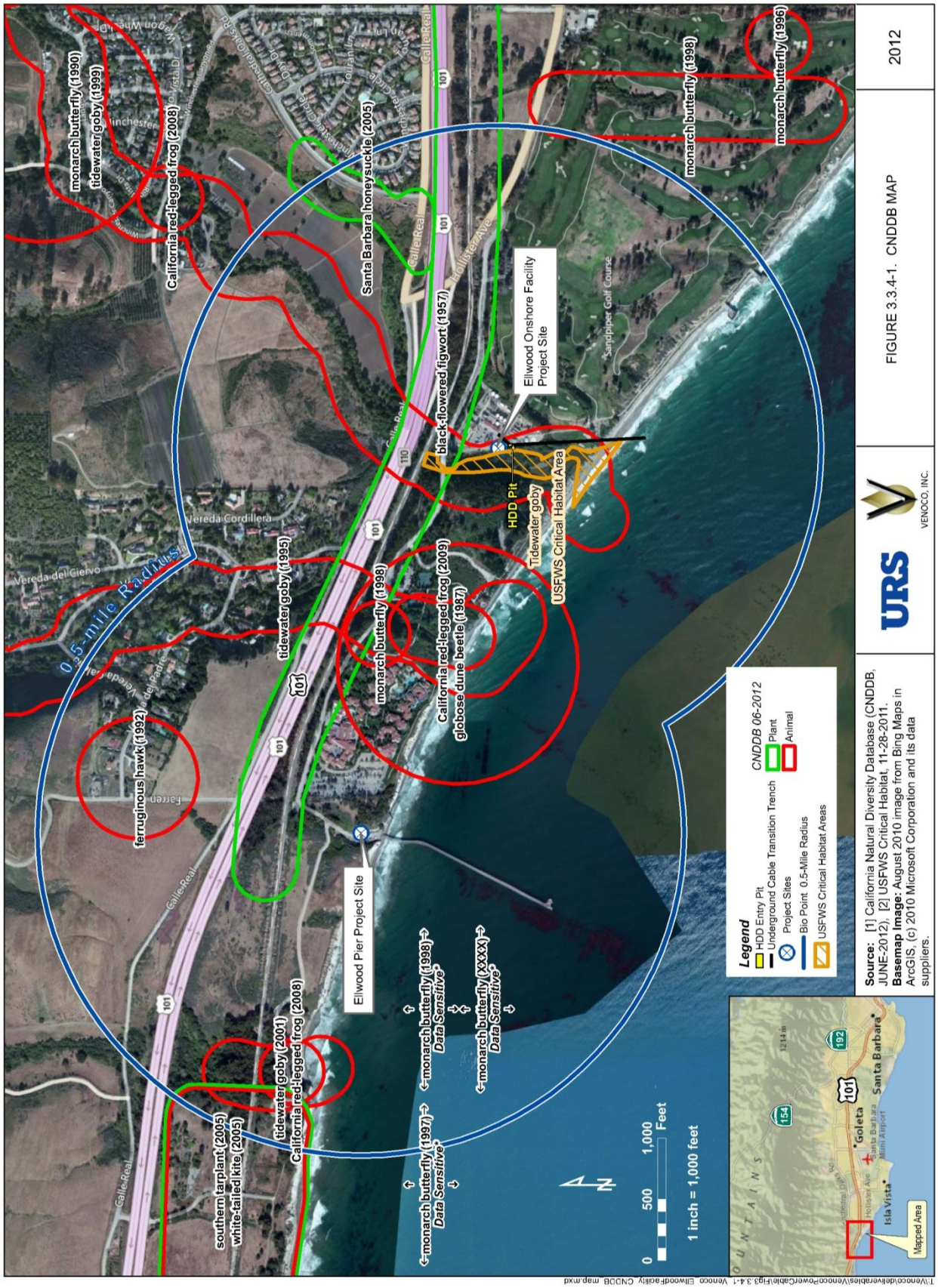
BIO-7. Anchoring Plan. Venoco shall submit a Final Anchoring Plan to California State Lands Commission (CSLC) staff for review and approval at least 2 weeks prior to commencement of Project activities. The Anchoring Plan shall include, at a minimum, the following elements:

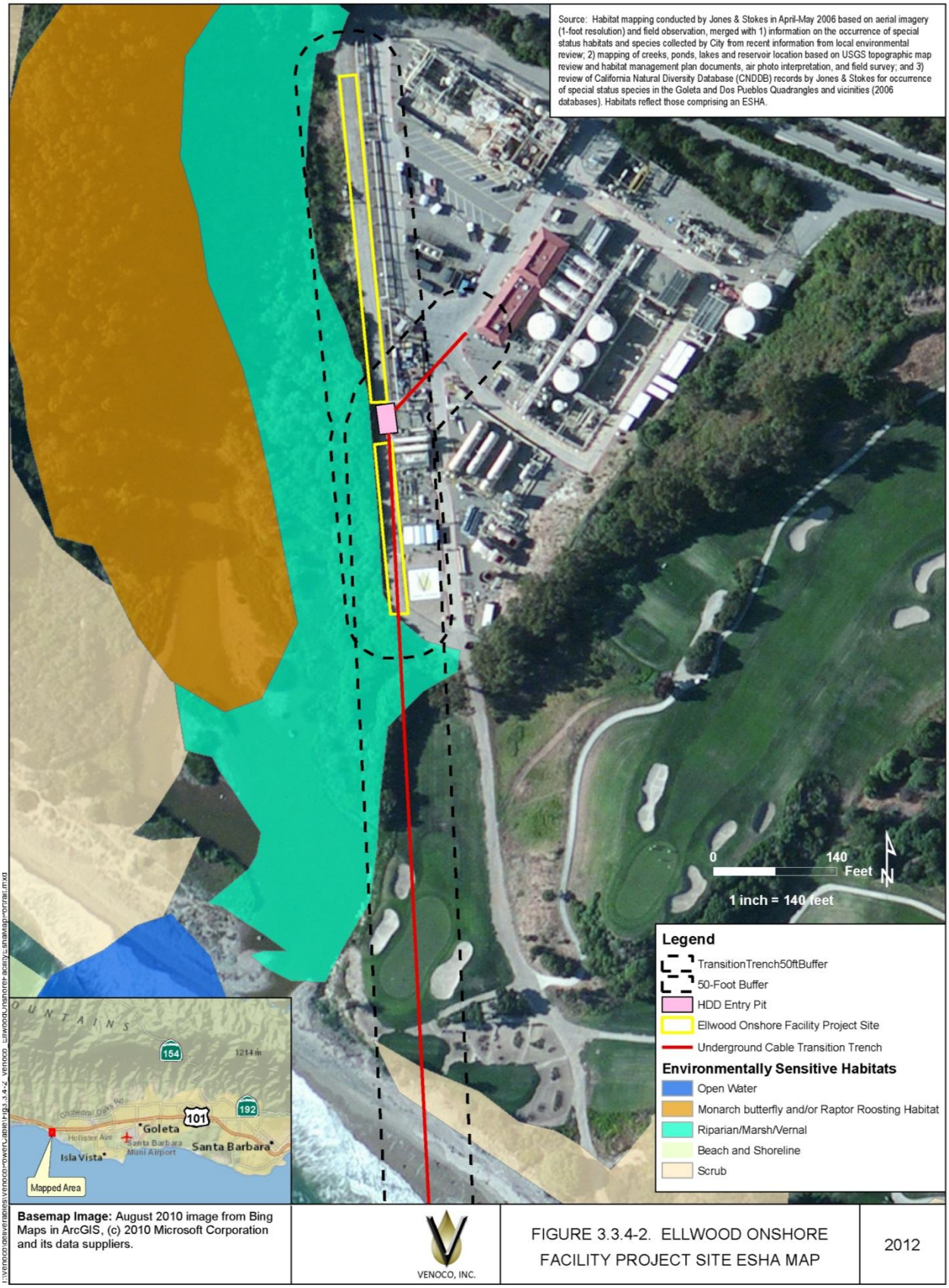
- A list all of the vessels that will anchor during the Project and the number and size of anchors to be set;
- Maps showing the anchoring sites identified during pre-construction surveys to identify anchor seclusion zones and ensure that all anchors shall avoid any rocky habitat, kelp beds, submerged cultural resources, and impacts to recreational and commercial boaters;
- Descriptions of navigation equipment that would be used to ensure anchors are accurately set and of the anchor handling procedures that would be followed to prevent or minimize anchor dragging; and,
- A requirement to be included in appropriate contracts for the Project that contractors shall, whenever feasible, use appropriate installation techniques and procedures described in the Plan that will minimize or avoid environmental impacts such as turbidity and anchor scarring.

BIO-8. Post-Construction Seafloor Survey and Remediation. Venoco shall perform a post-construction remotely operated vehicle or diver video survey along the length of the completed facility, with voice overlay, to verify the as-laid condition of the cable. The survey shall also provide a graphic record of the work accomplished and confirm seafloor cleanup and site restoration including anchor locations.

Residual Impacts. With the implementation of the recommended mitigation, there will be no residual impacts to the existing marine or terrestrial biological resources.

Cumulative Impacts. Project contributions to cumulative impacts on biological resources would be less than significant with the implementation of the recommended mitigation.


monarch butterfly (1990)
tidewater goby (1999)
California red-legged frog (2008)
Santa Barbara honeysuckle (2005)
monarch butterfly (1998)
monarch butterfly (1996)
Ellwood Onshore Facility Project Site
black-flowered figwort (1957)
HDD Pit
Tidewater goby
USFWS Critical Habitat Area
tidewater goby (1995)
monarch butterfly (1998)
California red-legged frog (2009)
globose dune beetle (1987)
ferruginous hawk (1992)
Ellwood Pier Project Site
tidewater goby (2001)
California red-legged frog (2008)
monarch butterfly (1997) Data Sensitive
monarch butterfly (1998) Data Sensitive
monarch butterfly (XXXX) Data Sensitive
southern tarplant (2005)
white-tailed kite (2005)
0.5-mile Radius
Vereda del Cielvo
Vereda Cordillera
Calle Real
Sandpiper Golf Course
Legend
HDD Entry Pit
Underground Cable Transition Trench
Project Sites
Bio Point 0.5-Mile Radius
USFWS Critical Habitat Areas
CNDDB 06-2012
Plant
Animal
Source: [1] California Natural Diversity Database (CNDDB, JUNE-2012), [2] USFWS Critical Habitat, 11-28-2011.
Basemap Image: August 2010 image from Bing Maps in ArcGIS, (c) 2010 Microsoft Corporation and its data suppliers.
URS
VENOCO, INC.
FIGURE 3.3.4-1. CNDDB MAP
2012
1 inch = 1,000 feet
0 500 1,000 Feet
N
Goleta
Santa Barbara
Isla Vista
Mapped Area
T:\Venoco\deliverables\VenocoPowerCableFig3.3.4-1_Venoco_ElwoodFacility_CNDDB_map.mxd


Source: Habitat mapping conducted by Jones & Stokes in April-May 2006 based on aerial imagery (1-foot resolution) and field observation, merged with 1) information on the occurrence of special status habitats and species collected by City from recent information from local environmental review; 2) mapping of creeks, ponds, lakes and reservoir location based on USGS topographic map review and habitat management plan documents, air photo interpretation, and field survey; and 3) review of California Natural Diversity Database (CNDDB) records by Jones & Stokes for occurrence of special status species in the Goleta and Dos Pueblos Quadrangles and vicinities (2006 databases). Habitats reflect those comprising an ESHA.
0
140
Feet
1 inch = 140 feet
N
Legend
TransitionTrench50ftBuffer
50-Foot Buffer
HDD Entry Pit
Ellwood Onshore Facility Project Site
Underground Cable Transition Trench
Environmentally Sensitive Habitats
Open Water
Monarch butterfly and/or Raptor Roosting Habitat
Riparian/Marsh/Vernal
Beach and Shoreline
Scrub
Goleta
Santa Barbara
Isla Vista
Santa Barbara Muni Airport
Mapped Area
Basemap Image: August 2010 image from Bing Maps in ArcGIS, (c) 2010 Microsoft Corporation and its data suppliers.
VENOCO, INC.
FIGURE 3.3.4-2. ELLWOOD ONSHORE FACILITY PROJECT SITE ESHA MAP
2012


Source: Habitat mapping conducted by Jones & Stokes in April-May 2006 based on aerial imagery (1-foot resolution) and field observation, merged with 1) information on the occurrence of special status habitats and species collected by City from recent information from local environmental review; 2) mapping of creeks, ponds, lakes and reservoir location based on USGS topographic map review and habitat management plan documents, air photo interpretation, and field survey; and 3) review of California Natural Diversity Database (CNDDB) records by Jones & Stokes for occurrence of special status species in the Goleta and Dos Pueblos Quadrangles and vicinities (2006 databases). Habitats reflect those comprising an ESHA.
Santa Barbara County
City of Goleta
Legend
Ellwood Pier Project Site
50-Foot Buffer
City of Goleta Boundary
Environmentally Sensitive Habitats
Beach and Shoreline
Scrub
N
0
150
300 Feet
1 inch = 150 feet
Basemap Image: August 2010 image from Bing Maps in ArcGIS, (c) 2010 Microsoft Corporation and its data suppliers.
URS
VENOCO, INC.
FIGURE 3.3.4-3. ELLWOOD PIER PROJECT
SITE ESHA MAP
2012
Goleta
Santa Barbara
Isla Vista
Mapped Area
T:\Venoco\deliverables\Venoco2PowerCable\Fig3.4-3_Venoco_EllwoodPierESHAMap.mxd

URS	Venoco Power Cable Replacement Project	**FIGURE 3.3.4-4** MARINE PROTECTED AREAS NEAR THE PROJECT SITE	2012

3.3.5 Cultural Resources

V. CULTURAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.3.5.1 Environmental Setting

The Project area is predominately located offshore in State waters of the Pacific Ocean with some onshore portions located in the City of Goleta and County of Santa Barbara.

As identified in Section 2, Project Description, onshore subsurface activities include HDD and trenching at the EOF Project site located within the city of Goleta and surface activities at the Ellwood Pier Project site located within the County. Onshore HDD would be used to install a 10-inch-diameter HDPE conduit from the EOF to the beach. In addition, a small concrete vault would be constructed under the south end of the existing Holly supply transformer at the EOF. The vault would be approximately 3 feet by 4 feet by 4 feet, and would allow positioning the replacement cable adjacent to the existing transformer until the final cable connection is made. A trench, approximately 2-feet-wide and 3- to 4-feet-deep, would be excavated from the termination vault to the HDD entry pit (The trench would be temporarily plated with steel traffic plates until the cable has been laid in the trench.) Once the cable is installed, the trench would be backfilled, compacted, and finished with replacement concrete paving where it crosses existing roadways. Other short-term temporary construction activities would occur at the Ellwood Pier, such as fusing pipes together and storing them until ready for use on the east side of an existing parking area. No subsurface activities would occur at the Ellwood Pier portion of the Project site.

Offshore Project activities include construction of a temporary HDD exit pit located approximately 1,400 feet offshore, pulling and laying of power cable, and anchoring.

Onshore Project

The onshore portion of the Project is located within the territory historically occupied by the Barbareño Chumash, one of the largest and most complex Native American groups in California. The term Chumash reflects separate but closely related languages spoken by people who occupied a vast territory stretching from Malibu in the south to San Luis Obispo in the north, more than 40 miles inland and offshore to the Channel Islands forming the Santa Barbara channel. The group known today as the Barbareño Chumash occupied territory along the coastal plain from Point Conception in the west to Carpinteria in the east. Archaeological evidence has revealed that prehistoric settlement of Santa Barbara County began over 9,500 years ago. Thousands of prehistoric archaeological sites have been recorded in Chumash territory.

Archaeological sites are an integral part of the modern day Native American community. Their history is contained in the sites, and most contemporary Chumash believe that cultural resources are best left in their natural State. Today, many Chumash people are involved in protecting their native heritage and practicing traditional beliefs in the same territory as their ancestors have for over 9,000 years.

Following the rise of the Chumash, in the late 1700s Spanish and Mexican influences greatly changed the aboriginal way of life. With the establishment of the Spanish missions, four of which were located in Chumash territory, Native American culture of the area changed dramatically. Indigenous technologies were lost or replaced by Western ones, and religion and belief systems became transformed and incorporated into the Spanish culture. Most devastating to the local Chumash population was the introduction of Old World diseases for which they had little natural tolerance (Heizer 1974). As a result, the Native American population in the area dropped dramatically between the end of the 18th and 19th centuries. With some exceptions, most Chumash had entered the mission system by the early 1800s. Secularization of the California missions in 1834 eventually resulted in the transfer of large ranchos to friends and allies of Mexican authorities and many Native Americans became part of the workforce of ranchos. The ranchos were the economic powerhouses of Mexican California, providing food, shelter, and employment for many residents of the State, as well as tallow, hides, and beef for trade and export (Smith 1958, 1964; Tompkins 1966). The majority of the ranchos raised just enough vegetable foods to supply their residents, and produced only livestock products for trade, however there were some ranchos given over primarily to the growing of crops (Avina 1932). The EOF is located in the former Rancho Dos Pueblos.

Even after Mexico ceded California, Texas, Arizona, Utah, and New Mexico to the U.S. in 1848, the local economy remained primarily agricultural, with an emphasis on cattle ranching until a series of droughts in the 1860s led to the decimation of the cattle trade. Following this, local rancho owners sold most of their land to American farmers, leading

to the eventual subdividing of the region into both agricultural and urban plots (Tompkins 1966). Many place names, including the EOF, recall an early rancher, Ellwood Cooper. Cooper first visited Santa Barbara as a tourist in 1868 and saw the area's commercial potential to grow olive trees. He returned in 1870, purchased Ellwood Canyon and the adjacent hills. His olive oil business was a commercial failure but for many years he was California's largest producer of walnuts. Several local place names acknowledge his historical contributions, including the oil fields, Ellwood Canyon, Ellwood School, Ellwood Station Road, and the Goleta neighborhood of Ellwood (City 2006).

At the same time, the small towns of La Goleta (in what is now eastern Goleta) and La Patera (now Old Town Goleta) began to take root and grow, though neither became particularly large until the mid-20th century. La Patera became the more important of the two communities in the 1920s and 1930s due to the construction of the Goleta Union School, the discovery of oil in the Ellwood area in the 1920s, the construction and subsequent expansion of an airfield, and the movement of the Post Office from La Goleta to La Patera, thus changing La Patera's name to Goleta (Tompkins 1966, Coombs 1991).

As noted, oil was discovered locally in the 1920s, setting off a dramatic period of oil exploration from Gaviota to Carpinteria. Natural oil seeps off Coal Oil Point suggested the presence of and oil field now known as the South Ellwood Offshore Field and, in 1966, Platform Holly was constructed. Venoco acquired Platform Holly in 1997.

Offshore Project

Because underwater development has not occurred and due to the difficulties of working underwater, extensive archaeological investigation of underwater cultural resources has not taken place. The inaccessibility of underwater sites and the difficulties posed by their investigation and recording have also meant that California's underwater archaeological record is not as extensive and complete as its land-based record. However, the State's rich maritime and coastal history (and prehistory) has left behind a variety of sites and artifacts.

Prehistoric Setting. Arlington Springs and Daisy Cave on San Miguel Island are two of the earliest dated archaeological sites in North America (Watts et al. 2008). They demonstrate that the Santa Barbara coastal region was occupied at least 13,000 years ago. Because of the rise in sea level during the middle and early Holocene (15,000 to 10,000 years ago), formerly land-based archaeological sites pertaining to the coastal activities of native inhabitants would now be deeply submerged if they survived inundation, wave-related erosion, and other natural processes (Moratto 2004). Such prehistoric sites could include the full range of site types, including habitation sites identified by stone and shell tools, shell middens, shell mounds, and rock milling

features that indicate food processing sites or larger inhabitation sites. Owing to technological, logistical, and funding difficulties, little or no intensive, systematic survey for submerged prehistoric sites off California's coast has been conducted and the number and locations of such sites are unknown. Most submerged prehistoric resources recorded along the coast have been found near shore by divers and include isolated artifacts such as net weights, bowls, and other items lost during maritime activities. Some of these likely reflect fishing and other maritime economic activities of the Chumash and their ancestors. For hundreds of years the Chumash traveled the Santa Barbara Channel in plank canoes called tomols to trade with villages located up and down the coast as well as on the Channel Islands.

Areas of the OCS predicted to be sensitive for submerged prehistoric resources have been identified by the former U.S. Minerals Management Service (Pierson, Shiller, and Slater 1987; Snethkamp et al. 1990). These areas correspond to the locations of sensitive landforms (paleoembayments, submerged channel systems, and island complexes) along the shoreline at various periods ranging from approximately 18,000 to 7,500 years ago. However, to date no known occurrences of in-situ remains of prehistoric habitation sites have been reported offshore Santa Barbara County,

Historic Setting. Shipwrecks are the most prominent known historical artifacts that lie beneath the waters off California. California's first recorded shipwreck is that of the San Agustin, which was driven ashore in 1595 at a location believed to be Drake's Bay, near Point Reyes north of the SCSR. Since then, hundreds of vessels have wrecked off California's rocky coast, but offshore locations of most shipwrecks were poorly documented owing to the emergency nature of accidents at sea and lack of precise navigational information. The remains of many of these ships have yet to be discovered.

The CSLC's Shipwreck Database (http://shipwrecks.slc.ca.gov/) lists 360 shipwrecks off the coasts of Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties. Chinese junks, Russian and Mexican sailing ships, American coastal traders, Gold Rush-era steamships, and U.S. Navy ships from the 1920s to the 1950s have all sunk in these waters, but the final resting places for most are unknown. Moreover, many shipwrecks may no longer exist even though we know where they were reported as lost. As a result of these factors, shipwrecks identified in databases are for the most part merely the last reported sighting of a foundering ship rather than a verified location of a shipwreck.

Site-Specific Cultural and Historical Resources.

The only onshore area of surface disturbance would take place at the EOF Project site. A Sacred Lands file search was performed on the Project's area of potential effect by the NAHC and a letter was received from the NAHC dated July 30, 2012, stating that no cultural resources were identified within 0.5 mile of the Project area (Appendix C). In

addition, a cultural resources record search for the EOF Project site onshore and offshore portions of the Project area along the alignment was conducted on May 25, 2012, by staff at the Central Coast Information Center, University of California, Santa Barbara. Results of the record search are presented below.

Onshore Cultural Resources

The site record search indicates the onshore Project site adjacent to the EOF has been subject to numerous negative cultural resources surveys and other cultural resource studies (Ehmann and Perez 1975, Spanne 1974, Swenson 1985, Stone 1985, King 1988, Chambers Group 1986). Two prehistoric sites (CA-SBA-71 and -1689) were identified within 0.125 mile of the EOF.

- CA-SBA-71 is a large prehistoric village and cemetery site located on the high marine terrace overlooking the Project area. The site has been subject to archaeological excavations by Rogers (1929) and Warren and Erlandson (1986), among others.
- CA-SBA-1689 is a small artifact scatter recorded on the west side of the Bell Canyon estuary (Moore and Serena 1980). At the time it was recorded, the site measured 15 by 15 meters in extent and included fragments of marine shellfish, one piece of quartzite and one burned rockfish vertebrae. The site had been disturbed by an old oil facility road.

Offshore Cultural Resources

Offshore cultural resources in the region are primarily historic shipwrecks. A recent EIR prepared by the CDFG (2010) included mapping potential shipwrecks listed in CSLC's California Shipwreck Database (http://shipwrecks.slc.ca.gov/). The database is used as a guide for determining the potential for encountering offshore cultural or historic resources.

According to the Database, 69 ships have been reported lost offshore of Santa Barbara County (see Appendix C). None are near the Project. The nearest shipwreck location is mapped on a NOAA nautical chart of waters off El Capitan State Beach, approximately 6.4 miles west of the Project.

3.3.5.2 Regulatory Setting

The following discussion summarizes the most important federal and State laws and regulations that apply to cultural resource protection for both the onshore and offshore portions of the Project area.

Federal

National Historic Preservation Act and Abandoned Shipwreck Act of 1987

The National Historic Preservation Act of 1966, as amended, (NHPA) and its implementing regulations (36 CFR 800) require federal agencies to evaluate the potential effects of their actions on historic properties. This process, often referred to as the "section 106" process, applies to properties that are listed on or eligible for listing on the National Register of Historic Places (National Register).

The Abandoned Shipwreck Act of 1987 (43 USC § 2101 et seq.) provides that any abandoned shipwreck embedded in a State's submerged lands or that is located on a State's submerged lands and is included in, or determined eligible for inclusion in, the National Register is the property of that State. As provided by the Abandoned Shipwreck Act, the title to all such abandoned shipwrecks, cargo, and other contents, on or in the tide and submerged lands of California is vested in the State and such resources are under the jurisdiction of the CSLC.

State

California Environmental Quality Act

As the CEQA lead agency, the CSLC is responsible for complying with all provisions of CEQA (Pub. Resources Code, § 21000 et seq.) and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) that relate to "historical resources." An historical resource includes: 1) a resource that is listed in, or determined to be eligible for listing in the California Register of Historic Resources (CRHR); 2) a resource included in a local register of historical or identified as significant in an historical resource surveys; and, 3) any resource that a lead agency determines to be historically significant for the purposes of CEQA, when supported by substantial evidence in light of the whole record.

The CRHR was created to identify resources deemed worthy of preservation on a State level and was modeled closely after the National Register. The criteria are nearly identical to those of the NRHP, but focus on resources of Statewide significance. The criteria are set forth in section 15064.5, subdivision (a)(3) of the State CEQA Guidelines and are defined as any resource that meets any of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

- Has yielded, or may be likely to yield, information important in prehistory or history.

Properties listed, or formally designated as eligible for listing, on the National Register are automatically listed on the CRHR, as are certain State Landmarks and Points of Interest.

In addition, section 15064.5, subdivision (a)(4) of the State CEQA Guidelines states:

> *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.*

California Coastal Act

Coastal Act section 30244 provides that, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

Local

City of Goleta General Plan

The General Plan Visual and Historic Resources Element includes policies to identify, protect, and encourage preservation of significant architectural, historic, and prehistoric sites, structures, and properties that comprise Goleta's heritage.

3.3.5.3 Impact Analysis

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Onshore Impacts

The onshore Project includes using HDD to install a 10-inch-diameter conduit from a new concrete vault at the EOF Project site and under the beach and surf zone for approximately 2,200 feet. The new vault would measure approximately 3 feet wide, 4 feet long and 4 feet deep and would be constructed under the south end of the existing Platform Holly supply transformer at the EOF Project site. Conduit from the vault to the onshore HDD site would be laid in a trench measuring approximately 2 feet wide and 3

to 4 feet deep. Laydown and construction areas would be established along the western edge of the EOF.

Previous archaeological surveys of the EOF have been negative and construction and operation of the onshore components of the Project would not affect any known cultural resources. A small artifact scatter recorded west of the EOF on the other side of Bell Canyon Creek is outside the Project area and would not be affected. The large archaeological site on the bluff overlooking the EOF is also outside the Project area and would also not be affected.

There is a very low potential that excavation of the onshore HDD site or onshore conduit trench, located within the EOF Project site, could encounter and adversely affect unrecorded archaeological sites that may lie buried beneath the ground surface. The HDD site would measure approximately 10- to 20-feet wide and 20- to 50-feet long.

Prehistoric use of Winchester Canyon is strongly implied by the presence of a large village located on the nearby bluff and previous archaeological studies in other similar canyon situations along the Gaviota coast have found ancient archaeological sites buried beneath modern alluvium. Therefore, MM CUL-1, Construction Monitoring, has been added to identify any previously unknown archaeological resources during Project construction.

HDD installation of the cable through the beach and surf zone would occur 30 to 50 feet below the beach erosion zone and the probability of intact cultural resources at these depths is considered remote. Therefore, onshore Project impacts due to construction would be less than significant with mitigation (MM CUL-1) incorporated.

Offshore Impacts

Offshore, the cable would be laid on the ocean floor using a conventional moored cable-lay barge. Based on the cultural resources record search conducted at the Central Coast Information center and a review of the CSLC Shipwreck Database, no known archaeological or historical resources are located within the offshore Project area. However, any submerged cultural resources would be identified during the pre-construction surveys conducted for preparation of the proposed subsea cable route and the required anchoring plan. Any shipwrecks or other significant archaeological resources identified in the pre-construction surveys shall be avoided by re-routing the cable a minimum of 300 feet away from the resource and not allowing anchoring within 500 feet of the resource during Project construction. Therefore, the potential for the Project to result in a significant impact to important archaeological or historical resources is remote and Project construction would have no impact on offshore cultural resources.

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

Please refer to the discussion for 3.3.5.3 (a) above. Identification of any previously unknown shipwrecks or archaeological sites during the pre-construction surveys and subsequent avoidance of any resources discovered will ensure that Project offshore impacts will be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are no unique geological features or known paleontological resources located in the Project area. Therefore, the Project would not directly or indirectly destroy a unique paleontological resource site or site of unique geologic feature and no Project impacts would result.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Onshore Impacts

There are no known burial sites within the onshore Project sites. In addition, there is a very low potential that excavation within the onshore Project sites could encounter and adversely affect unrecorded archaeological sites. Such sites may contain prehistoric human remains buried beneath the ground surface. Therefore, MM CUL-2, Unanticipated Archaeological Resources, has been added to evaluate any previously unknown archaeological resources discovered during construction. Work will stop within 100 feet of the find until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with the CSLC. If human remains are discovered, Venoco (the Applicant) would be required to stop work in the vicinity of the find until the county coroner has made the necessary findings as to origin and circumstances of the death. The CSLC would also be notified immediately. If the remains are determined to be of Native American origin, the coroner must notify the NAHC within 24 hours. Pursuant to Public Resources Code section 5097.98, the NAHC would then contact the most likely descendant of the deceased Native American, who would make a recommendation on how to treat or dispose of the remains with appropriate dignity. With the implementation of MM CUL-2, impacts due to Project construction would be less than significant.

Offshore Impacts

The Project is not located in any offshore areas known to contain human remains, including, but not limited to, formal cemeteries. The likelihood of encountering human remains on the seafloor during construction is remote and is considered a less-than-significant impact.

3.3.5.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The following mitigation measure would reduce Project impacts to a less than significant level.

CUL-1. Construction Monitoring. Onshore subsurface excavations within the Project area shall be monitored by a qualified archaeologist and a Native American monitor from a culturally affiliated tribe recognized by the Native American Heritage Commission for the Project area. In the event that archaeological resources are encountered, work shall be stopped immediately or redirected away from the resources. The California State Lands Commission is the point of contact for unanticipated discoveries and shall be notified immediately to determine further actions that may include recordation, evaluation and data recovery or avoidance through preservation in place. After construction is complete, the Project archaeologist shall prepare a construction monitoring report and submit it to the CSLC, City of Goleta and the Central Coast Information Center.

CUL-2. Unanticipated Archaeological Resources. Should any previously unknown archaeological resources be discovered during construction, work will stop within 100 feet of the find until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with California State Lands Commission (CSLC) staff. If human remains are discovered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. Venoco will notify the county coroner immediately in compliance with State Health and Safety Code section 7050.5 and work in the vicinity may not resume until the coroner has made the necessary findings as to origin and circumstances of the death. The CSLC shall also be notified immediately. If the remains are determined by the coroner to be of Native American origin, the coroner will notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would then contact the most likely descendant of the deceased Native American, who would make a recommendation on how to treat or dispose of the remains with appropriate dignity as set forth in Public Resources Code section 5097.98.

Residual Impacts. With the implementation of the recommended mitigation, any residual impacts to cultural resources would be less than significant.

Cumulative Impacts. Project contributions to cumulative impacts on cultural resources would be considered less than significant with the implementation of the recommended mitigation.

3.3.6 Geology and Soils

VI. GEOLOGY AND SOILS: **Would the Project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to 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?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Limitations. This section derived its information and data from a desktop study conducted by Fugro Consultants, Inc. in July 2012. The purpose of the geotechnical desktop study is to evaluate the significance of various potential geotechnical issues that may affect the permitting, planning, design, construction, and operation of the Project and to help guide the scope of work for future geotechnical/geologic investigation phases. The scope did not include Project-specific subsurface exploration or the assessment of the presence or absence of hazardous/toxic substances in the media considered. All references cited in this section can be found in the Fugro desktop study included as Appendix D.

3.3.6.1 Environmental Setting

Region and Site Marine Geology

The Goleta and Santa Barbara Channel area is located within the western portion of the Transverse Ranges geologic/geomorphic province of California. That province is locally dominated by the east-west trending Santa Ynez Mountain Range that extends continuously for about 75 miles from Point Conception eastward into Ventura County. The Santa Ynez Mountains, adjacent lowlands, and offshore Santa Barbara Channel areas are comprised of sedimentary rocks and soil materials ranging in age from Cretaceous to recent. Figure 3.3.6-1 identifies the regional geology with proposed cable location.

Structural geology in the Santa Barbara and Goleta areas consists of a south-dipping homocline and adjacent gently sloping coastal plain cut by a series of sub-parallel east-west trending faults and folds that are the result of north-south compressional tectonics. The faults and folds are roughly parallel the Santa Ynez Mountains to the north and extend into the Santa Barbara Channel south of the coastline. Faults proximal to the Project area are indicated on Figure 3.3.6-2 – Fault Map.

Cable Alignment

The approximately 3-mile-long power cable alignment extends from the onshore EOF southward to Platform Holly in the Santa Barbara Channel. The EOF is located within the City of Goleta near the mouth of the southerly draining Bell Canyon and is underlain by alluvial sediments as mapped by Dibblee (1987). Dibblee indicates that the alluvial sediments are in turn, underlain by bedrock of the Tertiary Monterey Formation described as thinly bedded, brittle shale and siliceous shale. Isaacs (1981) describes the Monterey Formation within the Ellwood Beach area as consisting of siliceous shale, chert, porcellanite, calcareous shale, diatomaceous shale, and mudstone. Dibblee maps a westerly-trending synclinal axis near the coastal bluff/beach area along the Project alignment. North of the axis (in the vicinity of the EOF) the bedrock dips southward at about 50 to 55 degrees; south of the synclinal axis, the bedrock dips to the north at about 40 to 45 degrees.

The geologic conditions offshore between the EOF and Platform Holly have been mapped by the California Division of Mines and Geology (CDMG) (1987-1989) as consisting of Tertiary bedrock (Monterey Formation) over the majority of the alignment and Quaternary sedimentary bedrock (Sisquoc Shale) over the southern-most portion of the alignment. The Sisquoc Shale is described as consisting of silty diatomaceous claystone. Geophysical mapping by Woodward-Clyde (1982) indicates that the offshore bedrock materials are overlain sediments that vary in thickness along the existing alignment. The report indicates that the sediments thicken shoreward from about 10 feet thick at Platform Holly to about 46 feet thick at the northernmost extent of their survey

(Figure 3.3.6-3 - Subsea Conditions). The report also identified an area of thickened sediment along the alignment that is about 56 feet thick north of the platform.

The Santa Barbara Channel is an offshore west-northwest trending geomorphic basin that extends from the Santa Ynez Mountains to the north to the Channel Islands to the south and from Point Conception to the west to the Hueneme Canyon offshore of the Santa Clara River delta in east Ventura County. Structurally, the Santa Barbara Channel area is an offshore extension of onshore oil fields within the Ventura Basin. Oil and gas production has occurred from the Santa Barbara Channel and along the shoreline since the early 1900s. The offshore replacement cable alignment is located within the 3- to 3.5-mile-wide, gently sloping (about 1 degree to the southwest), upper portion of the shallow shelf physiographic region of the Santa Barbara Channel. Water depths range from sea level at the beach to about -300 feet MLLW at the shelf-break.

The large subsea Goleta landslide complex is located about 1.5 miles southwest of Platform Holly. The headscarp area is coincident with the shelf-break and is about 500 feet high based on bathymetric data presented on Figures 3.3.6-2 and 3.3.6-3. Seafloor mapping by the Monterey Bay Aquarium Research Institute (2012) indicates that the landslide complex is about 9 miles wide and 6 miles long. According to Fisher (2005), this complex is composed of sediment that accumulated along a shelf-edge delta that subsequently failed and two of the three main lobes are 8,000 to 10,000 years old.

Faulting and Seismicity

Faults considered active or potentially active by the California Geologic Survey (CGS) are located within about 25-mile radius of the Project site. The computer program EQFAULT (Blake 1995) was used to estimate the distances between the proposed mid-point of the alignment and each of the faults. The estimated distances and maximum earthquake magnitudes are listed in Table 3.3.6-1.

North Channel Slope Fault

The nearest known active fault is the North Channel Slope fault, a north-dipping, east-west-trending reverse fault that extends through the Santa Barbara Channel subparallel to the coastline as indicated on Figure 3.3.6-4.

Red Mountain Fault

The Red Mountain fault is a north-dipping reverse fault that is considered to be potentially active. The fault has been mapped as extending from onshore in the Ventura area westerly into the offshore Santa Barbara Channel. The southern branch of the Red Mountain fault, considered potentially active by the CGS, projects toward the replacement cable alignment about 2,500 feet northwest of Platform Holly. Jennings

and Bryant (2010) maps the Red Mountain fault as projecting across the alignment as indicated on Figure 3.3.6-4.

Table 3.3.6-1. Active and Potentially Active Faults

Fault	Distance (miles)	Maximum Earthquake Magnitude (Mw) Ellsworth (2003)	Maximum Earthquake Magnitude (Mw) Hanks and Bakun (2002)
North Channel Slope	0	6.8	6.6
Mission Ridge-Arroyo Parida-Santa Ana	1.5	6.9	6.7
Channel Islands Thrust (Eastern)	9.4	7.3	7.2
Santa Ynez (West)	9.6	7	6.8
Red Mountain	14.5	7.4	7.4
Oak Ridge Mid-Channel Structure	14.7	7	6.7
Los Alamos-West Baseline	15.5	6.9	6.7
Santa Ynez (East)	16.5	7.2	7.1
Ventura-Pitas Point	20.8	7	6.8
Oak Ridge (Blind Thrust Offshore)	21.1	6.7	7.0
Santa Cruz Island	22.9	7.2	7.0
San Andreas - Whole	46.8	8.0	8.2

Earthquake magnitudes obtained from the USGS website
http://geohazards.usgs.gov/cfusion/hazfaults_search/hf_search_main.cfm

More Ranch Fault

While not specifically listed in Table 3.3.6-1 above, a review of CDMG (1996) indicates that the More Ranch fault is included in the Mission Ridge-Arroyo Parida-Santa Ana system. The More Ranch fault has been mapped by several authors, including Dibblee (1987) and Jennings and Bryant (2010), as an east-west-trending fault system that extends offshore and projects westward toward the alignment as indicated on Figure 3.3.6-4; as mapped by Dibblee, this fault trends toward the alignment about 1,500 feet south of the EOF. The More Ranch fault is considered active by Fugro based on recent field investigation and by the County of Santa Barbara (1979).

3.3.6.2 Regulatory Setting

Federal

There are no federal regulations related to geology and soils relevant to the Project.

State

California is a highly geologically active area, and therefore has substantial relevant regulatory requirements. The regulations listed below are at least partially applicable to the Project.

Alquist-Priolo Earthquake Fault Zoning Act (Pub. Resources Code, §§ 2621-2630)

This Act requires that "sufficiently active" and "well-defined" earthquake fault zones be delineated by the State geologists and prohibits locating structures for human occupancy across the trace of an active fault. The Act does not specifically apply to marine installations like the Project, but it does help define areas where fault rupture is most likely to occur onshore.

California Building Code (CBC)

The CBC contains requirements related to excavation, grading, and construction. According to the CBC, a grading permit is required if more than 50 cubic yards (38.2 m^3) of soil are moved. Chapter 33 of the CBC contains requirements relevant to the construction of pipelines alongside existing structures. California Code of Regulations, Title 23, sections 3301.2 and 3301.3 contain provisions requiring protection of the adjacent property during excavations and require a 10-day written notice and access agreements with the adjacent property owners. The CBC does not specifically apply to offshore marine installations.

California Seismic Hazards Mapping Act (Pub. Resources Code, § 2690 and following as Division 2, Chapter 7.8) and the Seismic Hazards Mapping Regulations (Cal. Code Regs., tit. 14, Div. 2, ch. 8, art. 10)

Designed to protect the public from the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes, the act requires that site-specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy. Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008), constitutes the guidelines for evaluating seismic hazards other than surface fault rupture and for recommending mitigation measures as required by Public Resources Code section 2695, subdivision (a). This act does not specifically apply to marine cable installations like the Project.

Local

There are no local regulations related to geology and soils relevant to the Project.

3.3.6.3 Impact Analysis

The Project would not result in changes to existing power generation operations or facilities. This evaluation of potential geology and soil impacts considers possible effects associated with power/data transfer cable, and a new cable conduit.

a) Expose people or structures to potentially 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.

The alignment does not lie within an Alquist-Priolo fault rupture hazard zone; however, it is proximal to a number of faults (Table 3.3.6-1) that are considered active or potentially active. A review of available data indicates that the More Ranch and Red Mountain faults included in the CGS database trend toward the alignment, and Jennings and Bryant (2010) map the Red Mountain fault as crossing the alignment as shown on Figures 3.3.6-2 and 3.3.6-4. It is not anticipated that Project construction would result in rupture of a known earthquake fault. The potential exists for ground rupture to occur along the alignment; however, because the cable is flexible and most of the alignment would be laid on the seafloor in a slight serpentine configuration to provide for future repair/maintenance, the risk associated with fault rupture is considered to be low. Project impacts due to Project construction would be less than significant.

ii) Strong seismic ground shaking?

As summarized on Table 3.3.6-1, numerous active or potentially active faults lie within a 25-mile radius of the site that have the potential to generate strong ground motion. Based on analyses using web applications available on the USGS website (USGS 2008), the estimated horizontal ground acceleration in the area with a 10 percent probability of exceedance in 50 years (475 year return period) is about 0.56g for alluvium conditions (Vs30 = 350 m/s) and 0.53g for stiff soil/soft rock conditions (Vs30 = 760 m/s). The peak ground acceleration was estimated for a site located near the mid-point of the proposed cable alignment (Latitude = 34.4102, Longitude = 119.9097). The mean earthquake magnitude for this event is estimated to be Mw 6.9.

Project construction activities are not likely to generate any strong seismic activity; therefore, impacts due to Project construction would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Seismically induced settlement or collapse can occur in soils that are loose, soft, or that are moderately dense but weakly cemented. Areas where the replacement cable is installed in bedrock of the Monterey Formation (such as may occur in the HDD alignment) should not be affected by liquefaction or seismic settlement. However, the potential may exist for liquefaction to affect the alignment in areas underlain by artificial fill, alluvial materials, and/or seafloor sediments. However, because the cable is flexible and would be laid in a serpentine configuration, the effects associated with liquefaction

and/or seismically induced settlement is considered to be low. Therefore, impacts due to Project construction would be less than significant.

iv) Landslides?

Submarine landslides and slumps (down-slope slip of coherent blocks of sediment and/or rock) and debris flows (downslope gravity-induced flows of sediment, rocks, and boulders) have been mapped all along the California Continental Borderland (Kennedy et al. 1987) including the Goleta slide located about 1.5 miles southwest of Platform Holly. Submarine slumps and slides are triggered by a variety of mechanisms, including strong ground shaking, fluid or gas expulsion in seabed sediments, and sediment loading and collapse in areas of high rates of sediment accumulation. These types of mass movement occur at a variety of scales and on slopes with relatively low gradients, depending on local conditions.

The seafloor slope in the vicinity of the proposed replacement cable alignment is about 1 degree to the southwest as shown on Figures 3.3.6-2 and 3.3.6-4. The occurrence of landslides and slumps cannot always be predicted, but due to the distance from the edge of the canyon wall and relatively flat slope, Project construction is not expected to result in submarine slumps, slides, and debris flows. In the event these activities occurred in the surrounding area, they are not anticipated to affect the replacement cable alignment. Therefore, impacts related to Project construction would be less than significant.

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

Based on a data review and site reconnaissance, the onshore near-surface earth materials along the replacement alignment are anticipated to consist of loose to medium dense sandy silt, silty sand, and sand and soft to medium stiff clay and clayey silt of alluvial origin. The alluvial sediments in the vicinity of the alignment are overlain by artificial fill that may be several feet to 10 feet thick. The fill materials were likely derived from the underlying alluvial sediments and placed as part of the development of the EOF or other previous site uses. The alluvial soils are underlain by thinly bedded bedrock of the Monterey Formation that may be 50 feet or more below the ground surface along the proposed onshore portion of the cable alignment based on data from Fugro (2011).

The only onshore component of the Project would be a new cable conduit to be located on top of a rock rip-rap area. Therefore, Project construction would not result in any substantial soil erosion or loss of topsoil and Project 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 proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Liquefaction is the sudden loss of soil shear strength due to rapid increases in pore water pressures caused by seismic shaking. For liquefaction to occur, underlying soils should be granular and of low density located below the groundwater level. In general, liquefaction occurring below a depth of about 50 feet is not considered a hazard for improvements constructed at or near the ground surface.

Seismically induced settlement or collapse can occur in soils that are loose, soft, or that are moderately dense but weakly cemented. Areas where the replacement cable is installed in bedrock of the Monterey Formation (such as may occur in the HDD alignment) should not be affected by liquefaction or seismic settlement. However, the potential may exist for liquefaction to affect the alignment in areas underlain by artificial fill, alluvial materials, and/or seafloor sediments. However, because the cable is flexible and would be laid in a serpentine configuration, the effects associated with liquefaction and/or seismically induced settlement is considered to be low. Therefore, impacts related to Project construction would be less than significant.

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

The only onshore component of the Project would be a new cable conduit that would be installed using HDD from an entry pit located on a gravel access road located west of the EOF, and that would run south under the Sandpiper Golf Course, a City-designated ESHA, and the beach. Potentially occurring expanding clays would create stress that could potentially affect the structural integrity of the underground cable pipeline. The Project is unlikely to result in any structural development that could be adversely affected by soil-related hazards such as landslides, subsidence, liquefaction or expansive soil; therefore, potential impacts would be less than significant. Any impacts associated with the potential for expansive soils would be further reduced through implementation of APM-3 Geotechnical Report for Horizontal Directional Drilling (HDD) Installation.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project would not result in any development that would increase the generation of wastewater or require the use of an individual waste water treatment or disposal system. No Project impacts associated with construction would result.

3.3.6.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would result in less-than-significant geology or soils impacts. Implementation of APM-3 would further reduce any potential for impacts associated with geology.

APM-3. Geotechnical Report for Horizontal Directional Drilling (HDD) Installation. At least 30 days prior to start of HDD construction, Venoco shall submit a site-specific geotechnical report certified by a California registered Geotechnical Engineer to the CSLC staff for review and approval, in consultation with the City of Goleta's Building Official and the Coastal Commission staffs and, if the City of Goleta has the legal authority to require approval of the geotechnical report, subject to that approval by the City of Goleta's Building Official. At a minimum, the report shall include the following information:

- Boring logs;
- Confirmation of fitness of purpose of the HDD method;
- Any other pertinent soil properties and parameters per California Building Code requirements; and
- Any geotechnical design recommendations for safe HDD installation including any safeguards to minimize risk of inadvertent release of drilling fluids to the surface, groundwater, or ocean.

Residual Impacts. The proposed Project would have no significant geology or soils impacts. No mitigation is required and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on geology or soils.

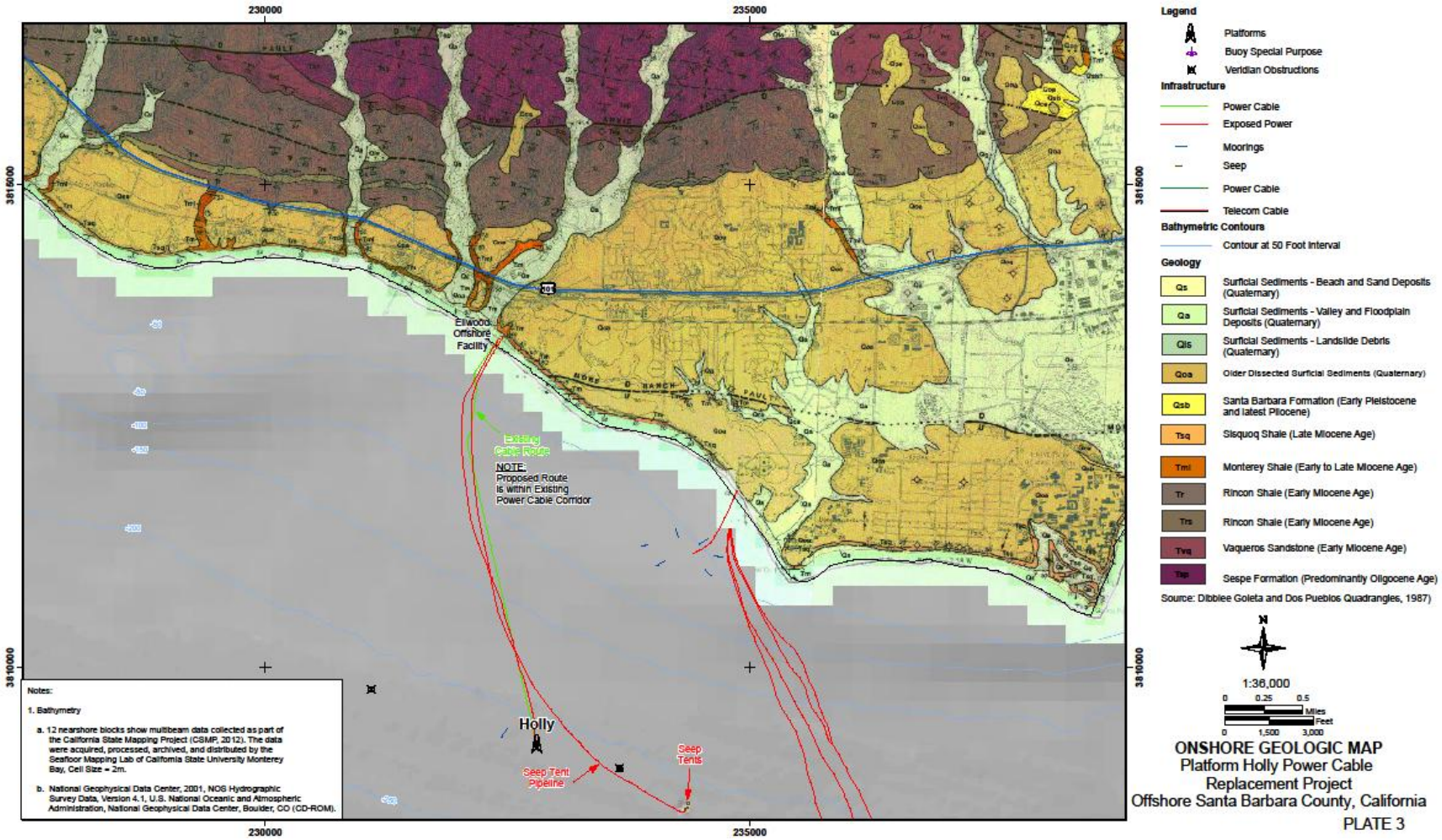


Figure 3.3.6-1. Region Geology with Proposed Cable Location

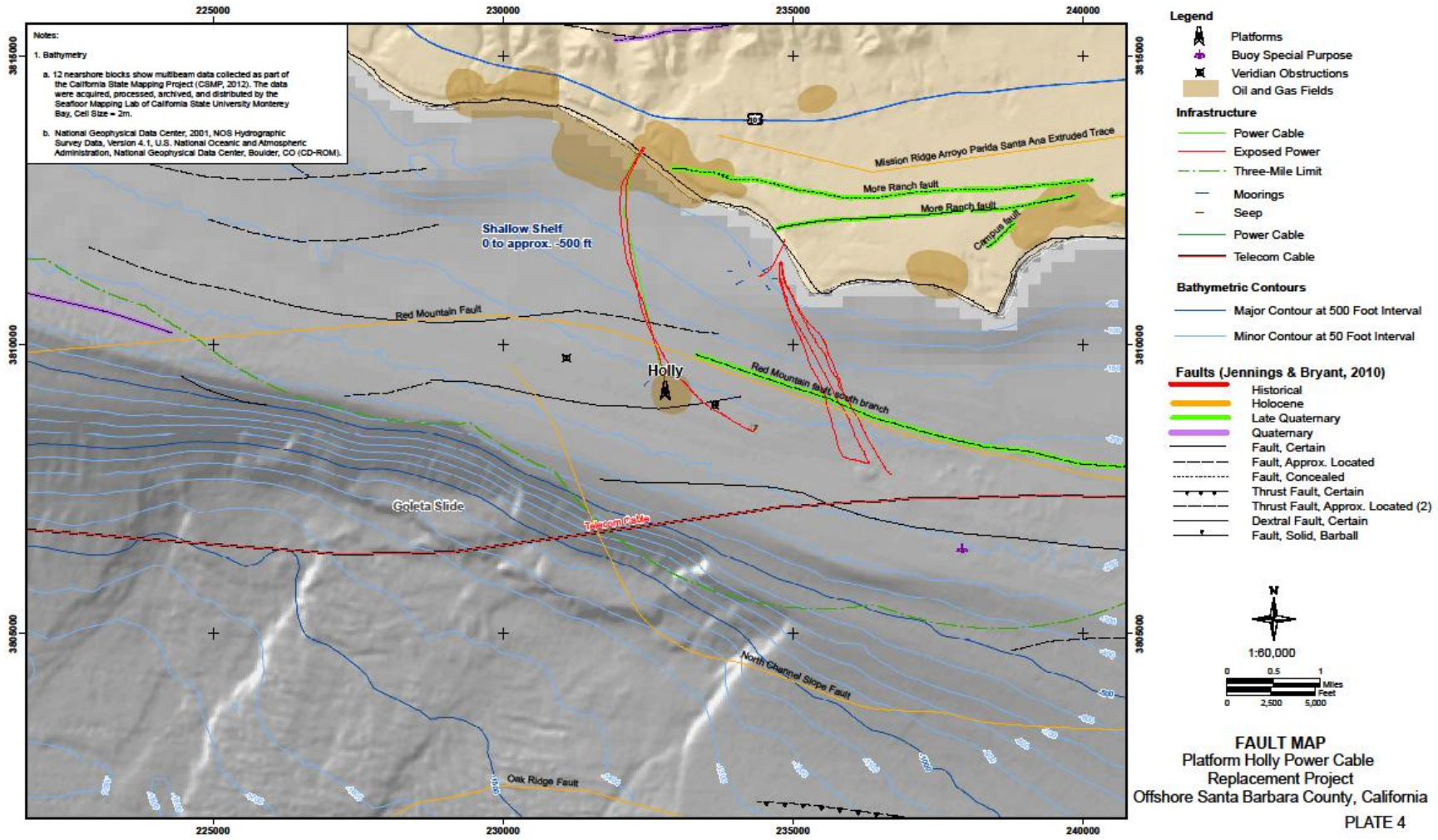


Figure 3.3.6-2. Region and Site Fault Map

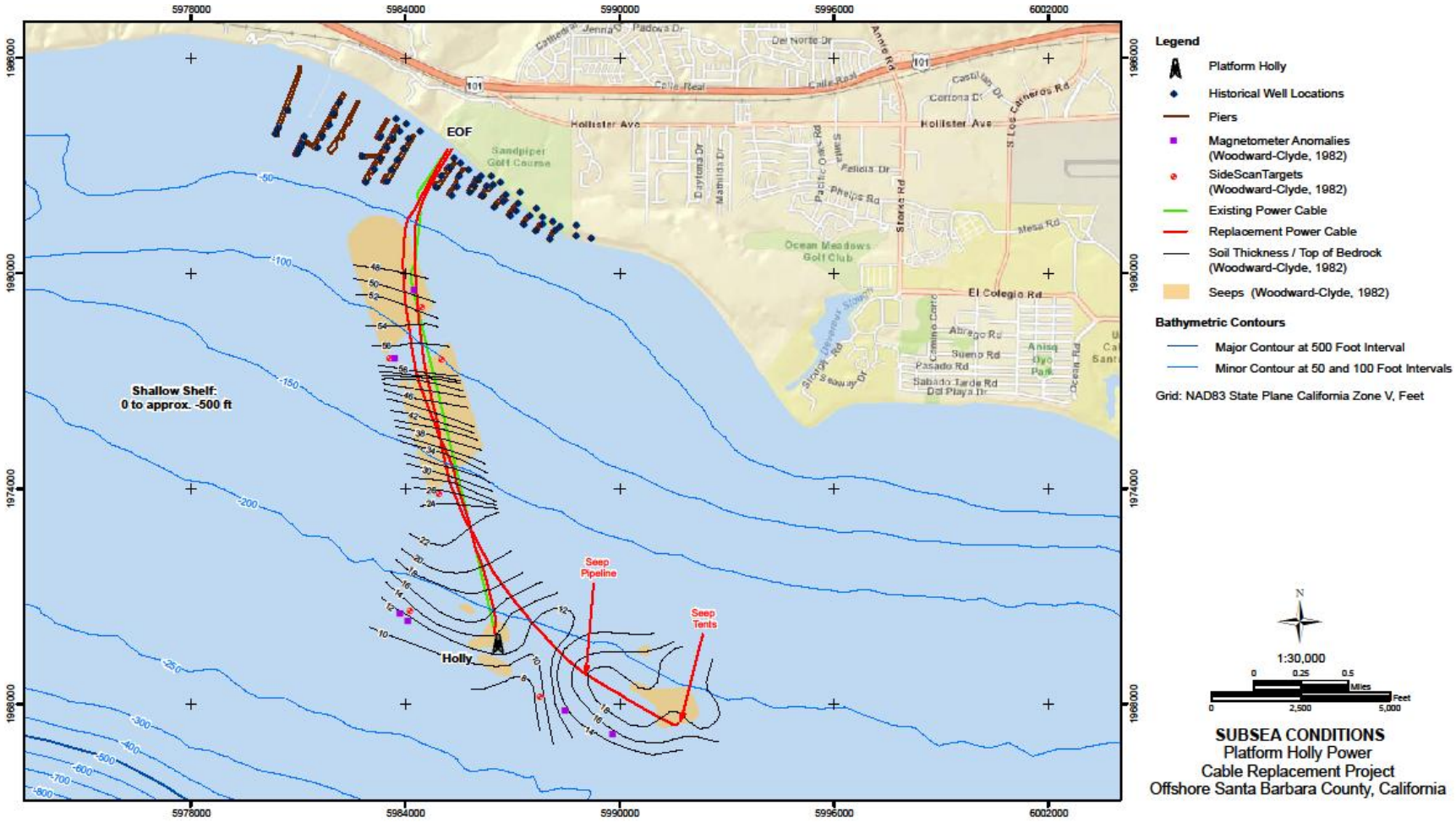


Figure 3.3.6-3. Subsea Conditions

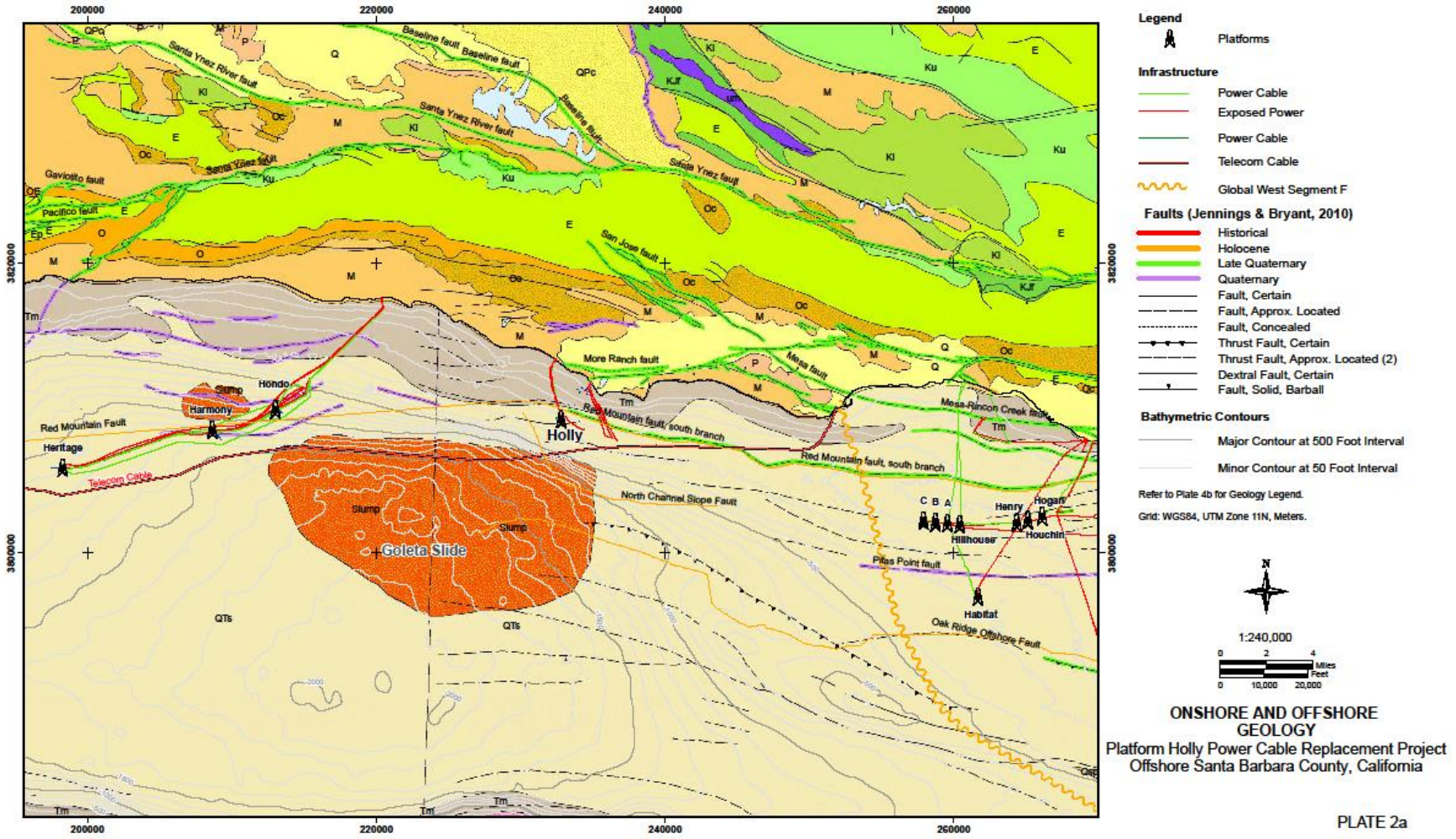


Figure 3.3.6-4. Onshore and Offshore Geology

3.3.7 Hazards and Hazardous Materials

VII. HAZARDS AND HAZARDOUS MATERIALS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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 two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

3.3.7.1 Environmental Setting

The City of Goleta has jurisdiction over the EOF for local building and land use permits; however, it does not have a certified LCP and until certification, the CCC has CDP authority over the EOF pursuant to the standards of the Coastal Act.

Venoco has an overall facility response plan and a safety plan would be developed by the contractor for the Project. The EOF and proposed HDD drilling area are not located within a wildland fire hazard area. However, the access road leading up to the Ellwood Pier is included within the wildland fire hazard area in the City of Goleta's General Plan (2009).

3.3.7.2 Regulatory Setting

This section identifies selected regulations and policies that are administered by federal, State, and local agencies and that pertain to the reduction of hazards and the management of hazardous materials.

Federal

Clean Water Act

The CWA is a comprehensive piece of legislation that generally includes reference to the federal Water Pollution Control Act of 1972, its substantial supplementation by the CWA of 1977, and subsequent amendments in 1981, 1987, and 1993. Overall, the CWA seeks to protect the nation's water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. These water quality standards are enforced by the EPA. The CWA also provides for development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters.

International Navigational Rules Act

The international rules and regulations governing operations at sea were formalized at the Convention on the International Regulations for Preventing Collisions at Sea in 1972 and became effective on July 15, 1977. Congress adopted these rules and regulations as the International Navigational Rules Act of 1977, commonly called 72 COLREGS. These rules, with 1989 amendments, identify all the regulations that govern operations on U.S. navigable waters. The rules are administered and enforced by the U.S. Coast Guard (USCG).

Oil Pollution Act

The OPA 90 (33 USC § 2712) requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of OPA 90 motivated California to pass a more stringent spill response and recovery regulation and the creation of the OSPR to review and regulate oil spill plans and contracts.

State

Lempert-Keene-Seastrand Oil Spill Prevention and Response Act

OSPRA established the OSPR division of the CDFG to provide protection of California's natural resources from petroleum discharges. OSPRA covers all aspects of marine oil spill prevention and response in California. It established an Administrator who is given broad powers to implement the provisions of the Act.

Coastal Act Section 30232

Per Coastal Act section 30232, protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.).

This act mandates that the waters of the State shall be protected, such that activities, which may affect waters of the State, shall be regulated to attain the highest quality. This Act established the SWRCB as the principal State agency for coordinated and controlling water quality in California. The SWRCB provides regulations mandating a "non-degradation policy" for State waters, especially those of high quality. The SWRCB is divided into local regional boards.

Local

City of Goleta General Plan Safety Element Policy SE Policy 8

This policy has an objective "To minimize the risk of potential short- and long-term hazards associated with the operation of the Venoco Ellwood facilities and other oil and gas extraction, processing, and transportation facilities."

Policy SE 8.1 addresses the nonconforming status of the EOF stating: "In accord with the legal nonconforming status of the EOF in western Goleta, the City may allow safety improvements that incidentally could prolong the life of the plant."

Policy SE 8.3 addresses annual safety audits of all new and existing oil and gas production, processing, and storage facilities. The City of Goleta or its agent shall participate in these audits and all deficiencies notes in each audit shall be addressed promptly, in timeframes recommended in the audits conclusions.

Policy SE 8.5 indicates that the City of Goleta should develop and maintain an inventory of gas and oil pipelines, including public utility transmission pipelines, and shall require operators of petroleum pipelines to provide information deemed essential for such inventory.

Santa Barbara County Systems Safety and Reliability Review Committee (SSRRC)

The Santa Barbara County Board of Supervisors established the SSRRC in 1986 to identify and require correction of possible design and operational hazards for oil and gas projects prior to construction and startup of the project and for project modifications. The goal of SSRRC review is to substantially reduce the risks of project-related hazards

that may result in loss of life and injury and damage to property and the natural environment. This process occurs through review of the technical design of facilities, and review and approval of Project Safety, Inspection, Maintenance and Quality Assurance Programs (SIMQAPs) and their implementation (e.g., conduct safety audits, review facility changes, etc.).

3.3.7.3 Impact Analysis

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

The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new in-kind cable. Limited quantities of hazardous materials (such as fuel for construction equipment) may be used for Project construction activities. A safety plan would be developed for the Project by the contractor and these materials would be used and stored in compliance with existing requirements. The proposed power cable Project would not emit hazardous emissions nor would the power cable require the handling of hazardous or acutely hazardous materials, substances, or waste as part of long-term Project operations. Therefore, the proposed cable replacement Project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials and Project impacts due to construction would be less than significant.

b) Would the Project 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?

The Project would not introduce a new use into the area as part of long-term operation. The Project is the replacement of the existing power cable with a new power cable. As noted in the Project description, the contractor for the Project would prepare a safety plan for Project construction activities. In addition, MM BIO-5 requiring a spill response and HDD fluid release monitoring and contingency plan and BIO-6 requiring a habitat restoration plan would be required for HDD construction activities. With implementation of MMs BIO-5 and BIO-6, Project impacts due to onshore and offshore construction would be less than significant.

c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The closest school to the onshore portion of the Project site is Ellwood Elementary School, located approximately 0.9 mile to the north The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new power cable. The Project is part of repair and maintenance needed to support

existing operations. The proposed power cable Project would not emit hazardous emissions nor would the power cable require the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and, therefore, no Project impacts due to construction would result.

d) Would the Project 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?

The Department of Toxic Substances Control EnviroStor database does not identify the Project area as being located on a federal Superfund, State response, school clean up, or corrective action cleanup site. A portion of the EOF (T10000003759) is identified as an "Other Cleanup Sites" by the SWRCB's GeoTracker database. This portion of the Project area, T10000003759, is identified with a cleanup status category of "open site assessment," as of May 19, 2012, and the Cleanup Action Report indicates that no cleanup actions exist. The Project status definition for "Open-Site Assessment" includes: "*Site Characterization, investigation, risk evaluation, and/or site conceptual model development are occurring at the site…"* (SWRCB 2012) The Cleanup Action Report indicates that no cleanup actions exist. Therefore, impacts due to Project construction would be less than significant.

e) For a Project located within 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, would the Project result in a safety hazard for people residing or working in the Project area?

The closest airport to the Project site is the Santa Barbara Airport, located approximately 3 miles to the east. The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new power cable. The onshore portion of the new power cable would be located underground within existing easements and offshore it would be located underwater. Therefore, the proposed cable replacement Project would not result in a safety hazard for people residing or working in the Project area and no Project impacts due to construction would result.

f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

The Project site is not located within the vicinity of a private airstrip. The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new power cable. The onshore portion of the new power cable would be located underground within existing easements and offshore it would be located underwater. Therefore, the proposed cable replacement Project would not result in a

safety hazard for people residing or working in the Project area and no Project impact due to construction would result.

g) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project has an overall facility response plan. The existing response plans would be revised as necessary for the Project. A safety plan would also be developed for the Project by the contractor for Project construction activities. In addition, a Critical Operations and Curtailment Plan would be prepared, as required by MM HAZ-1. Project Plans would be subject to review and approval for adequate emergency access prior issuance of development plan permits. Once constructed, the proposed replacement cable would be located underground or under water and would not physically interfere with an adopted emergency response plan. Therefore, with the implementation of mitigation, impacts due to Project construction would be less than significant.

h) Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The EOF and proposed HDD drilling area are not located within a wildland fire hazard area. However, the access road leading up to the Ellwood Pier is included within the wildland fire hazard area in the City of Goleta General Plan. The portion of the existing access road located within the City of Goleta wildland fire hazard area is paved. The proposed project does not include any use of the road beyond transit; the paved road would be used to travel to the Ellwood Pier Project site during short-term temporary construction activities. Areas susceptible to high-fire hazards generally include lands with steep slopes and ample vegetation, or fuel load. The existing paved road does not exhibit any of these features that could increase fire risk and no modifications to the road are proposed as part of the project. Therefore, no Project impact would result. The onshore portion of the cable would be located underground and therefore would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Therefore, impacts due to Project construction would be less than significant.

The City of Goleta can require that the onshore portion of the Project be reviewed and approved by the SSRRC to further reduce any potential public risk of hazards from Project design and construction (personal communication with Dean Dusette, Santa Barbara County Energy Division, November 13, 2012).

3.3.7.4 Mitigation and Residual/Cumulative Impacts

Mitigation. MMs BIO-5 and BIO-6 would also be applicable to this section. In addition, the following mitigation would be required.

HAZ-1. Preparation of a Critical Operations and Curtailment Plan (COCP). Venoco shall submit a Final COCP to CSLC staff for review and approval at least 2 weeks prior to commencement of Project activities. The COCP shall define the limiting conditions of sea state, wind, or any other weather conditions that exceed the safe operation of offshore vessels, equipment, or divers in the water; that hinder potential spill cleanup; or in any way pose a threat to personnel or the safety of the environment. The COCP shall provide for a minimum ongoing 5-day advance favorable weather forecast during offshore operations. The plan shall also identify the onsite person with authority to determine critical conditions and suspend work operations when needed.

Residual Impacts. With implementation of MMs BIO-5 and BIO-6, Project impacts would be less than significant and no residual impacts would occur.

Cumulative Impacts. Project contributions to cumulative impacts on hazards or hazardous materials would be considered less than significant with the implementation of the recommended mitigation.

3.3.8 Hydrology and Water Quality

VIII. HYDROLOGY AND WATER QUALITY: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

3.3.8.1 Environmental Setting

Marine Environment

The Project site is located along the landward edge of Santa Barbara Channel, near the western edge of the City of Goleta, along an area known as the Ellwood Coast. The major currents in the vicinity of the Project include the California Current, which dominates, and the Southern California countercurrent that flows northward along the

continental shelf. The California Current is an eastern-boundary current that flows south, carrying cool, nutrient-rich water from the sub-arctic region of the Pacific (DiGiacamo et al. 1995). Waters in the California Current are characterized by seasonably stable, low salinity (32 to 34 parts per thousand [ppt]), low temperature (55 to 68 °F), and high nutrient concentrations. The Southern California countercurrent carries warm, saline, and less oxygenated waters from Baja California into the Channel. Typically, winds blow from the northwest, parallel to the central California coast. The Southern California countercurrent is strongest when these winds relax between the months of December and February. When the winds gain strength between March and June, the Southern California countercurrent relaxes and surface water near the coast is transported offshore and down the coast and replaced by cooler, nutrient-rich seawater from underneath. This process is referred to as upwelling (County 2011).

The mean flows of surface waters within the Channel are counter-clockwise and monthly average flows reach 3 knots during most of the year (Winnant et al. 1999). However, currents and surface transport are highly complex within the Channel and are affected by periodic winds, coastal promontories, and subsurface bathymetric features. Subsurface currents are important in determining the fate of oil and other contaminants that may be released. Average monthly current profiles in the Channel are often strongly sheared and rotate in a counter-clockwise direction as depth increases. Average flow speed of subsurface flows increase with depth throughout the majority of the year. The exception is during the late fall when the surface flows intensify and become comparable to the speed of subsurface flows (CSLC 2006, NOAA 2005).

Local Wave Action

Waves generated on the surface of the ocean develop from a mixture of remotely generated ocean swells and local winds. Due to the presence of the Channel Islands off the coast, the Santa Barbara Channel is comparatively sheltered from swells generated outside the Channel, which impedes the local generation of waves of significant height. Consequently, wave heights within the Channel are typically low, generally ranging from 3 to 6 feet throughout most of the year. Waves are typically larger during winter storms that encroach on the California coastline from the west, although the coastline is sheltered from North Pacific swells by Point Conception (CSLC 2006). However, large swells from winter and fall storms occasionally penetrate into the Channel and create very high surf conditions along the coast. For example, El Niño conditions in 1983 generated very large surf, which combined with exceptionally high tides to cause extensive damage along normally calm sections of the coastline within the Channel. More recently, storms in the winter of 2005 to 2006 generated very high surf along the Goleta coast, with wave heights exceeding 15 feet at exposed point breaks (NOAA 2005).

Waves land on the mainland shore of the Channel at a slightly oblique angle, generally from the west. This drives a long-shore current toward the east within the surf zone (Hickey 1993). As a result, the net transport of particulates suspended in the water column near shore is toward the east, in contrast to the typically westward transport that is observed farther offshore (County 2011).

Marine Water Quality

Marine water quality is affected by a number of factors including oceanographic processes, contaminant discharge, erosion, and freshwater inflow. Petroleum development activities, commercial and recreational vessels, natural hydrocarbon seeps, river runoff, municipal wastewater outfalls, and minor industrial outfalls contribute to the increased presence of nutrients, trace metals, synthetic organic contaminants, and pathogens in ocean waters and sediments (County 2011).

The presence and transport of nutrients, trace metals, and other contaminants in marine water affects and is affected by five seawater properties: temperature, salinity, turbidity, alkalinity, and dissolved oxygen. The vertical density structure or stratification (determined by temperature and salinity at increasing depths within the water column) determines the amount of vertical mixing that occurs within the water column. Highly stratified waters inhibit vertical mixing of water, nutrients, and contaminants. Therefore, a contaminant introduced by a point source (e.g., a leak in a pipeline at a specific depth) would remain within the water column and would not rapidly rise to the ocean surface or sink into the bottom sediments. In the winter and spring, the Channel is characterized by cold, high nutrient surface water, and a shallow thermocline (i.e., highly stratified). In the summer and fall the Channel is characterized by warm, low nutrient surface water, and a deep thermocline (i.e., highly mixed) (Santa Barbara Long-Term Ecological Research Program 2003).

Within the mixed surface waters, dissolved oxygen levels are uniformly high and near saturation. This layer is known as the euphotic zone due to the penetration of light in this zone. Correspondingly, nitrate and phosphate are depleted in the surface mixed layer due to uptake by primary production (phytoplankton blooms) in the euphotic zone. Wind-driven upwelling, which periodically replenishes surface waters with nutrient-rich water from below, is an important feature of the Channel and is largely responsible for its productive fishery. The presence of nutrient-rich water (high levels of nitrates and phosphates) near the sea surface significantly enhances primary productivity. Below the surface, oxygen concentrations steadily decrease with depth due to losses from respiration and decomposition (CSLC 2006). Turbidity in the euphotic zone is determined by the concentration of suspended PM near the sea surface. Turbidity is increased in coastal waters as a result of storm runoff, sediment re-suspension, discharge of wastewater, and phytoplankton blooms (County 2011).

Natural seeps found along the coasts of Santa Barbara and Ventura counties discharge significant quantities of oil and tar to the nearshore waters of the Channel. Studies conducted in the late 1970s found that between 16,000 and 240,000 barrels of oil enter the Channel annually from natural seeps. Further, the Western States Petroleum Association estimates 150 to 170 barrels of oil seep from the seafloor near Coal Oil Point (approximately 5 miles southeast of the Project area) each day (Helix 2006). Consequently, the intertidal zone at Goleta, particularly along the Ellwood Coast in the Project vicinity, frequently experiences naturally occurring oil and tar from the Coal Oil Point Seep (County 2011).

Terrestrial Environment

Surface Water

Primary components of the Project are situated in the surf zone, the nearshore area and a small portion of low-lying coastal area at the EOF. The nearest drainages to the Project area are Bell Canyon and Tecolote Creeks to the northwest and Devereux Creek to the southeast. Bell Canyon and Tecolote Creeks drain primarily rural and agricultural areas northwest of the urban areas of the City of Goleta and discharge into lagoons at the west of the Project site. Devereux Creek drains a primarily urban watershed, and includes the western portions of the City of Goleta, and discharges into the Devereux Slough located approximately 1.8 miles southeast of the Project area. Runoff from the inland portions of the Project site could potentially drain into Bell Canyon Creek, which parallels the EOF Project site and the HDD cable alignment.

Groundwater

The Project area is adjacent to the West Subbasin of the Goleta Groundwater Basin. This underground reservoir is considered hydrologically separate from the North and Central Subbasins of the Goleta Groundwater Basin. Available storage in the West Basin is estimated to be 7,000 acre-feet. Based on the most recent analysis, the West Subbasin is in a state of surplus. However, water in this subbasin is considered poor quality and low yield, but is classified as beneficial use drinking water by the RWQCB under the Basin Plan (County 2005).

3.3.8.2 Regulatory Setting

This section identifies and discusses the regulations and policies pertaining to hydrology and water quality that are administered by federal and State agencies.

Federal

Clean Water Act

The CWA is a comprehensive piece of legislation that generally includes reference to the federal Water Pollution Control Act of 1972, its substantial supplementation by the CWA of 1977, and subsequent amendments. Overall, the CWA seeks to protect the nation's water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. These water quality standards are enforced by the EPA. The CWA also provides for development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters. State operation of the program is encouraged. The CWA is the primary federal statute governing the discharge of dredged and/or fill material into waters of the U.S. Relevant sections include:

- Section 208 requires that states develop programs to identify and control nonpoint sources of pollution, including runoff.
- Section 230.8 gives authority to the USACE and EPA to specify, in advance, sites that are either suitable or unsuitable for the discharge of dredged or fill material within U.S. waters.
- Section 303 requires states to establish and enforce water quality standards to protect and enhance beneficial uses of water for such purposes as recreation and fisheries.
- Section 304(a)(1) requires the administrator of the EPA to publish criteria for water quality that reflect the latest scientific knowledge regarding the effects of pollutants in any body of water.
- Section 313(a) requires that federal agencies observe state and local water quality regulations.
- Section 401 applies to dredging and other in-water activities and requires certification that the permitted Project complies with state water quality standards for actions within state waters. Under section 401, states must establish water quality standards for waters in the territorial sea. Dredging and other in-water activities may not cause the concentrations of chemicals in the water column to exceed state standards. To receive state certification, the applicant must demonstrate that these standards would not be exceeded.
- Section 401(a)(1) requires any applicant for a federal permit (i.e., section 404) to provide certification from the state in which the discharge originates that such discharge would comply with applicable water quality provisions (i.e., section 303).
- Section 402 requires the EPA Administrator to develop the National Pollutant Discharge Elimination System (NPDES) to issue permits for pollutant discharges

to waters of the U.S. A NPDES permit is required for: (1) any proposed point source wastewater or stormwater discharge to surface waters from municipal areas with a population of 100,000 or more; and (2) construction activities disturbing 1.0 acre (0.4 hectare) or more of land. A stormwater pollution prevention plan (SWPPP) is required for projects disturbing more than 1 acre (0.4 hectare), pursuant to the general permit for construction-related discharges.

- Section 404 establishes programs regulating the discharge of dredged and fill material into navigable waters of the United States. The CWA and MPRSA overlap for discharges to the territorial sea. The CWA supersedes MPRSA if dredged material is disposed of in the ocean for beach restoration or some other beneficial use. MPRSA supersedes CWA if dredged material is transported and disposed of in the territorial sea.
- Section 404(b)(1) guidelines are the substantive criteria used in evaluating discharges of dredged or fill material under section 404.

Oil Pollution Act (33 USC § 2712)

This act requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances.

Rivers and Harbors Act (33 USC § 401)

Section 10 of the Rivers and Harbors Act limits the construction of structures and the discharge of fill into navigable waters of the U.S.

State

Porter-Cologne Water Quality Control Act (Cal. Water Code § 13000 et seq.)

The Porter-Cologne Act is the principal law governing water quality in California. The act, which establishes a comprehensive program to protect water quality and the beneficial uses of State waters, also established the SWRCB and the nine RWQCBs, which are charged with implementing the SWRCB provisions and have primary responsibility for protecting water quality in California. The Porter-Cologne Act also implements many provisions of the federal CWA, such as the NPDES permitting program. CWA section 401 gives the SWRCB the authority to review any proposed federally permitted or federally licensed activity which may impact water quality and to certify, condition, or deny the activity if it does not comply with State water quality standards. If the SWRCB imposes a condition on its certification, those conditions must be included in the federal permit or license.

Basin Plan

The Central Coast Region of the RWQCB has established a Water Quality Control Plan (Basin Plan) for coastal waters. A water quality control plan for the waters of an area is defined as having three components: beneficial uses which are to be protected, water quality objectives which protect those uses, and an implementation plan that accomplishes those objectives (Cal. Water Code § 13050). The RWQCB's Basin Plan standards incorporate the applicable portions of the California Ocean Plan and are more specific to the beneficial uses of marine waters adjacent to the Project area. The water quality objectives and toxic material limitations are designed to protect the beneficial uses of ocean waters, which are as follows:

- Water Contact Recreation (REC-1). Uses of water for recreational activities involving body contact for water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, and fishing
- Non-Contact Water Recreation (REC-2). Uses of water for recreational activities involving proximity to water but not normally involving body contact with water, where ingestion of water is not reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities
- Industrial Service Supply (IND). Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization
- Navigation (NAV). Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels
- Marine Habitat (MAR). Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife such as marine mammals and shorebirds
- Shellfish Harvesting (SHELL). Uses of water that support habitats suitable for the collection of filter-feeding shellfish such as clams, oysters, and mussels, for human consumption, commercial, or sport purposes. This includes water that may have in the past or may in the future contain significant shellfisheries
- Ocean Commercial and Sport Fishing (COMM). Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including uses involving organisms intended for human consumption or bait purposes
- Rare, Threatened, or Endangered Species (RARE). Uses of water that support habitats necessary at least in part for the survival and successful maintenance of

plant or animal species established under State or federal laws as rare, threatened, or endangered; and

- Wildlife Habitat (WILD). Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife, e.g., mammals, birds, reptiles, amphibians, invertebrates, or wildlife water and food sources.

Along with the Ocean Plan provisions, the RWQCB Basin Plan specifies additional objectives applicable to all ocean waters, including: (1) the mean annual dissolved oxygen concentration shall not be less than 7.0 milligrams per liter (mg/L), nor shall the minimum dissolved oxygen concentration be reduced below 5.0 mg/L at any time; and (2) the pH value shall not be depressed below 7.0 or raised above 8.5.

California Ocean Plan

The California Ocean Plan (SWRCB 2001, et seq.) establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the State's ocean and coastal waters. The SWRCB prepares and adopts the Ocean Plan, which incorporates the State water quality standards that apply to all NPDES permits for discharges to ocean waters; the SWRCB and the six coastal RWQCBs implement and interpret the Ocean Plan. The Ocean Plan is not applicable to vessel wastes or the control of dredged material.

California Coastal Act

The Coastal Act requires anyone who proposes any development in the coastal zone to secure a CDP from either the CCC or local jurisdiction with a certified LCP. In general, the CCC is responsible for determining a project's consistency with the Coastal Act and/or the CCMP and for granting CDPs for projects within the California coastal zone not covered by LCPs.

California Clean Coast Act (Senate Bill [SB] 771), 2006

This Act establishes limitations for shipboard incinerators, the discharge of hazardous material, including oily bilge water, graywater, and sewage into State waters or a marine sanctuary. In addition, it provides specific direction for the reporting of discharges to the SWRCB and for the submission of information on visiting vessels to the CSLC.

Local

Project Clean Water

The Santa Barbara County Water Agency, Project Clean Water was established to reduce or eliminate discharges of pollution into creeks, rivers, ponds, or ocean waters,

through implementation of NPDES permit requirements and applicable regulations. This agency completes storm water sampling at select locations throughout the county. The County Water Agency is currently in the process of adopting provisions of the Storm Water Phase II Final Rule, which requires the operator of a regulated small municipal separate storm sewer system to obtain NPDES permit coverage because discharges of storm water from such systems are considered point sources.

City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP)

The City of Goleta GP/CLUP was adopted by the City in November 2006. The GP/CLUP adopted as part of its plan the policies of the California Coastal Act. In addition, the GP/CLUP contains a number of other policies that are relevant to the Project. These are described below:

- Policy CE 2 – Preserve, restore, and enhance the physical and biological integrity of Goleta's creeks and natural drainages and their associated riparian and creek-side habitats.
- Conservation Guiding Principle 5 – Protect water quality and the biological diversity of Goleta Slough and Devereux Slough.
- Conservation Guiding Principle 9 – Manage water resources at the watershed level cooperatively with other agencies to maintain high groundwater and surface water quality and to protect marine aquatic habitats.
- Policy CE 6 – Preserve and protect the biological integrity of marine habitats and resources within and adjacent to Goleta.
- Policy CE 10 – Manage groundwater and surface water resources to promote water quality and quantity adequate to support natural ecosystem processes and functions.

3.3.8.3 Impact Analysis

a) Would the Project violate any water quality standards or waste discharge requirements?

Onshore Project

The onshore construction activity would include the construction of the entry pit for the HDD. The entry pit is located within the EOF Project site in the City of Goleta. Lay down and construction areas would be established on the existing access road west of the EOF. The parking lot at Ellwood Pier in the County's jurisdiction would be used for fabrication of the HDPE conduit string. The potential for discharge of any materials from these areas (e.g., sediment or drilling muds) would not result in water quality degradation or an increase in contaminants. With the implementation of MM WQ-1, the

Project is expected to have a less-than-significant impact on the environment, as the mitigation would help prevent adverse impacts to nearby waterways and riparian areas. The alignment of the underground HDD includes a portion of the City of Goleta riparian/marsh ESHA as well as the existing golf course. No potential impacts to these areas are anticipated from the HDD boring. In addition, any potential for impacts to these areas would be reduced through implementation of MMs BIO-5 and BIO-6; therefore, impacts due to Project construction would be less than significant with mitigation.

Offshore Project

The offshore construction activity includes excavation of the HDD exit pit and transition trench and laying of the cable. Increased turbidity from sediment re-suspension is expected to occur during excavation of the exit pit and transition trench and to a lesser degree during the laying of the cable. The affected area is relatively small compared to the surrounding available marine habitat and because of the sandy sediments, material is anticipated to redistributed quickly back onto the seafloor. Based on these factors, turbidity-related impacts are expected to be short-term, local, and less than significant.

The potential for discharge of any materials, which is likely to consist of sand, would not result in water quality degradation or an increase in contaminants that exceeds the California Ocean Plan. Since these materials are non-toxic, no significant adverse effects on marine organisms or water quality would occur.

The HDD would use drilling mud that could accidently be released into the marine environment during offshore construction activity through existing fractures in the seafloor (surface releases). The presence of the exit pit would reduce the potential for significant impacts to water quality and the resulting dispersion at the site would further reduce the potential for water quality impacts. The Project however, incorporates a Spill Response and HDD Fluid Release Monitoring and Contingency Plan (BIO-5) that specifies methods for detecting and curtailing the accidental release of drilling mud, and a Habitat Restoration Plan (BIO-6). These plans would be implemented during HDD operations.

Based on the above descriptions, the Project activities are not expected to violate any water quality standards or discharge requirements, and with the implementation of mitigation, impacts due to Project construction would be less than significant.

b) Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The Project would replace an existing power cable through existing easements, and would not require water service as part of construction or long-term operation nor would it interfere with groundwater supply or recharge. No Project impact would result.

c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The Project would replace an existing power cable through existing easements and would not substantially alter drainage patterns of the site or area that could result in substantial erosion or siltation on- or off-site. No impacts to existing drainage patterns would occur.

d) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The Project would replace an existing power cable through existing easements and would not substantially alter drainage patterns of the site or area that could result in substantial erosion or siltation on- or off-site. No impacts to existing drainage patterns would occur.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The Project would replace an existing power cable through existing easements and would not result in an increase in erosion or flooding, require modifications to any existing drainage facilities, or adversely affect the quality of runoff water; therefore, no impacts due to construction would occur.

f) Would the Project otherwise substantially degrade water quality?

The Project would not introduce a new use into the area. The Project would replace an existing power cable through existing easements. As noted in 3.3.8.3 a) above, the Project would not violate water quality standards or waste discharge requirements; therefore, no impacts to water quality due to construction or operation would occur.

g) Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The Project does not include any housing. No impacts would result due to construction or operation of the Project.

h) Would the Project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No new structures are proposed as part of the Project. The Project would replace an existing power cable through existing easements. The replacement power cable would be located underground or underwater. Therefore, the Project would not place structures in a 100-year flood hazard area and no impacts would result due to construction of the Project.

i) Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The Project would replace an existing power cable through existing easements. The Project would not result in the development of any housing, or result in the development of any structures that would redirect flood flows. Therefore, Project construction or operation would have no flooding-related impacts.

j) Would the Project be subject to inundation by seiche, tsunami, or mudflow?

Ground displacement beneath the ocean has the potential to cause the formation of a tsunami wave. The Pacific Tsunami Warning Center is operated by NOAA and would likely be able to provide advance notice of an oncoming wave. If a tsunami were to occur during construction, such a warning would allow for equipment and crew to evacuate the area which would reduce potential safety impacts to the crew to a less than significant level. As part of long term operations, a tsunami wave could have the potential to damage or displace the new cable. This impact, however, would not result in substantial property damage or safety impacts. Therefore, impacts due to Project construction or operation are less than significant.

3.3.8.4 Mitigation and Residual/Cumulative Impacts

Mitigation.

WQ-1 **Water Quality/Storm Water Pollution Prevention Plan.** Venoco shall prepare a plan to prevent adverse impacts to nearby waterways and riparian areas associated with construction. The plan shall include, but not necessarily be limited to, a description of Best Management Practices (BMPs), including erosion and sedimentation prevention measures, spill prevention measures, spill containment measures and monitoring requirements. Measures shall include, but not be limited to, such BMPs as hay bales, silt fence, waddles and other measures determined appropriate for erosion control within areas of disturbance. General permit requirements for construction site operators to control waste such as discarded building materials, truck washout, chemicals, litters, etc., and

sanitary waste at a construction site are to be observed. The Plan shall be submitted to the City of Goleta for review and comment. In the presence of respective City and County representatives, the Applicant shall review the Water Quality/Storm Water Pollution Prevention Plan with appropriate contractor personnel.

Implementation of MMs WQ-1, BIO-5, and BIO-6, compliance with existing regulations, standard offshore construction industry measures for the containment and recovery of spills, and implementation of industry standard erosion control measures for construction would reduce the potential for and water quality-related impacts of an accidental release of petroleum or other materials to a less than significant level. The short-term resuspension of seafloor sediments during installation is also considered to be less than significant. The Project would not result in any other water quality- or hydrology-related impacts.

Residual Impacts. With the implementation of the recommended mitigation measures, the proposed Project would have less than significant hydrology and water quality impacts. No residual impacts would occur.

Cumulative Impacts. Project contributions to cumulative impacts on hydrology and water quality would be considered less than significant with the implementation of the recommended mitigation.

3.3.9 Land Use and Planning

IX. LAND USE AND PLANNING: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.3.9.1 Environmental Setting

Onshore

The EOF site is located on 4.5 acres along the western edge of the City of Goleta. The EOF site currently has a land-use designation of Open Space-Active Recreation, and a zoning designation of Recreation. It became a legal non-conforming use in 1990 when the County changed both the land-use and zoning designations of the facility following the 1987 action that directed new or expanded oil and gas processing on the South Coast to designated sites at Gaviota and Las Flores Canyon. The change in land use designations converted the EOF to a legal nonconforming use that allows the facility to operate under the vested rights of its current permit, but not to expand, extend, enlarge, or exceed any currently vested right (County 2011).

The Ellwood Pier is located within the County of Santa Barbara and would be used for short-term construction activities related to the proposed Project. The continued use of all existing piers and staging areas is a permitted use per the Santa Barbara County Article II Coastal Zoning Ordinance, Section 35-155.

Offshore

Platform Holly, located on State lease PRC 3242.1, is an oil drilling and production platform that consists of 30 wells slots. The primary operations at Platform Holly include production; well maintenance and operation; oil, water, and gas separation; emulsion shipping; vapor recovery; gas compression and shipping; gas dehydration; and gas lift compression. Oil is transported from Platform Holly through the subsea pipeline to the EOF for processing. Electrical power is provided to the platform by means of a high voltage submarine cable. The cable operates at 16.5 kV (nominal) and has operated continuously since its installation in 1966.

3.3.9.2 Regulatory Setting

Federal

Coastal Zone Management Act

The federal Coastal Zone Management Act of 1972 (CZMA) gives states coastal management agencies regulatory control (federal consistency review authority) over federal activities and federally licensed, permitted or assisted activities, wherever they may occur (i.e., within, landward or seaward of the coastal zone boundary) if the activity affects coastal resources. The CCC is one of California's two designated coastal management agencies for the purpose of administering the federal CZMA (the other agency is the Bay Conservation and Development Commission). The CCC's coastal development permit review, including taking an appeal of a local government coastal development permit decision, also serves as the CCC's review under the CZMA. The CCC's standard of review under CZMA is Chapter 3, coastal resources planning and management policies of the Coastal Act.

State

California State Lands Commission

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, § 6301 and § 6306). 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. As general background, 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 mean high tide line, except for areas of fill or artificial accretion.

California Coastal Act

The Coastal Act requires anyone who proposes any development in the coastal zone to secure a CDP from either the CCC or local jurisdiction with a certified LCP. In general, the CCC is responsible for determining a project's consistency with the Coastal Act and/or the CCMP and for granting CDPs for projects within the California coastal zone not covered by LCPs. The City of Goleta does not have a certified LCP.

Marine Life Protection Act (Fish & G. Code, § 2850 et seq.)

The MLPA directs the State to redesign California's system of MPAs to function as a network in order to: increase coherence and effectiveness in protecting the State's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance.

Local

City of Goleta General Plan, Land Use Element

This element defines Goleta's planned long-range development pattern and physical character, as well as the extent and distribution of future growth in the City. The Land Use Element is one of seven elements mandated by State planning law (Gov. Code, § 65302) that consists of a Statement of policies and a land use map showing the spatial distribution, location, and extent of lands designated for housing, business, industry, open space, agriculture, and other categories (City of Goleta 2006).

3.3.9.3 Impact Analysis

a) Would the Project physically divide an established community?

The Project would replace the existing 46-year-old power cable, between the EOF and Platform Holly, with a new cable. The proposed new cable would be underground or underwater in certain places. The replacement cable would follow the general route of the existing cable and would be sized as an in-kind replacement, with similar electrical power transmission capability. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. No modifications to the onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements. Therefore, the Project would not physically divide an established community and no Project impacts due to Project construction would result.

b) Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Project does not conflict with applicable land use policies or regulations per the City of Goleta General Plan (2006), as shown below; therefore, Project impacts would be less than significant. However, a number of sensitive habitats are present and could have residual impacts as a result of an unanticipated frac-out or spill release during construction into the adjacent Bell Canyon Creek. The potential for impacts due to an

unanticipated frac-out are addressed under the Biological Resources section and would be reduced with the incorporation of BIO-5 (Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan) and BIO-6 (Habitat Restoration Plan).

City of Goleta General Plan 2006

Land Use Element	Analysis of Consistency with Policy
LU 1.1 Land Use Plan Map. [GP/CP] The Land Use Plan map in Figure 2-1 is hereby adopted. The Land Use Plan map establishes the future distribution, extent, and geographic locations of the various land uses within Goleta. The standards applicable to each of the various use categories and sites are set forth in Policies LU 2 through LU 9.	Consistent. The existing EOF is a legal non-conforming use. The Project is part of repair and maintenance and is not an expansion of an existing use.
LU 6.1 General. [GP/CP] Table 2-4 of the Goleta General Plan shows the Park and Open Space use categories, including permitted uses and recommended standards for building intensity for each category. The two use categories are intended to identify appropriate locations for parks and other active recreational uses and for open space and passive recreation. The intent of each use category is further described in the following sections. (Amended by Reso. 08-30, 6/17/08)	Consistent. The EOF is a legal non-conforming use. The Project is part of repair and maintenance and is not an expansion of an existing use.
LU 6.3 Open Space/Active Recreation. This designation is intended to identify existing or planned areas for public parks and active recreational activities and facilities, such as playgrounds, picnic area, tennis courts, ballparks, and sports fields. This use category is also intended to apply to significant private outdoor recreational facilities, such as golf courses and privately owned parks. Individual recreational areas may include a mix of passive and active recreational features or improvements. Appropriate caretaker facilities and residences may also be allowed if consistent with the character of the planned uses. This designation may also include storm drainage facilities.	Consistent. The EOF is a legal non-conforming use. The Project is part of repair and maintenance and is not an expansion of an existing use.
LU 9.2 Site 2-Coastal Recreation. This parcel, occupied as of 2005 by the Venoco EOF, is designated in the Open Space/Active Recreation use category. The requirements applicable to this site are as follows: a) The recreation designation shall continue the nonconforming status of the existing use. The use was nonconforming at the time of incorporation of the City of Goleta. Its nonconforming status dates to the early 1990s when the property's zoning was changed by the County of Santa Barbara to the Recreation District as part of the plan to consolidate onshore oil and gas processing at the Las Flores Canyon site in the unincorporated area west of Goleta. b) The intent is that in	Consistent. The EOF is a legal non-conforming use. The Project is part of repair and maintenance and is not an expansion of an existing use. Project construction activities and operation would comply with all applicable federal, State and local environmental regulations.

Land Use Element	Analysis of Consistency with Policy
the long-term use of the property for oil and gas processing shall be terminated. The processing of hazardous materials and the risks associated with air emissions make this location, which is adjacent to the Bacara Resort and Sandpiper Golf Course and near Ellwood School and the residential neighborhoods of Santa Barbara Shores and Winchester Commons, unsuitable for oil and gas processing in the long term. c) Until such time as the oil and gas processing use is terminated, any modifications or alternations of the existing facilities shall be in accordance with the provisions of LU 10.1 and shall be designed to improve air quality, reduce environmental impacts and hazards, and improve safety for nearby lodging, recreational, and residential uses. d) Upon termination of the oil and gas processing use, the priority use of the site shall be coastal-dependent and coastal related recreational uses that are conducted primarily outdoors or limited to small-scale structures. Adequate on-site paring shall be provided to serve all recreational uses.	
LU 9.4 Site 3-Coastal Recreation Parcels. These parcels, which were occupied by the Sandpiper Golf Course as of 2005, are designated in the Open Space/Active Recreation use category. The requirements applicable to this site are as follows: a) The Sandpiper site shall continue to be used for golf course and other related outdoor recreation purposes. b) The golf course shall be maintained as a public course and shall not be converted to a members-only course. c) Any future Project that requires a discretionary approval by the City shall be subject to a condition that requires preference to be given to local residents in terms of fees and tee times during appropriate time periods each week. d) The size and design of any new buildings and structures, or expansions and alterations of existing buildings, shall be controlled so as to preserve the character of the property as open land and minimize impacts on views of the ocean and Channel Islands from Hollister Avenue and views of the Santa Ynez Mountains from within the property and from beach and water areas. e) Any new development or alternation of the existing facilities and golf course shall be required to maintain or expand the extent of existing coastal access facilities, including parking and vertical access to the beach. Lateral bluff-top access may also be considered and should connect with the bluff-top trail on Santa Barbara Shores Park, with a transition down the bluff to the SL 421 access road. The intent is to secure access easements, or offers to dedicate, that will provide for lateral access during all seasons and tide	Consistent, except in the event of a frac-out. The Project would not interfere with public use of the golf course. Public access to the EOF is restricted. The Project would replace a power cable as part of repair and maintenance. Onshore and through the beach and surf zone, the cable would be placed 30 to 50 feet below ground (including under a portion of the golf course) through existing easements.

Land Use Element	Analysis of Consistency with Policy
conditions. Conceptual locations for future coastal access ways are shown on Figure 3-1 in the Open Space Element). f) Any commercial uses, including restaurants, shall be open to the general public g) Views from Hollister Avenue to the ocean and islands shall be preserved. *Perimeter walls and landscaping that would obstruct or impair coastal views shall not be permitted.* h) Any rerouting or alteration of the golf course shall be designed in a manner that protects and enhances environmental resources, including adjacent monarch butterfly habitat areas, Devereux Creek, and other drainages, and that protects safety on the beach. (See related Policies OS 1 and OS 2.)	
LU 10.1 Oil and Gas Processing Facilities (Venoco Onshore Oil and Gas Processing Facility. As of 2005, the city had one existing oil and gas processing facility situated within its boundaries, the Venoco-owned EOF, which is a nonconforming use. The EOF and other oil and gas processing facilities generate emissions of air pollutants, pose safety hazards to nearby areas, create visual impacts, and create risks to marine and land resources associated with spills, leaks, or pipeline ruptures. The following standards shall apply to oil and gas processing facilities: a) The City supports County policies regarding consolidation of oil and gas processing in the South Coast Consolidation Planning Area at Las Flores Canyon in the unincorporated area west of Goleta. No new oil and gas processing facilities shall be permitted within Goleta. b) The Venoco EOF site is an inappropriate location for processing of oil and gas because of the public safety and environmental hazards associated with this type of use and its close proximity to residential neighborhoods, Ellwood School, Bacara Resort, and environmentally sensitive habitat areas. The site is designated in the Open Space/Active Recreation use category on the Land Use Map and shall continue to be a nonconforming use. C) the EOF shall continue to be subject to the rights and limitations applicable to nonconforming uses under California law. No modifications or alterations of the facility or other actions shall be authorized that would result in the expansion of the permitted throughput capacity of the EOF. The existing maximum permitted capacity shall not be exceeded, except for very minor increases that may be incidental to actions designed to improve safety or reduce environmental impacts. d) Until the EOF use is terminated, the priority shall be to insure that the facility strictly meets or exceeds all applicable environmental and safety standards	Consistent. The EOF is a legal non-conforming use. The Project is part of repair and maintenance and is not an expansion of an existing use. Project construction activities and operation would comply with all applicable federal, State and local environmental regulations.

California Coastal Act

Coastal Act Policy	Analysis of Consistency with Policy
§ 30211 - Development Not to Interfere with Access. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	Consistent. The Project would not interfere with public access to coastal resources as part of long term Project operation. Public access to the EOF and Ellwood Pier is restricted. The Project would replace a power cable as part of repair and maintenance. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. No modifications to the onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements.
§ 30212.5 - Public Facilities. Whenever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social or otherwise, of overcrowding or overuse by the public of any single area.	Consistent. The Project would not result in short- or long-term impacts to existing public facilities, including parking facilities, and would not result in population growth that would have the potential to increase the demand for coastal area parking or other public facilities.
§ 30213 - Low Cost Visitor and Recreational Facilities. Lower cost visitor and recreational facilities shall be protected, encouraged, and where feasible, provided. Developments providing public recreational opportunities are preferred.	Consistent. The Project would not result in long-term impacts to existing visitor or recreation facilities, and would not result in population growth that would have the potential to result in an increased demand for new visitor-serving facilities.
§ 30220 - Protection of Certain Water Oriented Activities. Coastal areas suited for water oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.	Consistent. The cable replacement Project would not interfere with water oriented recreational activities since the replacement cable would be located underground or underwater.
§ 30221 – Oceanfront Land: Protection for Recreation Use and Development. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.	Consistent. The Project is part of repair and maintenance and is not an expansion of an existing use. Public access to the EOF and Ellwood Pier is restricted and the replacement cable would be laid underground using HDD. All onshore routing would be through existing easements.

Coastal Act Policy	Analysis of Consistency with Policy
§ 30223 – Upland Areas. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.	Consistent. The Project is part of repair and maintenance and is not an expansion of an existing use. Public access to the EOF and Ellwood Pier is restricted and the replacement cable would be laid underground using HDD. All onshore routing would be through existing easements.
§ 30230 - Marine Resources and Special Protection. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters, and will maintain healthy populations of all species of marine organisms, adequate for long term commercial, recreational, scientific and educational purposes.	Consistent. The temporary physical disturbance from the excavation of the HDD exit pit and transition trench, laying of the cable, and the presence of work boats on the surface would likely cause both listed and non-listed species of fish, foraging seabirds, and marine mammals to avoid the immediate work area and areas of increased turbidity during excavation of the exit pit and trench, and laying of the cable. These effects would be temporary, with construction disturbance at the excavation site lasting approximately three weeks, and laying of the cable lasting approximately two weeks. The affected area would be limited to the immediate excavation area and would not substantially limit the available habitat for fish, seabirds and marine mammals in the Project vicinity. (Please reference Section 3.3.4.3 for biological resources analysis and mitigation measures).
§ 30231 - Coastal Waters, Marine Organisms and Human Health. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes, appropriate to maintain optimum populations of marine organisms, and for the protection of human health, shall be maintained. Where feasible, the aforesaid biological productivity shall be restored through, among other means, minimizing the adverse effects of wastewater discharges and entrainment; controlling runoff; preventing depletion of groundwater supplies and substantial interference with surface water flow; encouraging wastewater reclamation; maintaining natural vegetation buffer areas that protect riparian habitats; and minimizing alteration of natural streams.	Consistent. Construction-related erosion and discharges such as sediment and petroleum products from construction equipment would be minimized and/or avoided. The Project would not deplete groundwater supplies or substantially interfere with surface water flow. Both Project sites do not contain any native habitat and no riparian habitat or other sensitive natural communities occur on either Project site. Ground disturbance would be limited to the immediate lay down area; therefore, riparian vegetation and non-riparian vegetation adjacent to the Project sites would not be removed or altered.

Coastal Act Policy	Analysis of Consistency with Policy
§ 30232 - Oil and Hazardous Substance Spills. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.	Consistent. The Project is part of repair and maintenance and is not an expansion of an existing use. Venoco has an emergency response system as part of existing operations that would continue to be in place with the proposed power cable replacement Project.
§ 30233 - Diking, Filling or Dredging of Open Coastal Waters. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities; (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps; (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities; (4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines; (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas; (6) Restoration purposes; and (7) Nature study, aquaculture, or similar resource-dependent activities.	Consistent. The Project would replace a power cable as part of repair and maintenance. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone.
§ 30234 - Commercial Fishing and Recreational Boating Activities. Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.	Consistent. The Project would generate a small amount of additional vessel trips during short-term, temporary construction activities in and around Platform Holly. Vessel trips for the Project would be for construction actives associated with installation of the replacement cable and would not result in physical changes to harbor facilities. Once the replacement cable is in place, no additional vessel trips are anticipated for the Project.

Coastal Act Policy	Analysis of Consistency with Policy
§ 30234.5 - Economic and Recreational Importance of Fishing. The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.	Consistent. The Project would generate a small amount of additional vessel trips during short-term, temporary construction activities in and around Platform Holly. Once the replacement cable is in place, no additional vessel trips are anticipated for the Project.
§ 30240 - Environmentally Sensitive Habitat Areas (ESHAs). (a) The ESHAs shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas, and parks and recreation areas, shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	Consistent. The EOF and Ellwood Pier Project sites do not contain any native habitat and are not designated by the City of Goleta as ESHAs; however, several ESHAs are located adjacent to and in close proximity to the Project sites. Ground disturbance would be limited to the immediate lay down area and would not negatively affect any adjacent ESHAs in the City of Goleta. However, in the event of residual impacts should an accidental frac-out occur, MMs BIO-5 and BIO-6 would further reduce any impact.
§ 30244 - Archaeological or Paleontological Resources. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	Consistent. No known archeological or paleontological resources are located in the Project area. Mitigation measures were added to the Project to protect archeological resources should they be discovered as part of Project construction activities. (Refer to cultural section 3.3.5.3).
§ 30250 – Location; Existing Developed Area. (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it. Where such existing developed areas are not able to accommodate it, development shall be located in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.	Consistent. The Project would replace a power cable as part of repair and maintenance. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. No modifications to the onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements.

Coastal Act Policy	Analysis of Consistency with Policy
§ 30251 - Scenic and Visual Qualities. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to, and along, the ocean and scenic coastal areas to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	Consistent. The proposed power cable would be located underground or underwater thereby protecting the visual quality of the coastal environment.
§ 30253 –Minimization of Adverse Impacts. New development shall: 1) Minimize risks to life and property in areas of high geologic, flood, or fire hazard. 2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site and surrounding area in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. 3) Be consistent with the requirements imposed by the air pollution control district or State Air Resources Control Board as to each particular development. 4) Minimize energy consumption and vehicles miles traveled. 5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.	Consistent. The Project is part of repair and maintenance and is not an expansion of an existing use. No modifications to the onshore or offshore transformers or switchgear are proposed.
§ 30260 - Location or Expansion. Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.	Consistent. The Project is part of repair and maintenance and is not an expansion of an existing use. All routing would be through existing easements.

c) Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plans applicable to the Project sites or in Santa Barbara County (CDFG 2012b), therefore there is no conflict with said plans.

The Project is within the vicinity of, but outside the borders of, two State Marine Protected Areas protected under the Marine Life Protection Act, and one National Marine Sanctuary. Project activities would not impact habitat or species within these protected areas; therefore, no Project impacts due to Project construction would result.

3.3.9.4 Mitigation and Residual/Cumulative Impacts

Mitigation. Project impacts would be less than significant with the inclusion of MMs BIO-5 and BIO-6.

Residual Impacts. Project land use impacts are less than significant and no residual impacts would result.

Cumulative Impacts. The Project would not contribute to any cumulative impact on land use and planning.

3.3.10 Mineral Resources

X. MINERAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.3.10.1 Environmental Setting

There are no existing or planned surface mining operations within the City of Goleta. The Ellwood Oil Field is the only extractive industry within the City. The Venoco support facility for offshore oil operations, located at Elwood Mesa, is the only existing oil and gas processing facility in the City of Goleta (City of Goleta 2006).

3.3.10.2 Regulatory Setting

Federal

There are no federal regulations related to mineral resources relevant to the Project.

State

Surface Mining and Reclamation Act (SMARA)

The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with SMARA and assists in the designation of lands containing significant aggregate resources. Four Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits.

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- **MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ.

Local

There are no local policies related to mineral resource protection relevant to the Project identified within the Conservation Element of the City of Goleta General Plan.

3.3.10.3 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?

There are no existing or planned surface mining operations within the City of Goleta. The Ellwood Oil Field, located in the Ellwood Mesa area, is the only extractive industry within the City. The Venoco support facility for offshore oil operations, also located at Elwood Mesa, is the only existing oil and gas processing facility in the City of Goleta (City of Goleta 2006). The Project would replace a power cable as part of repair and maintenance needed to support existing Venoco operations. Therefore, the Project would not 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, and no impacts due to Project construction would result.

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?

The City of Goleta General Plan does not identify any mineral resource protection zones or locally important mineral resources recovery sites in the Land Use Element or Conservation Element. There are no existing or planned surface mining operations within the City of Goleta. The Ellwood Oil Field, located in the Ellwood Mesa area, is the only extractive industry within the City. The Venoco support facility for offshore oil operations, also located at Elwood Mesa, is the only existing oil and gas processing facility in the City of Goleta (City of Goleta 2006). The Project would replace a power cable as part of repair and maintenance needed to support existing Venoco operations. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site and no impacts due to Project construction would result.

3.3.10.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would have no impact on mineral resources and no mitigation is required.

Residual Impacts. The proposed project would have no impact on mineral resources, no mitigation is required, and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on mineral resources.

3.3.11 Noise

XI. NOISE: Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
e) For a Project located within 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, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

3.3.11.1 Environmental Setting

Offshore Project Area

The Project area is located in the Santa Barbara Basin, near the City of Goleta. It extends from the shoreline to Platform Holly, approximately 2 miles off Coal Oil Point. Major sources of noise in the vicinity of the Project area include breaking waves along the beach, occasional aircraft overflights, the EOF, and on-road traffic. The Sandpiper Golf Course is the nearest noise receptor to the Project area.

Offshore activities that would generate underwater noise include cable laying and HDD at the exit location. MMPA section 101(a)(5) (16 USC § 1371(a)(5)(A)) authorizes either USFWS or NMFS to allow the incidental, but not intentional, taking of small numbers of marine mammals associated with specified activities (other than commercial fishing), provided that the total of such taking would have no more than a negligible impact on the affected marine mammal species or stocks, and would not have an unmitigatable adverse impact on the availability of these species or stocks for subsistence uses.

For marine mammals, NMFS criteria define exposure to underwater sound pressure level (SPL) from impulse sounds at or above 160 dB root mean squared (RMS) as

constituting harassment to marine mammals. The MMPA defines two degrees of harassment: Level A and Level B. Level A harassment is defined as "Any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild." Level B harassment is defined as "Any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including but not limited to migration, breathing, nursing, breeding, feeding or sheltering."

Studies have suggested that SPLs above 190 dB RMS can cause temporary hearing impairment in cetaceans (whales, dolphins, and porpoises), and SPLs above 180 dB RMS and cause temporary hearing impairment in pinnipeds (seals and sea lions). NMFS also distinguishes between impulse sound, such as that from impact pile driving, and continuous sounds, such as that from vibratory pile driving. NMFS criteria for harassment of marine mammals from continuous sound are between 120 dB and 180 dB. NMFS, USFWS, the California, Oregon, and Washington Departments of Transportation, the CDFG, and the U.S. Federal Highway Administration have developed interim criteria to protect fish from pile driving activities. These criteria were established after extensive review of the most recent analysis of the effect of underwater noise on fish. The agreed-upon threshold criteria for impulse-type noise to harm fish have been set at 206 dB peak[2]. Lower levels may cause behavioral harassment (such as avoidance of an area while the sound is generated), but not physical injury.

The cable lay is expected to take approximately 2 weeks. Operations would be conducted 24-hours per day to prevent damage to the cable. Cable-laying equipment would require one moored lay barge and two anchor handling tugs. Vessels of this type are common in the offshore environs of Santa Barbara Channel. Underwater noise from these vessels is generally caused by propeller/thruster cavitation and machinery noise with noise levels being heavily dependent on vessel speed. Empirical data suggest that underwater noise levels from tug boats is approximately 160 dB at a distance of 2 meters measured at a vessel speed of 11 knots with an empty barge. Underwater noise levels rapidly attenuate with distance and decrease at a rate of approximately 6 dB per doubling of distance. Noise levels would attenuate to below 120 dB at approximately 200 meters. Background sound levels in the nearshore environment are often at or near 120 dB RMS with background sound generated from both anthropogenic sources such as vessels and natural sources including wind waves at the surface.

The HDD exit for the directional drill would not be located in hard rock, and the trench would not be jackhammered. Activities associated with HDD exit pit include dredging in

[2] Fisheries Hydroacoustic Working Group (FHWG). 2008. Agreement in Principle for Interim Criteria for Injury to Fish from Pile Driving Activities. June 12.

soft-bottom habitat using the boats discussed above. These activities would be of very short duration.

Based on this information, noise from Project activities would not reach Level A harassment for marine mammals, or dangerous exceed peak sound pressure levels at levels that could injure fish, at any distance. Noise from Project activities would reach Level B harassment only for marine mammals within 2 meters of Project vessels, at speeds at, or under, those projected for Project activities. For these reasons, a detailed underwater noise analysis was not performed for this project.

Onshore Project Areas

Ambient Noise Environment

Construction activities relating to the installation of the replacement power cable would take place immediately adjacent to, and on the west side of the EOF. The primary noise sources located in the area north of the EOF consist of traffic along US-101 and the UPRR which is located in between the EOF and US-101. The City of Goleta General Plan/Coastal Land Use Plan Noise Element, Chapter 9, states, "the combined noise sources of the railway and US-101 result in a 300 to 600 foot-wide east-west corridor where noise levels equal or exceed 70 dBA Community Noise Level Equivalent (CNEL) and produce noise levels equal to or exceeding 60 dBA CNEL in a corridor that is roughly three times the width of the 70+ dBA CNEL corridor."

Santa Barbara Airport is located approximately 3 miles east of the EOF and generates noise in the areas surrounding the EOF. The City of Goleta General Plan/Coastal Land Use Plan Noise Element, Chapter 9, states, "Because of [the airport's] location near the center of Goleta, airport-related noise affects a large area of the City, with noise levels exceeding 60 dBA CNEL for much of the City south of Hollister Avenue." The Project is located at the western extent of this area. Surf noise from the Pacific Ocean is also a primary noise contributing source near the beach located south of the EOF.

Noise-Sensitive Receptors

There are five areas that may be potentially impacted by noise generated by construction activities relating to the installation of the replacement power cable. Three of the five areas are noise-sensitive residential and resort areas. The other two areas are recreational areas consisting of a golf course and tennis courts.

A residential community located in the County of Santa Barbara is located approximately 1,400 feet northwest of the proposed HDD entry pit site. The nearest single-family residence in this community is located at the southeast end of Vereda Cordillera and northeast of the intersection of Vereda Leyenda and Calle Real. Another residential community in the Project vicinity is located in the City of Goleta,

approximately 2,150 feet northeast of the proposed HDD entry pit site. The nearest single-family residence is located on Winchester Circle and northeast of the intersection of Cathedral Oaks Road and Calle Real.

The Bacara Resort is located in the City of Goleta, approximately 2,000 feet northwest of the proposed HDD entry pit site and the associated tennis courts are approximately 1,250 feet northwest of the proposed HDD entry pit site. The Sandpiper Golf Course is located in the City of Goleta and is immediately adjacent to the east of the EOF and approximately 300 feet south and 300 feet east of the proposed HDD entry pit site.

Existing noise measurement data in the areas surrounding the EOF were obtained from the Line 96 Modification Project for the Ellwood Pipeline Company. Table 3.3.11-1 summarizes the estimated existing noise exposure at the previously mentioned five locations. The estimated existing ambient CNEL values at the Bacara Resort and Spa, and the Bacara Resort tennis courts are anticipated to be similar based on their proximity to US-101 and the UPRR.

Table 3.3.11-1. Estimated Existing Noise Exposure

Site	Distance to Proposed HDD Site (feet)	Estimated Existing Noise Exposure (dBA CNEL)
Bacara Resort and Spa	2,000	54.6[a]
Residence at southeastern end of Vereda Cordillera	1,400	56.1[ab]
Residence at southwestern corner of Winchester Circle	2,150	56.1[ab]
Bacara Resort tennis courts	1,250	54.6[a]
Sandpiper Golf Course	300	63.8[a]

[a] Source: Line 96 Modification Project, Ellwood Pipeline Company, 2011 (County 2011)

[b] These estimated existing CNEL values are based upon a measurement conducted at the intersection of Vereda Leyenda and Calle Real. An additional 7.4 dBA of attenuation was applied to these values due to the noise-sensitive receptors being an additional 180 feet further (300 feet away total) from the centerline of US-101 (the primary noise source during the measurement).

3.3.11.2 Regulatory Setting

Federal

A number of laws and guidelines at the federal level direct the consideration of a broad range of noise and vibration issues. Because the Project does not fall within the purview of, or require action by, federal agencies, the Project is not directly subject to federal noise regulations other than the Occupational Safety and Health Administration (OSHA). For perspective, several of the more significant noise-related federal regulations and guidelines are provided below:

- Noise Control Act of 1972 (42 USC § 4910). This Act establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. To accomplish this, the Act establishes a means for the coordination of federal research and activities in noise control, authorizes the establishment of federal noise emissions standards for products distributed in commerce, and provides information to the public respecting the noise emission and noise reduction characteristics of such products.

- EPA recommendations in "Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety," NTIS 550\9-74-004, USEPA, Washington, D.C., March 1974. In response to a federal mandate, the U.S. EPA provided guidance in this document, commonly referenced as the, "Levels Document," that establishes an L_{dn} of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses including residences and recreation areas. This document does not constitute U.S. EPA regulations or standards, but identifies safe levels of environmental noise exposure without consideration for achieving these levels or other potentially relevant considerations. It is intended to "provide State and Local governments as well as the federal government and the private sector with an informational point of departure for the purpose of decision making." The agency is careful to stress that the recommendations contain a factor of safety and do not consider technical or economic feasibility issues, and therefore should not be construed as standards or regulations.

- Federal Energy Regulatory Commission Guidelines On Noise Emissions From Compressor Stations, Substations, And Transmission Lines (18 CFR 157.206(d)(5)). These guidelines require that "the noise attributable to any new compressor stations, compression added to an existing station, or any modification, upgrade or update of an existing station, must not exceed a day-night level (Ldn) of 55 dBA at any pre-existing noise sensitive area (such as schools, hospitals, or residences)." This policy was adopted based on the U.S. EPA-identified level of significance of 55 L_{dn} dBA.

- Federal Highway Administration Noise Abatement Procedures (23 CFR Part 772). The purpose of 23 CFR Part 772 is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. It establishes five categories of noise sensitive receptors and prescribes the use of the Hourly Leq as the criterion metric for evaluating traffic noise impacts.

- Department of Housing and Urban Development (HUD) Environmental Standards (24 CFR Part 51). HUD Regulations set forth the following exterior

noise standards for new home construction assisted of supported by the Department:

65 L_{dn} or less – Acceptable

> 65 L_{dn} and < 75 L_{dn} – Normally unacceptable, appropriate sound attenuation measures must be provided

> 75 L_{dn} – Unacceptable

HUD's regulations do not contain standards for interior noise levels. Rather, a goal of 45 decibels is set forth and attenuation requirements are geared to achieve that goal.

State

State regulations for limiting population exposure to physically- and/or psychologically-significant noise levels include established guidelines and ordinances for roadway and aviation noise under the California Department of Transportation (Caltrans) as well as the now defunct California Office of Noise Control. The California Office of Noise Control land use compatibility guidelines provided the following:

- An exterior noise level of 60 to 65 dBA CNEL is considered "normally acceptable" for residential uses.
- A noise level of 70 dBA CNEL is considered to be "conditionally acceptable." This level is considered to be the upper limit of "normally acceptable" noise levels for sensitive uses such as schools, libraries, hospitals, nursing homes, churches, parks, offices, and commercial and professional businesses.
- A noise level of greater than 75 dBA CNEL is considered "clearly unacceptable" for residences.

Local

The two jurisdictions located near the potential onshore construction activities include the County of Santa Barbara and the City of Goleta.

County of Santa Barbara

The County of Santa Barbara General Plan Noise Element establishes land use compatibility standards for new developments. The Noise Element states that "in the planning of land use, 65 dB Day-Night average sound level (L_{dn}) should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in Project designs." Interior noise levels shall not exceed 45 dB L_{dn}. Noise-sensitive land uses include:

a) Residential, including single and multifamily dwellings, mobile home parks, dormitories, and similar uses.

b) Transient lodging, including hotels, motels, and similar uses.

c) Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.

d) Public or private educational facilities, libraries, churches, and places of public assembly.

The County of Santa Barbara does not establish construction noise standards. The County of Santa Barbara Municipal Code Nighttime Noise Restrictions, Chapter 40, states:

It shall be unlawful within the unincorporated area of the County of Santa Barbara to make, assist in making, permit, continue, create, or cause to be made, any loud and unreasonable noise, music, percussion or other sound which is broadcast outside of any residence or building by means of any amplified musical instrument, drum, or similar device, or by means of any radio, loudspeaker, sound amplifier or phonograph, or by means of or employing any similar device which amplifies and produces, reproduces or broadcasts sound, during any of the following periods of time:

(a) The night and following morning of any Sunday, Monday, Tuesday, Wednesday, or Thursday between the hours of 10:00 p.m. of such day and 7:00 a.m. the following morning; or,

(b) The morning hours after midnight of any Friday or Saturday, between twelve midnight, following such day, and 7:00 a.m. the following morning.

Within such time periods, and for the purposes of this chapter, a loud and unreasonable sound shall include any sound created by means prohibited above which is clearly discernable at a distance of one hundred feet from the property line of the property upon which it is broadcast or which is at any level of sound in excess of sixty decibels at the edge of the property line of the property upon which the sound is broadcast.

Chapter 40 of the County of Santa Barbara Municipal Code does not apply to construction noise because the noise generated by construction activities is not being amplified by a “musical instrument, drum, or similar device.”

City of Goleta

The City of Goleta General Plan Coastal Land Use Plan Noise Element, Chapter 9, establishes land use compatibility standards for new developments as well as providing

restrictions, guidelines and policies for noise due to construction. Table 3.3-11-2 illustrates the City of Goleta's General Plan Land Use and Noise Compatibility.

Table 3.3.11-2. Goleta General Plan Land Use and Noise Compatibility

Land Use Category	Community Noise Exposure (Ldn or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential—low density	50–60	60–65	65–75	75–85+
Residential—multiple family	50–60	60–65	65–75	75–85+
Transient lodging—motels and hotels	50–65	65–70	70–80	80–85+
Schools, libraries, churches, hospitals, and nursing homes	50–60	60–65	65–80	80–85+
Auditoriums, concert halls, and amphitheaters	NA	50–65	NA	65–85+
Sports arenas and outdoor spectator sports	NA	50–70	NA	70–85+
Playgrounds and neighborhood parks	50–70	NA	70–75	75–85+
Golf courses, riding stables, water recreation, and cemeteries	50–70	NA	70–80	80–85+
Office buildings, business commercial, and professional	50–67.5	67.5–75	75–85+	NA
Industrial, manufacturing, utilities, and agriculture	50–70	70–75	75–85+	NA

Notes:

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements shall be made and needed noise insulation features shall be included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

NA: Not applicable.

Source: Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

Noise generated by operations at the EOF is specifically addressed in the City of Goleta's General Plan Noise Element. Policy NE 5.6 specifically addresses noise from the EOF. The policy states:

> *The City shall continue to monitor noise at the Venoco Ellwood Onshore Oil and Gas Processing Facility to determine whether noise levels exceed required standards and may require Venoco to implement measures that will avoid violations of the standards. The City shall require that any major facility upgrades include measures or designs that ensure noise levels generated by the facility are in compliance with the plant's operating permit.*

The City of Goleta Noise Element establishes construction noise exempt times for projects located near or adjacent to residential buildings and other sensitive receptors as well as in non-residential areas located away from sensitive receivers. Construction noise is limited to Monday through Friday from 8:00 a.m. to 5:00 p.m. if construction activities are located near residential areas and sensitive receivers. If construction activities are located in non-residential areas away from sensitive receivers, construction is limited to Monday through Friday from 7:00 a.m. to 4:00 p.m. Construction shall generally not be allowed on weekends and State holidays. NE Policy 6.4 continues:

> *Exceptions to these restrictions may be made in extenuating circumstances (in the event of an emergency, for example) on a case by case basis at the discretion of the Director of Planning and Environmental Services. All construction sites subject to such restriction shall post the allowed hours of operation near the entrance to the site, so that workers on site are aware of this limitation. City staff shall closely monitor compliance with restrictions on construction hours, and shall promptly investigate and respond to all noncompliance complaints.*

Policy NE 6.5 applies a 65 dBA CNEL noise threshold at sensitive receivers if construction activities are conducted outside of construction noise exempt times. The CNEL metric is usually reserved for land use compatibility and transportation noise sources. CNEL is not typically used for construction activities as CNEL is a cumulative (24-hour) noise metric. Using the CNEL metric, noise that occurs during evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours is more heavily "weighted" than noise that takes place during daytime hours. This 65 dBA CNEL would not apply to the Sandpiper Golf Course or the Bacara Resort tennis courts as nighttime activities do not take place at these locations.

3.3.11.3 Impact Analysis

The primary noise generating sources are equipment associated with the HDD occurring adjacent to the west side of the EOF. HDD construction activities would be conducted 24 hours per day for 11 consecutive days.

The following equipment is typically associated with HDD operations:

- Drilling rig & engine-driven hydraulic power unit [400 to 750 HP (300 to 560 kilowatt (kW)) engine(s)]
- Triplex centrifugal main mud pumps [350 to 450 horsepower (HP) (260 to 340 kW) engine]
- Engine-driven electric generator sets [200 to 350 HP (150 to 260 kW) generator sets]
- Mud mixing/cleaning system (e.g., ditch pumps, mud tank pumps)

- Fluid systems shale shakers (associated with the mud mixing/cleaning system)
- Crane, boom truck, frontloader, backhoe, trackhoe and/or forklift
- Engine-driven light plants (if needed for nighttime operation)
- Mud tanks (water & drilling mud storage) and storage container(s).

The combined HDD activities are expected to generate a sound pressure level of 80.4 dBA L_{eq} at a distance of 50 feet (URS 2012). As defined in the Project Description, on-site portable noise barriers would be used throughout the duration of HDD activity to reduce noise emissions. These barriers would reduce noise emissions by a minimum of 10 dBA. The resulting noise levels from HDD activity are expected to be 70.4 dBA L_{eq} at a distance of 50 feet.

The estimated existing noise levels are combined with the expected HDD noise levels and the resulting noise levels are compared to the significance noise thresholds at each noise-sensitive area. The City of Goleta's noise exposure threshold is 65 dBA CNEL at noise-sensitive land uses during construction activities.

CEQA standards must also be met along with local noise standards. When noise levels are compared side by side in a quiet environment, it is easier to detect a change in level. Under these conditions, changes as small as 1 dBA have been detected, a change of 3 dBA is somewhat noticeable, a change of 5 dBA is readily noticeable, and a change of 10 dBA is perceived as a doubling of the sound level. For the purposes of this Project, a change of 5 dBA in CNEL constitutes a significant change per CEQA.

Significance Thresholds

Significance noise thresholds have been established at each of the five areas that may potentially be impacted by noise. Noise-sensitive residential land uses include the Bacara Resort and Spa and the residence located at the southwestern corner of Winchester Circle. According to the County of Santa Barbara Noise Element, the Sandpiper Golf Course and the Bacara Resort tennis courts are not categorized as noise-sensitive land uses and, therefore, have no applicable construction noise level limits. The residence located at the southeastern end of Vereda Cordillera in Santa Barbara County is a noise-sensitive land use; however, the County of Santa Barbara does not have any applicable noise exposure threshold for construction activities.

In Table 3.3.11-3, the estimated existing noise exposure, City of Goleta's noise exposure threshold during construction activities, and significance noise exposure criteria during construction activities per CEQA are listed for each location. The 65 dBA CNEL must be met at the Bacara Resort and Spa and the residence located at the southwestern corner of Winchester Circle. The other receivers are either located outside the jurisdiction of the City of Goleta or are not considered noise-sensitive land uses. Per

CEQA, the significance noise exposure criteria during construction activities equal the existing noise exposures plus 5 dBA. At each location, if the modeled noise level due to noise generated by construction activities causes an increase of 5 dBA or more, there would be a significant noise impact.

Table 3.3.11-3. Significant Noise Thresholds

Site	Estimated Existing Noise Exposure (dBA CNEL)	City of Goleta's Noise Exposure Threshold during Construction Activities (dBA CNEL)	Threshold of Significance (Existing Ambient Noise Level Plus 5 dBA CNEL)
Bacara Resort and Spa	54.6[a]	65	59.6
Residence, SE end of Vereda Cordillera	56.1[ab]	N/A	61.1
Residence, SW corner of Winchester Circle	56.1[ab]	65	61.1
Bacara tennis courts	54.6[a]	N/A[c]	59.6
Sandpiper Golf Course	63.8[a]	N/A[c]	68.8

[a] Source: Line 96 Modification Project, Ellwood Pipeline Company, 2011 (County 2011).

[b] These estimated existing CNEL values are based upon a measurement conducted at the intersection of Vereda Leyenda and Calle Real. An additional 7.4 dBA of attenuation was applied to these values due to the noise-sensitive receptors being an additional 180 feet further (300 feet away total) from the centerline of US-101 (the primary noise source during the measurement).

[C] This location is not considered to be a noise sensitive land use as defined by the City of Goleta.

Impact Discussion

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

HDD activities are expected to generate a sound pressure level of 80.4 dBA L_{eq} at a distance of 50 feet (URS 2012). As defined in the Project Description, on-site portable noise barriers would be used throughout the duration of HDD activity. These barriers would reduce noise emissions by a minimum of 10 dBA. The resulting noise levels from HDD activity are expected to be 70.4 dBA L_{eq} at a distance of 50 feet.

Table 3.3.11-4 lists the existing plus modeled noise exposure at each site generated by HDD activities. The resulting CNEL values at each location were calculated by attenuating the noise generated by HDD activities over the given distance between construction activities and each modeled location. Each modeled L_{eq} level was converted into a CNEL value by weighting evening hours (7:00 p.m. to 10:00 p.m.) by 5 dBA and nighttime hours (10:00 p.m. to 7:00 a.m.) by 10 dBA and then adding the modeled noise exposure to the estimated existing noise exposure.

Table 3.3.11-4. Local Significant Noise Thresholds

Site	Estimated Existing Noise Exposure (dBA CNEL)	Modeled Noise Exposure due to HDD Activities (dBA CNEL)	Existing Plus Modeled Noise Exposure (dBA CNEL)	City of Goleta's Noise Exposure Threshold during Construction Activities (dBA CNEL)
Bacara Resort and Spa	54.6[a]	45.1	55.1	65
Residence, SE end of Vereda Cordillera	56.1[ab]	48.2	56.7	N/A
Residence, SW corner of Winchester Circle	56.1[ab]	44.4	56.4	65
Bacara tennis courts	54.6[a]	49.1	55.7	N/A
Sandpiper Golf Course	63.8[a]	61.5	65.8	N/A

a Source: Line 96 Modification Project, Ellwood Pipeline Company, 2011 (County 2011)

b These estimated existing CNEL values are based upon a measurement conducted at the intersection of Vereda Leyenda and Calle Real. An additional 7.4 dBA of attenuation was applied to these values due to the noise-sensitive receptors being an additional 180 feet further (300 feet away total) from the centerline of US-101 (the primary noise source during the measurement)

As shown in Table 3.3.11-4, the Project would not expose people or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; therefore, impacts due to Project construction would be less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Vibration levels from typical construction equipment expected to be used for this Project produce vibrations levels that range from 58 to 94 vibration decibels (VdB) at a distance of 25 feet. The nearest noise-sensitive land use to the Project site (Sandpiper Golf Course) is located approximately 300 feet south and east of the site, within the City of Goleta. Vibration levels typically fall off with distance from the source at the rate of 9 dB per doubling of distance from the source. Given the source levels and the distance to the nearest noise sensitive land use, the resulting vibration levels are expected to range from 26 to 62 VdB. Human perception of vibration begins at levels between 65 and 70 VdB depending upon the sensitivity of the individual. Since the Project vibration levels are 3 to 8 dB below the level of perception, vibration impacts are expected during construction activities.

Based on the vibration levels associated with the Project and the distance to the nearest sensitive land use, Project construction would not expose people to, or generate, excessive groundborne vibration or groundborne noise levels and no impact would result.

c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Construction activities are anticipated to be conducted for 21 days and HDD activities located on the west side of the EOF site are anticipated to be conducted on a 24-hour basis for 11 consecutive days. Based on the relatively short duration of construction activities and the absence of Project related noise emissions after construction, the Project would not cause a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project and no impact would result.

d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Marine Noise

Marine mammals and fish can be affected by elevated underwater sound pressure levels. The Fisheries Hydroacoustic Working Group (FHWG), whose members include NMFS' Southwest and Northwest Divisions, the departments of transportation for the states of California, Washington, and Oregon, CDFG, and the Federal Highway Administration, issued an agreement for the establishment of interim threshold criteria to determine the effects of high-intensity sound on fish. While these criteria are not formal regulatory standards, they are generally accepted as viable criteria for underwater noise effects on fish. The FHWG has determined that underwater noise at or above a 206 dB peak level can cause damage to auditory tissues, the swim bladder, or other sensitive organs in fish.

For marine mammals, NMFS criteria define exposure to underwater sound pressure level (SPL) from impulse sounds at or above 160 dB root mean squared (RMS) as constituting harassment to marine mammals. Studies have suggested that SPLs above 190 dB RMS can cause temporary hearing impairment in cetaceans (whales, dolphins, and porpoises), and SPLs above 180 dB RMS and cause temporary hearing impairment in pinnipeds (seals and sea lions). NMFS also distinguishes between impulse sound, such as that from impact pile driving, and continuous sounds, such as that from vibratory pile driving.

NMFS criteria for harassment of marine mammals from continuous sound are between 120 dB and 180 dB. The levels above that can cause injury to fish and marine mammals (i.e., 206 dB peak for fish, and generally above 180 dB RMS for marine mammals) are generally only reached during activities that generate loud impulse sounds such as pile driving with impact hammers or breaking rock with hoe rams or jackhammers underwater. Based on the Project description, the types of construction activities for laying the cable would not generate SPLs at these levels that could injure fish or marine mammals. This assumes that underwater activities do not include any jackhammering, underwater pile driving, or other such loud underwater activities. Some of the ship noise

might generate continuous sounds at or above 120 dB, but less that 180 dB. This could constitute Level B harassment (behavioral effects like avoidance), but would not cause injury. Therefore, impacts to the marine environment due to Project construction would be less than significant.

Onshore Noise

Short-term noise increases associated with HDD activities would occur in the immediate vicinity of the Project site. As defined in the Project Description, HDD activities would generate a sound pressure level of 70.4 dBA L_{eq} at a distance of 50 feet. This L_{eq} equates to a CNEL of 77.1 dBA at a distance of 50 feet over a 24-hour period.

Table 3.3.11-5 lists the existing plus modeled noise exposure in terms of CNEL at each location based on attenuation of noise due to distance. The increase above the existing noise exposure due to HDD activities is also listed for each location. The largest increase above the existing noise exposure occurs at the Sandpiper Golf Course located to the southeast of the EOF. The increase at this location is 2 dBA CNEL. Based on the analysis, the increase in ambient noise levels due to Project construction would be less than significant. However, MM N-1 has been included to further reduce any impacts associated with onshore noise.

Table 3.3.11-5. Significant Noise Thresholds Per CEQA

Site	Estimated Existing Noise Exposure (dBA CNEL)	Modeled Noise Exposure due to HDD Activities (dBA CNEL)	Existing Plus Modeled Noise Exposure (dBA CNEL)	Increase above Existing Noise Exposure (dBA CNEL)	Meets CEQA Noise Standards (Y/N)
Bacara Resort and Spa	54.6[a]	45.1	55.1	0.5	Yes
Residence, SE end of Vereda Cordillera	56.1[ab]	48.2	56.7	0.6	Yes
Residence, SW corner of Winchester Circle	56.1[ab]	44.4	56.4	0.3	Yes
Bacara tennis courts	54.6[a]	49.1	55.7	1.1	Yes
Sandpiper Golf Course	63.8[a]	61.5	65.8	2.0	Yes

[a] Source: Line 96 Modification Project, Ellwood Pipeline Company, 2011 (County 2011)

[b] Estimated existing CNEL values are based upon a measurement conducted at the intersection of Vereda Leyenda and Calle Real. An additional 7.4 dBA of attenuation was applied to these values due to the noise-sensitive receptors being an additional 180 feet further (300 feet away total) from the centerline of US-101 (the primary noise source during the measurement).

e) For a Project located within 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, would the Project expose people residing or working in the Project area to excessive noise levels?

The Project is not located within 2 miles of a public airport or public use airport; therefore, no impact would result.

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly with a new power cable. There are no private airstrips located in the vicinity of the Project site. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels for a Project within the vicinity of a private airstrip and no impact would result.

3.3.11.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would not result in significant short- or long-term noise impacts; therefore, no mitigation measures are required. However, MM N-1 has been included to further reduce any impacts associated with onshore noise.

MM N-1. Noise Reduction Plan. The Applicant shall prepare a noise reduction plan, which shall be approved by the City. The Plan shall include, but not be limited to, the following measures:

- Notify residents and landowners about the planned construction activities near their residence/land at least one week before construction at that location.
- Ensure that construction activities are reduced during the maximum extent feasible during the Holidays.
- Ensure that all internal combustion engines are properly maintained and that mufflers, silencers, or other appropriate noise-control measures function properly.

Residual Impacts. The Project would have no significant noise impacts. No mitigation is required and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact to noise levels.

3.3.12 Population and Housing

XII. POPULATION AND HOUSING: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.3.12.1 Environmental Setting

No housing units are located within the Project area.

3.3.12.2 Regulatory Setting

Federal, State, or Local

No federal, State, or local regulations related to population and housing are relevant to the Project.

3.3.12.3 Impact Analysis

a) Induce substantial 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)?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The replacement cable would follow the general route of the existing cable and would be sized as an in-kind replacement, with similar electrical power transmission capability. Therefore, the Project would not induce substantial population growth in an area, either directly or indirectly and no impacts due to Project construction would result.

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

The Project would not displace any housing. Therefore, the Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere and no impacts due to Project construction would result.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere, since no housing would be removed as part of the Project. Therefore, no impacts due to Project construction would result.

3.3.12.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would not result in impacts related to existing population or housing; therefore, no mitigation is required.

Residual Impacts. The proposed Project would have no impact on existing population levels or housing stock. No mitigation is required and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on population and housing.

3.3.13 Public Services

XIII. PUBLIC SERVICES:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☒	☐

3.3.13.1 Environmental Setting

Fire Protection and Emergency Response

Santa Barbara County Fire Department

The City of Goleta contracts fire protection services from the Santa Barbara County Fire Department. There are three fire stations located within the City of Goleta: Fire Stations 11, 12, and 14. Fire Station 11, which is located at 6901 Frey Way, is also a water rescue station, and responding firefighters may be assigned to rescue watercraft. Fire Station 12 is located at 5530 Calle Real, and Fire Station 14 is located at 320 Los Carneros (Santa Barbara County Fire Department 2012).

Venoco's Fire Protection and Emergency Response Plan

In addition to the publicly provided fire protection and emergency response equipment, oil facilities are required by federal and State Regulations to have onsite firefighting equipment, as well as materials to control oil spills or other hazardous materials releases. Venoco has fire-fighting and emergency response capabilities at the EOF and Platform Holly in accordance with these regulations. Venoco's ability to prevent, contain, and extinguish fires or resolve emergencies reduces the burden placed on publicly-provided and funded fire protection and emergency response services (County 2011).

Police Services

The City of Goleta contracts police protection services from the Santa Barbara County Sheriff's Department. The Sheriff Deputies enforce State statutes and City municipal ordinances. Assigned officers are considered City police and use vehicles identified by the City of Goleta logo (City of Goleta 2006). The City of Goleta Substation is located at the City Hall (130 Cremona Drive, Suite B, Goleta, CA 93117) and provides law enforcement services for the incorporated City of Goleta (City of Goleta Substations 2012).

Public Education

Public education services within the City of Goleta are provided by the Goleta Union School District and the Santa Barbara High School District.

Parks and Open Space

Sixteen parks and eight open space areas lie within the City of Goleta totaling approximately 482 acres (City of Goleta Parks and Open Space 2012).

Emergency Medical Services

Located at 400 West Pueblo Street in Santa Barbara, CA, Santa Barbara Cottage Hospital is verified as a Level II Trauma Center by the American College of Surgeons and the Santa Barbara County Emergency Medical Services Agency. This trauma center responds to trauma emergencies throughout Santa Barbara County and is the only trauma center on the Central Coast between Ventura and San Jose (Cottage Health Systems 2012a). In addition to Santa Barbara Cottage Hospital, Goleta Valley Cottage Hospital is a 122-bed acute care hospital located at 351 South Patterson Avenue in Santa Barbara, CA (Cottage Health Systems 2012b).

3.3.13.2 Regulatory Setting

Federal

Federal regulations directly applicable to fire protection and emergency response issues include:

- 29 CFR 1910.38, Emergency Action Plans;
- 29 CFR 1910.39, Fire Prevention Plans; and
- 29 CFR 1910.155, Subpart L, Fire Protection.

State

The State Fire Marshal develops regulations relating to fire and life safety under California Code of Regulations, Title 19, Public Safety. These regulations have been prepared and adopted for the purpose of establishing minimum standards for the prevention of fire and for protection of life and property against fire, explosion, and panic. The Fire Marshal also adopts and administers the regulations and standards considered necessary under the California Health and Safety code to protect life and property.

Local

City of Goleta General Plan Safety Element Policy SE 8.3 addresses annual safety audits of all new and existing oil and gas production, processing, and storage facilities. The City of Goleta or its agent shall participate in these audits and all deficiencies notes in each audit shall be addressed promptly, in timeframes recommended in the audits' conclusions.

3.3.13.3 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?

The Project would not generate population growth through the generation of additional jobs or housing units that would result in increased demand for public services and/or facilities. No new or physically altered governmental facilities are proposed as part of the Project. The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new power cable. The Project is part of repair and maintenance needed to support existing operations. Therefore, impacts associated with Project construction would be less than significant.

3.3.13.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would not result in significant impacts to public services and no mitigation is required.

Residual Impacts. The proposed Project would have less than significant impacts on public services, no mitigation is required, and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on public services.

3.3.14 Recreation

XIV. RECREATION:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.3.14.1 Environmental Setting

Sixteen parks and eight open space areas lie within the City of Goleta totaling approximately 482 acres (City of Goleta Parks and Open Space 2012). Ellwood Pier is a private facility and access to the public would remain restricted during the Project. Public access to the beach and golf course would not be restricted during construction or operation of the Project.

3.3.14.2 Regulatory Setting

Federal

No federal regulations pertain to recreational resources relevant to this Project.

State

California Coastal Act

The following policies from the California Coastal Act pertain to the Project. Section 30220 of the Act is pertinent to recreation, stating:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Section 30221 states, in part, that new development shall:

> *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30223 states, in part, that new development shall:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30234 states, in part, that for new development:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Local

The City of Goleta General Plan Open Space Element addresses open space, recreation and coastal access. This element provides goals, policies, and actions intended to achieve the City's vision for open space, parks, and recreational facilities that are accessible to all members of the community.

3.3.14.3 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?

The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly as part of repair and maintenance. The replacement power cable would be sized as an in-kind replacement, with similar electrical power transmission capability to support existing operations. Therefore, the Project would not 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 and no impacts due to Project construction would result.

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?

The Project would replace the existing 46-year-old 16.5 kV power cable between the EOF and Platform Holly with a new power cable as part of repair and maintenance. The Project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment. Therefore, no impacts due to Project construction would result.

3.3.14.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would not result in significant recreation impacts; therefore, no mitigation measures are required.

Residual Impacts. The Project would not result in impacts related to recreation facilities or opportunities. No mitigation is required and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on recreation.

3.3.15 Commercial and Recreational Fisheries

3.3.15.1 Environmental Setting

The region supports both commercial and recreational fishing activities. Public and private access to commercial and recreational fisheries within the Project area between Platform Holly and the shoreline is permitted, with the exception of the Ellwood Pier, which is a private facility that is not used for commercial or recreational fishing activities.

Within the Project area between Platform Holly and the shoreline, commercial fishing is largely focused on crab, lobster, and halibut using traps and trawls. Non-finfish taxa such as urchin, shrimp, lobster, and crab are the primary commercial catch landed within the waters of the Project area. Urchin and shrimp constitute the highest total biomass, while lobster rank as the highest in overall value (County of Santa Barbara 2011).

Statewide, more than 20 harvesters hold current licenses to commercially harvest kelp using kelp harvesting vessels. The entity that currently leases the kelp beds near the Project area is continually increasing its kelp harvest in response to a growing abalone market, and approximately half of its harvest comes from this area (County of Santa Barbara 2011).

Nearly half of the commercial passenger fishing vessel (CPFV) catch in the Santa Barbara Channel occurs near the Channel Islands. In contrast, the CPFV catch in the Project area between Platform Holly and the shoreline is very minimal. Recreational fishing for rockfish (*Scorpaenidae*) dominates the CPFV catch within the Santa Barbara Channel. However, within the Project area between Platform Holly and the shoreline, no suitable hard-substrate features are frequented by the CPFV fleet, and recreational fishing for these species is minimal (County of Santa Barbara 2011).

3.3.15.2 Regulatory Setting

Federal

No federal regulations are applicable to the commercial and recreational fishing within the area.

State

California Coastal Act

The Coastal Act includes the following policies related to commercial and recreational facilities and opportunities. Section 30234 states, in part: “Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate

substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry." Section 30234.5 states, in part: "The economic, commercial, and recreational importance of fishing activities shall be recognized and protected."

Marine Life Protection Act (MLPA) (Fish & G. Code, § 2850 et seq.)

The MLPA directs the State to redesign California's system of MPAs to function as a network in order to: increase coherence and effectiveness in protecting the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance. There are six goals that guide the development of MPAs in the MLPA planning process:

1. Protect the natural diversity and abundance of marine life, and the structure, function and integrity of marine ecosystems;
2. Help sustain, conserve and protect marine life populations, including those of economic value, and rebuild those that are depleted;
3. Improve recreational, educational and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity;
4. Protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic values;
5. Ensure California's MPAs have clearly defined objectives, effective management measures and adequate enforcement and are based on sound scientific guidelines; and
6. Ensure the State's MPAs are designed and managed, to the extent possible, as a network.

To help achieve these goals, three types of MPA designation types are used in the MLPA process: SMRs, SMCAs, and State Marine Parks.

State of California, 2011-2012 California Ocean Sport Fishing Regulations

Each year, the California Fish and Game Commission issues regulations on recreational fishing within State marine waters. These regulations specify season, size and bag limits, and gear restrictions as well as licensing requirements. Since the development of the MPAs, a section on fishing restrictions within the MPAs has also been included.

State of California, Commercial Fishing Laws and Licensing Requirements

Similar to the recreational fishing industry, commercial fishing is regulated by a series of laws passed by the California Fish and Game Commission and issued each year in a summary document. Seasonal and gear restrictions within the various CDFG Districts, licensing instructions and restrictions, and species-specific fishing requirements are provided in the document. Most of the MPAs have commercial fishing restrictions (based on the designation of each area).

3.3.15.3 Impact Analysis

Significance Criteria

Although no federal or State criteria for significant impacts to the fisheries of the Project area have been established, previous State-administered environmental analyses have used loss of available area, reduction of habitat, and/or substantial decrease in the number of organisms of commercial or recreational value as the basis for analyzing impacts. For the Project, a significant impact to the fisheries would occur if:

a) 10 percent or more of the currently-available fishing area used by a target species was lost.

The Project area within the marine environment includes an HDD exit pit with a maximum area of 1,000 square feet, and the laying of cable across the seafloor for approximately 13,500 linear feet (2.56 linear miles). With a cable width of less than 8 inches, this gives an area of permanent impact of 9,000 square feet (0.00032 square miles). The currently available fishing area used by the full range of potential target species within the Santa Barbara Basin is on the order of 1,700 to 1,800 square miles, if the Channel Islands and all MPAs are excluded from basin area calculations. If the fishing area is considered to only include nearshore, shallow waters within the Santa Barbara Basin, such as areas fished for shallow water species such as sand bass, clams, and halibut, the “currently available fishing area” might be conservatively estimated at 300 square miles. Compared to this conservative habitat estimate, the Project would affect less than 0.0001% of the available fishing area. Therefore, Project effects would be less than significant.

b) Commercial or recreational fishing activities were precluded from a currently-utilized area for more than one month.

Neither commercial nor recreational fishing activities would be precluded from any currently utilized fishing area for more than 1 month due to Project construction. Relevant onshore staging would occur at Ellwood Pier, which is not currently used for fishing. Project HDD operations could preclude fishing activities in the immediate region of the exit pit, due to the nature of dredging and cable work at the exit pit.

However, these activities are expected to take less than 20 days. The Project would generate a small amount of additional vessel trips during short-term, temporary construction activities in and around Platform Holly and the cable laydown corridor. Project activities are not expected to preclude fishing along the length of the undersea cable laydown corridor. Cable laydown is scheduled to proceed slowly, allowing any pelagic species, including fish and seabirds, to move out of the way of the descending cable. Project barges would move slowly along this corridor from nearshore to offshore waters, allowing fishing activities to occur within all areas other than those actively occupied by a barge at any one time. This activity is expected to take 2 weeks, during which fisheries activities could continue within the Project vicinity. Project effects would be less than significant.

c) The Project resulted in substantial reduction in the Essential Fish Habitat required by one or more of the species managed by the Pacific Fisheries Management Council's fisheries management plans.

As described in Section 3.3.4.1, the Santa Barbara Channel is designated as Essential Fish Habitat for coastal marine fish and macroinvertebrate species, which support commercial fisheries. Laydown of the cable is expected to affect 9,000 square feet of soft, sandy bottom habitat that may be used by commercial sandy bottom fish species such as halibut. However, the narrow width of the cable does not provide any barrier to essential fish activities, including movement, foraging, feeding, or breeding. In addition, it is likely to be partially or fully buried in sand within a short time frame, or may serve as an attachment point for marine algaes such as kelp, and for sessile benthic invertebrates including worms and barnacles. HASC in the Project vicinity include Rocky Reef, Seagrass, and Kelp Canopy. The cable laydown would occur following seafloor surveys, in areas that are shown during surveys to exclude HASC habitats. Therefore, HASC areas would not be affected by Project activities.

Since no exceedances of the significance criteria listed above are anticipated, Project construction or operation are not expected to result in significant adverse impacts to commercial or recreational fishing facilities.

3.3.15.4 Mitigation and Residual/Cumulative Impacts

Mitigation. Mitigation measures identified in Section 3.3.4.4, Biological Resources, would also be applicable to this section and no additional mitigation is required.

Residual Impacts. With implementation of the biological mitigation measures, there would be no residual impacts.

Cumulative Impacts. The Project would not contribute to any cumulative impact on commercial and recreational fisheries.

3.3.16 Transportation / Traffic

XVI. TRANSPORTATION / TRAFFIC: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.3.16.1 Environmental Setting

Vehicular Traffic

Road vehicles that travel through the Project area near the EOF use Hollister Avenue, US-101, and the two-lane access road that leads to the EOF and the Bacara Resort. Official traffic counts are not available for the access road which serves as the access road to the EOF, Bacara Resort and Spa, and the Sandpiper Golf Course and connects the EOF to Hollister Avenue and its interchange with US-101.

Hollister Avenue is an arterial roadway that serves as the major east/west surface street route in the Goleta area. The acceptable capacity of the roadway is defined as 34,000 vehicles per day along the four-lane sections and 14,300 vehicles per day along the two-lane sections. Hollister Avenue extends easterly from its terminus at the US-101 interchange, adjacent to Winchester Canyon Road through the City of Goleta (County 2011).

Key intersections in the Project vicinity, as defined in the City of Goleta Traffic Element (General Plan Figure 7.2), include the Hollister/US-101 northbound and southbound Ramps and Cathedral Oaks/Hollister Avenue. An existing level of service (LOS) is not provided for the intersection of Cathedral Oaks/Hollister Avenue, but future traffic model results indicate acceptable levels of service of C or greater with General Plan build out conditions. Hollister/U.S. 101 northbound Ramp has an LOS A and Hollister/US-101 southbound Ramp has an LOS B and would continue to operate at an acceptable LOS of B or better under General Plan 2030 conditions (City of Goleta 2006).

Marine Traffic

Approximately 18 large ocean-going vessels pass through Santa Barbara Channel each day. Numerous small private vessels also transit the Santa Barbara Channel on a regular basis (City of Goleta 2006).

3.3.16.2 Regulatory Setting

Federal

Federal regulations concerning marine navigation are codified in 33 CFR Parts 1 through 399 and are implemented by the USCG and USACE. Federal regulations for marine vessel shipping are codified in 46 CFR Parts 1 through 599 and are implemented by the USCG, Maritime Administration, and federal Maritime Commission. California laws concerning marine navigation are codified in the Harbors and Navigation Code and are implemented by local city and county governments.

The entire marine vessel study area is within the 11th USCG District, which includes all of California and the offshore waters. Each USCG District publishes a weekly Local Notice to Mariners (LNTM), which is the primary means of disseminating information pertaining to navigational safety and other items of interest to mariners. Information contained in the LNTM includes reports of hazards to navigation, channel conditions, obstructions, dangers, anchorages, restricted areas, regattas, construction or modification of bridges, construction or removal of oil platforms, and laying of undersea cable. LNTMs are developed from information received from USCG field units, the general public, the USACE, U.S. Merchant Fleet, National Ocean Service, and other sources, concerning the establishment of, changes to, and deficiencies in aids to navigation and any other information pertaining to the safety of the waterways.

Designated coastwise shipping traffic lanes have been established along two portions of the California coast: (1) in the vicinity of the entrance to San Francisco Bay, and (2) from Point Conception southeast to the vicinity of the entrance to the Ports of Los Angeles and Long Beach. The shipping lanes are generally 4 to 20 nm offshore. Where shipping lanes have not been established, such as the central coast, navigation practice has produced a pattern of traffic flow at various distances from shore based on transit

direction, vessel type, and cargo. Members of the Western States Petroleum Association, whose tankers carry crude oil from Alaska, agreed in 1990 to voluntarily keep laden vessels a minimum of 50 nm from shore along the California central coast. Slower-going ocean tank barges transit the central coast approximately 15 to 25 nm from shore to minimize interaction with the offshore oil tankers and the inshore container ships.

State

Chapter 2, Article 3 of the California Vehicle Code defines the powers and duties of the California Highway Patrol, which has enforcement responsibilities for the operation of vehicles and highway use within the State. In addition to the California Vehicle Code, Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the State's boundaries.

Local

The City of Goleta General Plan established a number of policies for transportation demand management (City of Goleta 2006). These are summarized below.

- **TE2.1 -** Limit traffic congestion through reducing low-occupancy auto trips and shifting peak hour vehicle trips to off-peak hours;
- **TE2.4 -** Require proposed larger sized non-residential developments with 100 or more employees to prepare and adopt a Transportation Management Plan;
- **TE3.8 -** Primary truck routes shall be limited to freeways and major and minor arterials within the City; and
- **TE4.1 -** Traffic LOS standard C shall apply citywide to major arterials, minor arterials, and collector roadways and signalized and unsignalized intersections.

The Santa Barbara County Association of Governments (SBCAG) is designated by State and federal governments as the Metropolitan Planning Organization, the Local Transportation Authority, and the Regional Transportation Planning Agency. Under these designations, SBCAG has responsibility for all regional transportation planning and programming activities.

The Project would be subject to the provisions of the Santa Barbara County Congestion Management Program (CMP). The CMP is a comprehensive program designed to reduce auto-related congestion and designates major highway and road segments within the Project vicinity. The CMP requires an assessment of the Project's potential impacts on designated roadways, which include Hollister Road and US-101. As the

Congestion Management Agency for Santa Barbara County, SBCAG is responsible for the development and implementation of the County-wide CMP. All urban counties are required to have a CMP (County 2011).

3.3.16.3 Impact Analysis

Significance Criteria

In addition to State CEQA Guidelines criteria "a" through "f" listed above, a significant transportation impact would result if the Project:

- Reduces the existing level of safety for vessels transiting the Project area; or
- Substantially increases the potential for vessel collisions.

Impact Discussion

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Public access to the EOF and Ellwood Pier is restricted and would remain restricted with the Project. The Project would not interfere with public access (non-motorized) as part of long-term Project operation. Public coastal access to Haskell's/Bacara Beach is provided to the west of the EOF and there would be no change to existing public bus service in the vicinity as a result of the Project. The Project would not generate additional vehicle or marine trips as part of long-term Project operation.

Offshore Project construction activities would occur in an area where regular boating traffic is common and would not add substantially to the level of boat traffic within the Project vicinity.

Onshore during construction, short-term temporary construction activities would generate additional vehicle trips. Construction activities are anticipated to be conducted for 21 days and HDD activities located on the west side of the EOF are anticipated to be conducted on a 24-hour basis for 11 consecutive days. Public bus service would not be impacted by Project construction activities since all construction and staging areas would occur within existing Venoco restricted areas. Additional vehicle trips associated with Project construction include those driven by workers. MM T-1 would restrict workers from using the public parking lot (Haskell's Beach) that is typically used by people accessing the beach to the west of the Project area. Key intersections are operating at acceptable levels of service as noted in Section 3.3.16.1. Also, as noted in the Project description, truck trips would occur during non-peak hours, therefore,

onshore and offshore traffic impacts due to Project construction would be less than significant with mitigation.

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The Project is subject to the provisions of the Santa Barbara County CMP 2009. The CMP addresses the problem of increasing congestion on regional highways and principal arterials through a coordinate approach with the State, County, cities, transit providers and the APCD (SBCAG 2009). According to page 47 of the CMP, "a Project should be evaluated for potential impacts to the "off-site" CMP system if total trip generation exceeds 50 peak hour trips or 500 average daily trips." Examples of projects at this threshold would be a 50-lot single-family residential project or a 20,000 square-foot office building. Since the new power cable would not add any new permanent vehicle trips to the CMP network, Project impacts would be less than significant. MM T-1 has been modified to further reduce any impacts associated with traffic.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly with a new power cable. The proposed replacement power cable would be located underground or underwater within existing easements and would not result in a change in air traffic patterns or change in location that result in substantial safety risks.

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

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. No modifications to the onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements. Since the Project is a replacement of an existing cable, and onshore and through the beach and surf zone the cable would be underground, the Project would not substantially increase hazards due to a design feature or incompatible uses and Project impacts would be less than significant.

e) Result in inadequate emergency access?

The proposed power cable would be located underground or underwater as part of long-term operations. Venoco has an overall facility response plan that would be revised as needed for the Project and a safety plan would be developed by the contractor. During

construction, the staging area and laydown area would be on the existing access road to the west of the EOF. During short-term Project construction activities an alternate access route would be provided through the EOF. Vehicles could enter through the main gate and transit through the facility on the existing access road and exit the facility at the south end near the heliport. Since a safety plan would be developed and an alternate access route would be provided during short-term temporary Project construction activities, Project impacts would be less than significant.

f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly with a new cable. The replacement cable would follow the general route of the existing cable and would be sized as an in-kind replacement. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. All routing would be through existing easements. Public beach access is provided near the Project site at Bacara Resort/Haskell's Beach to the west of the Project area. The Santa Barbara Metropolitan Transit District (MTD) provides bus passenger service to the Project area. The closest bus stop to the Project area is at Hollister and Sandpiper Golf Course which is served by Lines 25 and 23 (Santa Barbara MTD 2012). Therefore, no Project impact to alternative transportation would result since the proposed replacement cable would either be located underground or underwater.

3.3.16.4 Mitigation and Residual Impacts

Mitigation.

T-1. Construction Traffic Control Plan. The Applicant shall prepare, provide funding for, and implement a Construction Traffic Control Plan for approval by the City. The Plan shall include, but not be limited to, the following:

- Provide traffic controls when lanes are closed due to construction, e.g., flaggers, detour signs, orange safety cones;
- Provide traffic controls at the EOF driveway and Hollister Road to allow for left-hand turning of project construction traffic in a safe manner, e.g., flaggers;
- Provide detours for emergency vehicles;
- Provide alternative routes for bicycles and pedestrians, if feasible;

- Notify the residents or owners of any properties within 1,000 feet and/or adjacent to the project route of the constructions schedule at least one week before construction in their vicinity;
- Provide access to the affected properties during the construction; if access to businesses is not possible during the work hours, provide lost sales compensation;
- Monitor for road damage from construction-related activities and compare the affected roads at the end of the construction to the preconstruction conditions; repair any visible construction-caused damage to restore the road to its pre-construction condition or better;
- No construction parking will occur in public parking lots (i.e., Haskells Beach and Ellwood/Mesa/Sperling Preserve Lots).
- For construction, Venoco shall limit truck deliveries and commuters/personnel to the west Hollister-Highway 1010 on and off ramps and shall not utilize the Storke Road-Highway 101 on/off ramps during peak hours (peak hours are defined as 6 a.m. to 8 a.m. and 4 p.m. to 6 p.m.).

Residual Impacts. With implementation of traffic MM T-1, there would be no residual impacts.

Cumulative Impacts. Project contributions to cumulative impacts on transportation and traffic would be considered less than significant with the implementation of the recommended mitigation.

3.3.17 Utilities and Service Systems

XVII. UTILITIES AND SERVICE SYSTEMS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, State, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

3.3.17.1 Environmental Setting

Water Utility

The average monthly water consumption at the EOF during recent years has been approximately 0.92 acre-feet. Potable water is purchased from the Goleta Water District which is the water purveyor for the City of Goleta. Fresh water is provided to Platform Holly from a water well located a short distance from the Ellwood Pier. Water is loaded into portable water "tote" tanks on an as-needed basis and transported to Platform Holly during regularly scheduled crew boat runs. Water consumption averages approximately 220,000 gallons per month (County 2011).

Sewer Utility

The EOF is not connected to the City of Goleta's sewer service. Sewage generated at the facility is routed to the onsite septic tank, which is emptied by a contract sanitary disposal company approximately once a month.

Solid Waste

Waste generated in the City of Goleta is handled at the South Coast Recycling and Transfer Station, where recyclable and organic materials are sorted out. The transfer Station processes 550 tons of waste per day. The remaining solid waste is disposed of at the Tajiguas Landfill. The 80-acre Tajiguas Landfill, located 26 miles west of Santa Barbara has a permitted capacity of 23.3 million cubic yards and is permitted to operate through 2020.

3.3.17.2 Regulatory Setting

Federal/State

No federal or State regulations are applicable to the Project's use of utility services.

Local

Goleta Municipal Code Section 8.10.200, Construction and Demolition Waste

To assist the City in maintaining compliance with the State Integrated Waste Management Act which requires the diversion of at least 50 percent of all waste generated, the City requires 50 percent of all construction and demolition waste to be recycled.

3.3.17.3 Impact Analysis

a) Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The Project is a replacement power cable that would be located underground or underwater. The Project would not require new water or wastewater treatment service. Therefore, the Project would not exceed the wastewater treatment requirements of the Central Coast RWQCB and no impact would result due to construction of the Project.

b) Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The proposed power cable replacement Project would not require additional water or wastewater treatment services. Therefore the Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities and impacts due to the construction of the Project would be less than significant.

c) Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The Project is part of repair and maintenance and would be sized as an in-kind replacement. Onshore and through the beach and surf zone, the cable would be laid using HDD and the cable would be placed 30 to 50 feet below the beach erosion zone. No modifications to the onshore or offshore transformers or switchgear are proposed and all routing would be through existing easements. Since onshore and through the beach and surf zone the cable would be underground, the Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities and no significant environmental impacts would result due to construction of the Project.

d) Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The proposed power cable replacement Project would not require water or wastewater treatment services. Therefore, no impacts to water supplies would result due to construction of the Project.

e) Would the Project 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?

The Project would replace the existing 46-year-old power cable between the EOF and Platform Holly. The proposed power cable replacement Project would not require water or wastewater treatment services. Therefore, no impacts related to wastewater treatment capacity would result due to construction of the Project.

f) Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Waste generated in the City of Goleta is handled at the South Coast Recycling and Transfer Station. At this facility recyclable and organic materials are sorted out and the remaining solid waste is disposed of at the Tajiguas Landfill. The 80-acre Tajiguas Landfill has a permitted capacity of 23.3 million cubic cards and is permitted to operate through 2020. The Project is a new power cable that would not generate waste necessitating disposal as part of long-term operations. The Project would generate waste during short-term, temporary construction activities. Anticipated construction waste includes spoils not used as backfill. Construction waste would be disposed of in

compliance with existing regulations and recycled to the extent feasible. Therefore, impacts to landfills due to Project construction would be less than significant.

g) Would the Project comply with federal, State, and local statutes and regulations related to solid waste?

As noted above in 3.3.17 (f), waste generated by the Project would be during short-term, temporary construction activities. Once constructed, the new power cable would not generate waste necessitating disposal. Construction waste would be disposed of in compliance with existing regulations and recycled to the extent feasible. Therefore, impacts due to Project construction would be less than significant.

3.3.17.4 Mitigation and Residual/Cumulative Impacts

Mitigation. The Project would not result in significant impacts to utilities or municipal services; therefore, no mitigation measures are required.

Residual Impacts. The proposed Project would have less than significant impact on existing municipal services. No mitigation is required and no residual impacts would occur.

Cumulative Impacts. The Project would not contribute to any cumulative impact on utilities and service systems.

3.3.18 Mandatory Findings of Significance

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE – **The lead agency shall find that a Project may have a significant effect on the environment and thereby require 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 mitigation measures 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 section 15065 of the State CEQA Guidelines):**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Does the Project have the potential to 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?	☐	☐	☒	☐
b) Does the Project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐
c) 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 past, present and probable future projects)?	☐	☐	☒	☐
d) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

3.3.18.1 Impact Analysis

a) Does the Project have the potential to 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?

The Project would replace the existing power cable with a new power cable within existing easements. The proposed replacement cable would be located underground or underwater within existing easements. As noted in the analysis above for Section 3, with the implementation of mitigation, no significant impacts were identified for cultural or biological resources.

b) Does the Project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

The Project would not introduce a new use into the area. The Project would replace the existing power cable with a new power cable. As noted in the analysis above for Section 3, the Project would comply with all applicable local, State, and federal environmental regulations; and therefore, no impacts would result.

c) 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 past, present and probable future projects)?

As noted in the analysis above, no significant Project impacts were identified for short-term construction or long-term operation. The Project would not add a new use to the area nor would it expand an existing use. The Project is part of repair and maintenance and would be sized as an in-kind replacement. Therefore, no impacts would result.

d) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The Project would not cause substantial adverse effects on human beings. The Project would not introduce a new use into the area. The Project would replace the existing power cable with a new power cable. As noted in the analysis above for Section 3, the Project would comply with all applicable local, State, and federal environmental regulations and would not result in any impacts to the public.

SECTION 4 – ENVIRONMENTAL JUSTICE POLICY

This section discusses the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the Project location. This analysis focuses on whether the Project has the potential to adversely and disproportionately affect area(s) of high-minority population(s) and low-income communities, thus creating a conflict with the CSLC's Environmental Justice Policy.

4.1 INTRODUCTION

On February 11, 1994, President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" designed to focus attention on environmental and human health conditions in areas of high-minority populations and low-income communities and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House 1994). The order requires the EPA and all other federal agencies (as well as State agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of the programs, policies, and activities on minority and/or low-income populations.

In 1997, the EPA's Office of Environmental Justice released the *Environmental Justice Implementation Plan*, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA's *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (1998). This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many State agencies have used the EPA's *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, the majority of California State agencies do not have guidance for incorporation of the environmental justice impact assessment into CEQA analyses. CARB has, for example, examined this issue and has received advice from legal counsel, by a memorandum entitled "CEQA and Environmental Justice," which states, in part:

> *[F]or the reasons set forth below, we would conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the CARB), the air pollution control districts, and general purpose land use agencies) undertakes or permits a Project or activity that may have a significant adverse impact on the physical environment. All public agencies in California are currently obligated to comply with CEQA, and no further legislation*

would be needed to include an environmental justice analysis in the CEQA documents prepared for the discretionary actions public agencies undertake.

Under AB 1553, signed into law in October 2001, the California Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. In 2003, OPR released an update to the General Plan Guidelines to incorporate the requirements of AB 1553.

4.1.1 CSLC Policy

To ensure equity and fairness in its own processes and procedures, the CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities." The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs. The policy is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately affected by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental issues affecting such populations. This discussion is provided in this document consistent with and in furtherance of the CSLC's Environmental Justice Policy.

4.1.2 Methodology

Analysis for the related environmental Issue area is provided below with respect to the effects that would represent conflicts with the CSLC's Environmental Justice policy, if those impacts would disproportionately affect minority or low-income populations or decrease these communities' employment and or economic base.

4.1.3 "Communities of Concern" Definitions

Minority Populations. According to the Council of Environmental Quality (CEQ) guidelines for environmental justice analysis:

Minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the majority population percentage in the general population or other appropriate unit of geographic analysis. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds (CEQ 1997).

As a conservative assumption, the Environmental Justice analysis uses the CEQ minority population definition to identify "communities of concern" within the Project study area.

Low-Income Populations. The CEQ's environmental justice guidance does not clearly set the demarcations at the census poverty thresholds, but states that "Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty." According to the EPA's *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses*, a minority or low-income community is disproportionately affected when the community would bear an uneven level of health and environmental effects compared to the general population. Further, the State CEQA Guidelines recommend that the "community of comparison" selected should be the smallest governmental unit that encompasses the impact footprint for each resource. Therefore, the "community of comparison" for the Project area was determined as the cities directly adjacent to the offshore activities. Minority and income data were obtained for all the "communities of comparison" identified.

4.2 SETTING

Since the Project area is located within the City of Goleta in Santa Barbara County, the communities of comparison for this analysis are defined as the City of Goleta and Santa Barbara County. The EOF is located between the Bacara Resort and Spa on the west and Sandpiper Golf Course on the east and south, with US-101 to the north. The Pacific Ocean and beach are located to the south of the facility beyond the golf course. There are no residential areas adjacent to the Project area.

4.2.1 Study Area Demographics

Information regarding racial diversity in these communities was derived from the 2010 Census Redistricting Data. Table 4.2-1 presents the racial composition for the City of Goleta and Santa Barbara County.

The City of Goleta is estimated to have a total population of 29,888. Of this population, it is estimated that 30.3 percent is in the minority population, while 69.7 percent of the population is white in origin. Santa Barbara County is estimated to have a total population of 423,895. Of this population, it is estimated that 30.4 percent is in the minority population, while 69.6 percent of the population is white in origin. The data provided in Table 4.2-1 indicate that these communities are predominately comprised of white (non-minority) individuals.

Table 4.2-1 U.S. Regional Demographic Comparison

County/ City	Total Population	White	Ethnicity of Minority Populations						
			Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other Race	Two or More Races	% of Minority Population
Goleta	29,888	69.7%	1.6%	0.9%	9.1%	0.1%	14.0%	4.6%	30.3%
Santa Barbara County	423,895	69.6%	2%	1.3%	4.9%	0.2%	17.4%	4.6%	30.4%

Source: 2010 Census Redistricting Data (Public Law 94-171) Summary File

Hispanic or Latino Populations. As an added measure to ensure that study area minority populations are adequately and fully identified, data were gathered for Hispanic origin. Hispanic is considered an origin, not a race, by the U.S. Census Bureau. An origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People that identify their origin as Spanish, Hispanic, or Latino may be of one race. Therefore, those who are counted as Hispanic are also counted under one or more race categories, as shown above. In the City of Goleta, 32.9 percent of persons identify themselves to be of Hispanic or Latino decent. Santa Barbara County has 42.9 percent of persons who identify themselves to be of Hispanic or Latino decent.

Low-Income Populations. The CEQ environmental justice guidance does not clearly set the demarcations at the census poverty thresholds, but states that "low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty."

Poverty level guidelines published by Department of Health and Human Services vary according to a household's size and composition. The most current poverty guidelines for 2012 reveal the level to be at $23,050 for a four-person family/household in the 48 contiguous States. The poverty thresholds provide one national measurement of income that is not adjusted for regional costs of living. For many federal and State programs serving low-income households, eligibility levels are significantly higher than the poverty level.

Information regarding income and poverty level was derived from the 2006-2010 American Community Survey 5-Year Estimates. Table 4.2-2 provides a summary of these findings for the City of Goleta and Santa Barbara County.

Table 4.2-2 Socioeconomic Comparison of Proximal City to Project Area as Compared to Santa Barbara County

	Goleta	Santa Barbara County
Per Capita Income	$32,073	$29,731
Median Household Income	$51,914	$60,078
Median Family Income	$62,982	$69,190
Percentage of Individuals Below Poverty Level	23.7%	28.5%
Percentage of Families Below Poverty Level	24.0%	26.6%

Source: 2006-2010 American Community Survey 5-Year Estimates.

4.3 ANALYSIS AND CONDITIONS

The analysis focuses primarily on whether the Project's impacts have the potential to affect area(s) of high-minority populations(s) and low-income communities disproportionately and thus would create an adverse environmental justice effect. For the purpose of the environmental analysis, the Project would be inconsistent with the CSLC's Environmental Justice Policy if it would:

- Have the potential to disproportionately affect minority and/or low-income populations adversely; or
- Result in a substantial, disproportionate decrease in employment and economic base of minority and/or low-income populations residing in the City of Goleta and/or Santa Barbara County.

4.3.1 Communities of Concern Identified Within the Project Study Area

According to the definitions in Section 4.1.3, no communities of concern have been identified within the Project area. Populations of adjacent communities (City of Goleta and Santa Barbara County) do not contain 50 percent or greater of minority populations or low income populations.

4.3.2 Air Quality and Greenhouse Gas Emissions

As discussed in Section 3.3.3, Project impact on air quality and GHG would be less than significant. Given the absence of a significant impact affecting the local communities, no inconsistency with the CSLC's environmental justice policy would result.

4.3.3 Aesthetics

As discussed in Section 3.3.1, Project impacts on aesthetics and visual quality would be less than significant. Given the absence of a significant impact affecting the local communities, no inconsistency with the CSLC's environmental justice policy would result.

4.3.4 Fisheries

As discussed in Section 3.3.15, Project impacts would be less than significant. Given the absence of significant impacts affecting the local communities, no inconsistency with the CSLC's environmental justice policy would result.

4.3.5 Onshore Resources

Implementation of the Project would neither result in any employment losses nor any reduction in local economic activity. Access to the beach and golf course would not be restricted during HDD drilling below ground. The proposed replacement power cable would be located underground or underwater as part of long-term operations. No new jobs would be created for continued operations or periodic maintenance. Given the absence of local employment or significant economic activity decreases, no inconsistency with the CSLC's environmental justice policy would result from the Project's economic effects.

SECTION 5 – MITIGATION MONITORING AND REPORTING PROGRAM

5.1 AUTHORITY

CEQA directs Lead Agencies to adopt, concurrent with adoption of an MND, a program for reporting or monitoring the changes that have been incorporated into the project or that have been made a condition of approval to mitigate or avoid significant environmental effects. This proposed Mitigation Monitoring Program (MMP) has been prepared to provide a summary and discussion of the ways in which the CSLC, as the Lead Agency for the Project, would ensure the measures identified in the MND are implemented, and identifies other agencies potentially having enforcement and compliance responsibilities. While the MMP may identify other public agencies with oversight or permitting jurisdiction, until the mitigation measures (MMs) have been completed, the CSLC would remain responsible for ensuring all measures are implemented in accordance with the MMP. Should the CSLC adopt the MND after considering it together with any comments received during the public review process, it would adopt a final MMP in compliance with CEQA. (See Pub. Resources Code § 21081.6, subd. (a); State CEQA Guidelines, §§ 15074, subd. (d), 15097.)

5.2 MITIGATION COMPLIANCE RESPONSIBILITY

Venoco is responsible for successfully implementing all the MMs in the MMP, and is responsible for assuring that these requirements are met by all of its construction contractors and field personnel. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional MMs may be imposed by applicable agencies with jurisdiction through their respective permit processes.

5.3 GENERAL MONITORING AND REPORTING PROCEDURES

The CSLC and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the project implementation process in coordination with Venoco. To oversee the monitoring procedures and to ensure the required measures are implemented properly, the environmental monitor assigned must be on site during any portion of project implementation that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the MMP are followed.

Site visits and specified monitoring procedures performed by other individuals will be reported to the assigned environmental monitor. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the

environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

5.4 MITIGATION MONITORING TABLE

The following mitigation monitoring table lists all mitigation measures identified in Section 3 of the MND. The table lists the following information, by column:

- Potential Impact;
- Mitigation Measure;
- Location;
- Monitoring/reporting action;
- Responsible agency; and
- Timing.

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
Air Quality	**APM-1. Measures to Reduce Dust Emissions from Construction.** Best available control measures shall be implemented to control PM10 generation during construction of the Project, inclusive of: • During construction, water trucks or sprinkler systems will be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption. • Minimize the amount of disturbed area and reduce onsite vehicle speeds to 15 miles per hour or less. • If importation, exportation, and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist or treated with soilbinder to prevent dust generation. • Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads. • After clearing, grading, earthmoving, over-	Onshore Project area	Compliance monitoring	City of Goleta	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	excavation is completed, the disturbed area is paved or otherwise developed so that dust generation will not occur. • The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure. • Prior to any land clearance, the Project Applicant shall include, as a note on a separate informational sheet to be recorded as required by the City of Goleta, these dust control requirements. All requirements shall be shown on grading and building plans.				
	APM-2. Measures to Reduce NOx Emissions from Construction. Diesel emissions shall be reduced during construction by implementation of the following measures: • Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission	Onshore Project area	Compliance monitoring	City of Goleta	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	standards should be used to the maximum extent feasible. • Diesel powered equipment should be replaced by electric equipment whenever feasible. • If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by the Environmental Protection Agency or CARB. • Construction equipment shall be maintained per the manufacturers' specifications. • Catalytic converters shall be installed on gasoline powered equipment, if feasible. • All construction equipment shall be maintained in tune per manufacturer's specifications. • The engine size of construction equipment shall be the minimum practical size. • The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. • Construction worker trips should be minimized by requiring carpooling and by providing lunch onsite.				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
Geology	**APM-3. Geotechnical Report for Horizontal Directional Drilling (HDD) Installation.** At least 30 days prior to start of HDD construction, Venoco shall submit a site-specific geotechnical report certified by a California registered Geotechnical Engineer to the CSLC staff for review and approval, in consultation with the City of Goleta's Building Official and the Coastal Commission staffs and, if the City of Goleta has the legal authority to require approval of the geotechnical report, subject to that approval by the City of Goleta's Building Official. At a minimum, the report shall include the following information: • Boring logs; • Confirmation of fitness of purpose of the HDD method; • Any other pertinent soil properties and parameters per California Building Code requirements; and • Any geotechnical design recommendations for safe HDD installation including any safeguards to minimize risk of inadvertent release of drilling fluids to the surface, groundwater, or ocean.	Onshore and Offshore Project areas	Compliance monitoring	CSLC and City of Goleta	Prior to construction
Nighttime lighting	**AES-1 Construction Night Lighting Plan.** Venoco shall prepare, and submit to California State Lands Commission and City of Goleta staffs for approval, a Construction Night Lighting Plan at least 2 weeks prior to construction. The Plan shall include at least the following measures:	Onshore Project area	Compliance monitoring	CSLC and City of Goleta	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	• Onshore and offshore lighting shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject area and prevent spill-over onto adjacent areas. Upward directed exterior lighting is prohibited. • Lighting fixtures shall be kept to the minimum number and intensity needed to ensure construction and worker safety. • Lighting shall be not directed towards any Environmentally Sensitive Habitat Area or any neighboring properties to the maximum extent feasible.				
Marine wildlife interactions	**BIO-1. Marine Mammal Monitoring. BIO-1** A. A 500-foot (152-meter) Minimum Safety Zone shall be established along the proposed cable alignment. B. Two National Oceanic and Atmospheric Administration Fisheries-approved marine mammal monitors shall be on watch on each Project vessel (cable-lay and support vessels) during offshore horizontal directional drilling (HDD) and cable-laying activities to monitor any marine mammals that enter the established Minimum Safety Zone. In the event a marine mammal approaches within 200 feet during the HDD operation, the monitors shall notify the onsite construction foreman and initiate a cease-work order; the monitors shall have	Offshore Project area	Compliance monitoring	CSLC	Throughout offshore installation period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	discretion to continue operations if they determine that the mammal is headed away from the HDD construction area. All sightings shall be documented in a monitor logbook. Photographs with a date stamp will also be taken as practical and included in the logbook. C. Cable-laying vessel speeds shall be limited to less than 2 nautical miles per hour (knots), with the speed of support vessels moderated to 3 to 5 knots, to minimize the likelihood of collisions with marine mammals and sea turtles. D. Propeller noise and other noises associated with cable laying activities shall be reduced or minimized (through reduction of vessel speed) to the extent possible.				
Terrestrial wildlife interactions and habitat damage	**BIO-2. Onshore Pre-construction Surveys**. A. Pre-construction surveys for special-status species and nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code section 3503 shall be conducted by a qualified biologist within 30 days prior to the commencement of Project-related activities. The Project biologist shall recommend if any additional mitigation is necessary to address changes since the original survey was done. In particular, pre-construction surveys should target monarch butterflies, California red-legged frog, tidewater goby, and white-tailed	Onshore project area	Completed. with results incorporated into MND	CSLC and City of Goleta	Completed

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	kites as they have high potential to occur within or directly adjacent to the Project area. Appropriate survey methods and timeframes acceptable to California State Lands Commission (CSLC) staff and the City of Goleta (for resources applicable to City jurisdiction) shall be established to ensure that chances of detecting the target species are maximized, i.e., October through February for monarch butterflies, March through June for nesting birds, or as determined by the consulting qualified biologist. B. If aggregations of monarch butterflies are detected within the adjacent areas, avoidance measures in compliance with the City of Goleta General Plan/Coastal Land Use Plan (City 2009) shall be implemented to ensure that aggregations of monarch butterflies are not disturbed. A minimum of a 100-foot buffer, as measured from the outer extent of the tree canopy, shall be established if monarch butterfly aggregations are detected. Construction activities within the designated buffer of the aggregation shall be halted until monarch butterflies have left the site and the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the monarch butterfly habitat.				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	C. If nesting birds are detected, avoidance measures in compliance with the City General Plan and/or County policies shall be implemented to ensure that nests are not disturbed until after young have fledged. Construction activities within the designated buffer of the nest shall be halted until the consulting qualified biologist has determined that the resumption of construction shall not adversely affect the nest. In the event that other listed species are encountered, consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Game (CDFG) and City of Goleta (when work is within their jurisdiction) must be initiated before continuing with work. D. The results of the preconstruction surveys, including graphics showing the locations of any nests detected, and any avoidance measures implemented for special-status species, shall be submitted to CSLC staff, CDFG, USFWS, and the City of Goleta within 14 days of completion of the surveys to document compliance with applicable State and federal laws.				
	BIO-3. Onshore Biological Monitoring. A. Prior to the start of construction, an Employee Environmental Awareness training program approved by California State Lands Commission (CSLC) staff and the City of Goleta shall be used	Onshore project area	Compliance monitoring	CSLC and City of Goleta	Throughout onshore construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	to train all onsite Project personnel (Applicant employees and contractors) relative to the environmental protection measures of the Project. B. A City of Goleta-approved biological monitor (Project biologist and biological monitors) shall be present during all onshore construction (including during borings) for the portion of the proposed Project located within the jurisdiction of the City of Goleta (the Ellwood Onshore Facility [EOF] Project site and the onshore horizontal directional drilling [HDD] cable alignment). The Project biologist and the Project engineer shall clearly designate "sensitive resource zones" on project maps, construction plans, and at the construction site, consistent with the preconstruction surveys conducted for the presence of sensitive species. Sensitive resource zones are defined as areas where construction would be limited to a 15- to 30-foot corridor, depending on the particular construction requirements, to avoid impacts to special-status biological resources. Similarly, staging and storage areas shall not be placed in areas where sensitive resources are present or nearby, under the direction of the Project biologist. The Project biologist shall ensure the following: 1. Washing of any Project equipment is not				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	allowed near sensitive biological resources. An area designated for washing functions shall be identified on the plans and submitted to the related agencies prior to the Project mobilization. All waste, garbage, and trash created during the Project shall be kept in covered containers and will be removed from the Project site and disposed of in accordance with local and State regulations. 2. Removal of waste occurs as required and does not attract wildlife. 3. Construction personnel do not feed or harass wildlife for the Project duration. 4. Construction occurs during the dry season of the year (i.e., April 15 to November 1) unless an agency-approved erosion control plan, incorporating appropriate best management practices identified in the U.S. Environmental Protection Agency's guidelines for construction site runoff control is in place and all measures therein are in effect. 5. All machinery that cannot be stored offsite, e.g., HDD equipment, shall be stored and fueled only within designated locations approved by the City of Goleta. 6. Disposal of or temporary placement of excess fill or other construction materials are prohibited within 50 feet from the top of the				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	banks for all drainages and other areas known to support special-status species. 7. All HDD work stops and the related plans are properly implemented, under the Project biologists' oversight in the event of a frac-out or construction spill into the Bell Canyon Creek drainage. C. If any special-status species are observed during monitoring, or if Project-related biological resource-focused conditions of approval are violated, the biological monitor shall have the authority to halt construction activities to avoid damaging sensitive resources or violating applicable laws. The Bell Canyon Creek corridor will be inspected during construction at a frequency acceptable to the Project biologist to ensure that possible HDD drilling mud leaks are identified. In the event that a listed species is encountered, authorization from the U.S. Fish and Wildlife Service and California Department of Fish and Game (CDFG), plus the City of Goleta for those portions of the Project located within the jurisdiction of the City of Goleta, must be obtained before continuing with work. If nesting birds are detected, avoidance measures in compliance with the City General Plan and procedures shall be implemented to ensure that nests are not disturbed until after young have fledged. The				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	results of the monitoring, including graphics showing the locations of any nests detected, and any avoidance measures implemented, shall be submitted to the CSLC staff, City of Goleta and CDFG within 14 days of completion of the inspections to document compliance with applicable State and federal laws.				
	BIO-4. Highly Visible Fencing. Limits of work shall be established in the field with highly visible construction fencing to prevent encroachment into the native habitats adjacent to Project sites. The fencing shall be installed prior to issuance of a development permit. If the fencing is installed during the winter months, it shall be raised to allow for the migration of California red-legged frogs through the Project area. The City of Goleta shall inspect and verify fencing installation for those portions of the proposed Project located within the jurisdiction of the City of Goleta.	Onshore project area	Compliance Monitoring	CSLC	Throughout construction period
Spill and HDD fluid release	**BIO-5. Spill Response and Horizontal Directional Drilling (HDD) Fluid Release Monitoring and Contingency Plan.** A Spill Response and HDD Fluid Release Monitoring and Contingency Plan (plan) shall be completed and include measures for training, monitoring, worst-case scenario evaluation, equipment and materials, agency notification and prevention, containment, clean up, and disposal of released drilling muds. Preventative measures would include geotechnical	EOF Project Site	Compliance Monitoring	CSLC	Throughout HDD construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	investigations to determine the most appropriate HDD depth and drilling mud mixture. The plan shall include, but not be limited to, the following: • The plan shall be submitted to all respective jurisdictions. • In the event of a frac-out or any incident that affects the Bell Canyon Creek drainage, all work in the area shall cease. • Monitoring of the entry and exit pits after construction shall be conducted to determine that excavated areas are restored to pre-construction contours. • Monitoring by a minimum of two biological monitors shall occur throughout the drilling operations to ensure swift response in the event of a release (frac-out). • Methods for detecting and curtailing the accidental release of that fluid shall be developed and shall be implemented during the HOD operations. Drilling pressures shall be closely monitored so that they do not exceed those needed to penetrate the formation. In addition, the HDD operator shall continuously monitor mud returns at the exit and entry pits to ascertain that mud circulation has not been lost. Spotters shall follow the progress of the drill bit during the pilot hole operation, and reaming and pull back operations.				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	• In the event of loss of circulation, without mud surfacing, the mud engineer shall evaluate the weight and viscosity of the fluid and mix in additives to seal off the crossing hole and regain circulation. Similar analysis of the mud shall be performed if surface releases are observed. Any spills shall be contained to the extent feasible in accordance with approved plans. Containment shall be accomplished through construction of temporary berms/dikes and use of slit fences, straw bales, absorbent pads, straw wattles, and plastic sheeting. Clean up shall be accomplished with plastic pails, shovels, portable pumps, and vacuum trucks. Should the release be onshore in upland or aquatic/creek habitat then the following will be required and presented in more detail in the plan: • Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud. • Consult with the City of Goleta, California Coastal Commission (CCC), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) regarding the next appropriate actions among				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	the following: ○ A mobile vacuum truck will be used to pump the drilling mud from the contained area and recycled to the return pit. ○ The drilling mud will be left in place to avoid potential damage form vehicles entering the area. In the event of an unanticipated fluid release and subsequent adverse impacts to offshore coastal waters then the following will be required: • Venoco shall immediately erect an isolation/containment environment (underwater boom and curtain). • Venoco shall consult with the California State Lands Commission staff and CCC, CDFG's Office of Spill Prevention and Response, and National Oceanic and Atmospheric Administration Fisheries regarding the next appropriate action among the following: ○ Monitor the release for 4 hours to determine if the drilling mud congeals. ○ If drilling mud congeals, take no other action that would potentially suspend sediments in the water column. • If the release becomes excessively large, a				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	spill response team would be called in to contain and clean up excess drilling mud in the water. Phone numbers of spill response teams in the area will be on site.				
	BIO-6. Habitat Restoration Plan In the event of an unanticipated fluid release and subsequent adverse impacts to onshore upland habitat or onshore, native aquatic/creek habitat, a site-specific Habitat Restoration Plan shall be prepared for review and approval by applicable regulatory agencies, including, but not limited to, the CCC, CDFG, and the City of Goleta. If a Habitat Restoration Plan is required, an installation security and a separate performance security shall be immediately posted by the Applicant to the City or County, depending on where the restoration occurs, for (1) tree replacement and mitigation and (2) restoration, whichever applies. The installation security shall be equal to the value of installation and/or replacement of all required items. The performance securities shall be equal to the value of maintenance period of a minimum of 3 years and shall be maintained by the City or County, whichever is responsible for overseeing the restoration/tree replacement, for the required maintenance period of at least 3 years. The installation securities shall be released upon satisfactory installation of planted and/or seeded stock. The performance securities shall be released once the performance standards				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	are achieved, or after a minimum of 3 years.				
	BIO-7. Anchoring Plan. Venoco shall submit a Final Anchoring Plan to California State Lands Commission (CSLC) staff for review and approval at least 2 weeks prior to commencement of Project activities. The Anchoring Plan shall include, at a minimum, the following elements: • A list all of the vessels that will anchor during the Project and the number and size of anchors to be set; • Maps showing the anchoring sites identified during pre-construction surveys to identify anchor seclusion zones and ensure that all anchors shall avoid any rocky habitat, kelp beds, submerged cultural resources, and impacts to recreational and commercial boaters; • Descriptions of navigation equipment that would be used to ensure anchors are accurately set and of the anchor handling procedures that would be followed to prevent or minimize anchor dragging; and, • A requirement to be included in appropriate contracts for the Project that contractors shall, whenever feasible, use appropriate installation techniques and procedures described in the Plan that will minimize or avoid environmental impacts such as turbidity and anchor scarring.	Offshore Project area	Compliance Monitoring	CSLC	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	BIO-8. Post-Construction Seafloor Survey and Remediation. Venoco shall perform a post-construction remotely operated vehicle or diver video survey along the length of the completed facility, with voice overlay, to verify the as-laid condition of the cable. The survey shall also provide a graphic record of the work accomplished and confirm seafloor cleanup and site restoration including anchor locations.	Offshore Project area	Compliance Monitoring	CSLC	Post-construction period
Discovery of previously unknown resource	**CUL-1. Construction Monitoring.** Onshore subsurface excavations within the Project area shall be monitored by a qualified archaeologist and a Native American monitor from a culturally affiliated tribe recognized by the Native American Heritage Commission for the Project area. In the event that archaeological resources are encountered, work shall be stopped immediately or redirected away from the resources. The California State Lands Commission is the point of contact for unanticipated discoveries and shall be notified immediately to determine further actions that may include recordation, evaluation and data recovery or avoidance through preservation in place. After construction is complete, the Project archaeologist shall prepare a construction monitoring report and submit it to the CSLC, City of Goleta and the Central Coast Information Center.	EOF Project Site	Compliance Monitoring	CSLC and City of Goleta	During subsurface construction activities.
	CUL-2. Unanticipated Archaeological Resources. Should any previously unknown archaeological				

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	resources be discovered during construction, work will stop within 100 feet of the find until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with California State Lands Commission (CSLC) staff. If human remains are discovered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. Venoco will notify the county coroner immediately in compliance with State Health and Safety Code section 7050.5 and work in the vicinity may not resume until the coroner has made the necessary findings as to origin and circumstances of the death. The CSLC shall also be notified immediately. If the remains are determined by the coroner to be of Native American origin, the coroner will notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would then contact the most likely descendant of the deceased Native American, who would make a recommendation on how to treat or dispose of the remains with appropriate dignity as set forth in Public Resources Code section 5097.98.				
	HAZ-1. Preparation of a Critical Operations and Curtailment Plan (COCP). Venoco shall submit a Final COCP to CSLC staff for review and approval at least 2 weeks prior to commencement of Project activities. The COCP shall define the limiting conditions of sea state, wind, or any other weather	Offshore Project area	Compliance Monitoring	CSLC	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	conditions that exceed the safe operation of offshore vessels, equipment, or divers in the water; that hinder potential spill cleanup; or in any way pose a threat to personnel or the safety of the environment. The COCP shall provide for a minimum ongoing 5-day advance favorable weather forecast during offshore operations. The plan shall also identify the onsite person with authority to determine critical conditions and suspend work operations when needed.				
Water Quality	**WQ-1 Water Quality/Stormwater Pollution Prevention Plan.** Venoco shall prepare a plan to prevent adverse impacts to nearby waterways and riparian areas associated with construction. The plan shall include, but not necessarily be limited to, a description of Best Management Practices (BMPs), including erosion and sedimentation prevention measures, spill prevention measures, spill containment measures and monitoring requirements. Measures shall include, but not be limited to, such BMPs as hay bales, silt fence, waddles and other measures determined appropriate for erosion control within areas of disturbance. General permit requirements for construction site operators to control waste such as discarded building materials, truck washout, chemicals, litters, etc., and sanitary waste at a construction site are to be observed. The Plan shall be submitted to the City of Goleta for review and comment. In the presence of respective City and County representatives, the Applicant shall review the	Onshore Project area	Compliance Monitoring	CSLC	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	Water Quality/Storm Water Pollution Prevention Plan with appropriate contractor personnel.				
Noise	**N-1. Noise Reduction Plan.** The Applicant shall prepare a noise reduction plan, which shall be approved by the City. The Plan shall include, but not be limited to, the following measures: • Notify residents and landowners about the planned construction activities near their residence/land at least one week before construction at that location. • Ensure that construction activities are reduced during the maximum extent feasible during the Holidays. • Ensure that all internal combustion engines are properly maintained and that mufflers, silencers, or other appropriate noise-control measures function properly.				
Traffic	**T-1 Construction Traffic Control Plan.** The Applicant shall prepare, provide funding for, and implement a Construction Traffic Control Plan for approval by the City. The Plan shall include, but not be limited to, the following: • Provide traffic controls when lanes are closed due to construction, e.g., flaggers, detour signs, orange safety cones; • Provide traffic controls at the EOF driveway and Hollister Road to allow for left-hand turning of project construction traffic in a safe manner, e.g., flaggers;	Onshore Project area	Compliance Monitoring	CSLC	Throughout construction period

Table 5.4-1. Mitigation Monitoring Program

Potential Impact	Applicant Proposed Measure / Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	• Provide detours for emergency vehicles; • Provide alternative routes for bicycles and pedestrians, if feasible; • Notify the residents or owners of any properties within 1,000 feet and/or adjacent to the project route of the constructions schedule at least one week before construction in their vicinity; • Provide access to the affected properties during the construction; if access to businesses is not possible during the work hours, provide lost sales compensation; • Monitor for road damage from construction-related activities and compare the affected roads at the end of the construction to the preconstruction conditions; repair any visible construction-caused damage to restore the road to its pre-construction condition or better; • No construction parking will occur in public parking lots (i.e., Haskells Beach and Ellwood/Mesa/Sperling Preserve Lots). • For construction, Venoco shall limit truck deliveries and commuters/personnel to the west Hollister-Highway 1010 on and off ramps and shall not utilize the Storke Road-Highway 101 on/off ramps during peak hours (peak hours are defined as 6 a.m. to 8 a.m. and 4 p.m. to 6 p.m.).				

SECTION 6 – MND PREPARATION SOURCES AND REFERENCES

This Proposed MND was prepared by the staff of the CSLC's Division of Environmental Planning and Management (DEPM). The analysis in the MND is based on information provided on behalf of Venoco and information in the References listed in Section 6.3 that was independently reviewed by DEPM staff.

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APPENDIX A

CONSTRUCTION SCHEDULE

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT REPORT

APPENDIX C
CULTURAL RESOURCES SHIPWRECK DATA AND SACRED LANDS FILE DATABASE SEARCH

APPENDIX D
FUGRO DESKTOP STUDY

APPENDIX E
AIR QUALITY AND GREENHOUSE GAS EMISSIONS TECHNICAL APPENDIX