

TOPANGA LAGOON RESTORATION PROJECT

Draft Environmental Impact Report

Prepared for
California Department of Parks and Recreation

February 2024



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- C Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration MN 2023
- D Geotechnical Investigation Report Visitor Services at the Topanga Ranch Motel Site, Topanga Lagoon Restoration Project, Malibu, CA (GeoPentech 2022)
- E Topanga Lagoon Restoration Alternatives Analysis Report (Moffatt & Nichol June 2022) and Hydraulics, Sediment Transport and Sea Level Rise Analyses (Moffatt & Nichol 2022)
- F Parking Analysis Technical Memo (RCDSMM 2023) UPDATED 11/13/23
- G Sediment Beneficial Reuse Study (Moffatt & Nichol 2022), and Beneficial Reuse Soil Characterization (GeoPentech 2022)
- H Surf Quality Impact Assessment for Topanga Lagoon Restoration (Integral 2023)
- I Wastewater Management Options Conceptual Design and Construction Summary, Topanga Lagoon Restoration Project (EPD 2023)
- J Draft Construction Traffic and Emergency Management Plan (LLG 2023)
- K Biological Resources Assessment (RCDSMM 2023)
- L Conceptual Habitat Restoration Management Plan (ESA 2023)
- M Topanga Lagoon Restoration Ecohydrology Report: Fish Passage, Fish Habitat Suitability and Habitat Zone Elevations (ESA 2022)
- N Air Quality, Greenhouse Gas Emissions, and Energy Data, Modeling, and Noise Calculations (ESA 2023)
- O Structures Preliminary Geotechnical Report Pacific Coast Highway Bridge over Topanga Lagoon Bridge No. 53-0035 Topanga Lagoon Restoration Project Malibu, California (GeoPentech 2022)
- P Topanga Lagoon Restoration Project Water and Sediment Quality Study Technical Report (ESA 2023) and Water Quality Pre-Construction Baseline Report (RCDSMM and Bay Foundation 2022)
- Q Santa Monica Mountains Land Use Plan and Topanga General Plan Consistency Table (Winecki 2022)
- R Topanga Lagoon Final Transportation Assessment (LLG 2023)

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
1992 Act	Energy Policy Act of 1992
2020 CCAP	Unincorporated Los Angeles County Community Climate Action Plan 2020
2045 CAP	Draft 2045 Climate Action Plan
2045 RTP/SCS	2020–2045 Regional Transportation Plan/Sustainable Communities Strategy
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily traffic
AFV	alternative fuel vehicle
AHPA	Archaeological and Historic Preservation Act
Air Basin	South Coast Air Basin
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
ALUCP	airport land use compatibility plan
AOWTS	advanced on-site wastewater treatment system
APE	Area of Potential Effects
AQMP	air quality management plan
ARMR	Archaeological Resources Management Report
ASBS	Areas of Special Biological Significance
ATSP	Active Transportation Strategic Plan
BACT	Best Available Control Technology
Basin Plan	Water Quality Control Plan for the Los Angeles Region
BERD	Built Environment Resources Directory
bgs	below ground surface
BMI	benthic macroinvertebrate
BMP	best management practice
BP	Before Present
BSA	Biological Study Area
BTU	British thermal units
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Office of Emergency Services

Acronym/Abbreviation	Definition
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEMA	California Emergency Management Agency
CALGreen	California Green Building Standards
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	census-designated place
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEC	California Energy Commission
CEO OEM	Chief Executive Office, Office of Emergency Management
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHBC	California Historical Building Code
CHL	California Historical Landmark
CHP	California Highway Patrol
CHRAMP	Conceptual Habitat Restoration and Adaptive Management Plan
CIDH	cast-in-drilled-hole
cm	centimeters
CMU	concrete masonry unit
CNDDB	California Natural Diversity Database
CNEL	the community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO Protocol	Transportation Project-Level Carbon Monoxide Protocol
CO ₂	carbon dioxide

Acronym/Abbreviation	Definition
CO ₂ e	carbon dioxide equivalent
Coastal Act	California Coastal Act of 1976
Construction General Permit	General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities
County	County of Los Angeles
County General Plan	Los Angeles County General Plan 2035
CPUC	California Public Utilities Commission
CRAM	California Rapid Assessment Method
CRM	Coastal Resources Management, Inc.
CRPR	California Rare Plant Rank
cSEL	accumulative sound exposure level
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CY	cubic yard(s)
CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibel
DBH	County of Los Angeles Department of Beaches and Harbors
DPM	diesel particulate matter
DPS	distinct population segment
DPW	County of Los Angeles Department of Public Works
Draft EIR	draft environmental impact report
DSH	diameter at standard height
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EFH	essential fish habitat
EIR	environmental impact report
EISA	Energy Independence and Security Act of 2007
EMFAC2021	on-road vehicle emissions factor model
EO	Executive Order
ESGVAP	East San Gabriel Valley Area Plan
ESHA	Environmentally Sensitive Habitat Area
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
Final EIR	final environmental impact report
FR	<i>Federal Register</i>
FTBMI	Fernandeño Tataviam Band of Mission Indians

Acronym/Abbreviation	Definition
GHG	greenhouse gas
gpd	gallons per day
GPM	general protection measure
GSA	groundwater sustainability agency
GTIC	Gabrielino/Tongva Indians of California Tribal Council
GVWR	gross vehicle weight rating
GWP	global warming potential
H&SC	Health and Safety Code
HABS	Historic Architectural Building Survey
HAP	hazardous air pollutant
HAPC	Habitat Area of Particular Concern
HCP	habitat conservation plan
HCR	Harvest Control Rule
HFC	Hydrofluorocarbon
HMBP	Hazardous Materials Business Plan
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HRAMP	Habitat Restoration and Adaptive Management Plan
HRMTP	Historical Resources Monitoring and Treatment Plan
HSC	California Health and Safety Code
HTL	high-tide line
ITM	Inland Testing Manual
kWh	kilowatt-hour(s)
LAAC	Los Angeles Athletic Club
LACFCD	Los Angeles County Flood Control District
LACFD	Los Angeles County Fire Department
LACM	Natural History Museum of Los Angeles County
LACSD	Los Angeles County Sanitation Districts
LASAN	City of Los Angeles Sanitation and Environment
LASD	Los Angeles County Sheriff's Department
LBP	lead-based paint
LBV	least Bell's vireo
LCP	Local Coastal Program
LID	low-impact development
LIP	Local Implementation Program
LOS	level of service
LRA	Local Responsibility Area
LST	localized significance threshold
LUP	Land Use Plan
LUST	leaking underground storage tank

Acronym/Abbreviation	Definition
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
MHW	Mean High Water
MLD	Most Likely Descendant
MLLW	mean lower low water
MLPA	Marine Life Protection Act
mm	millimeters
MMPA	Marine Mammal Protection Act
MMTCO _{2e}	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MPRSA	Marine Protection, Research, and Sanctuaries Act
MRCA	Mountains Recreation and Conservation Authority
MS4	municipal separate storm sewer (drain) system
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSL	mean sea level
MTCO _{2e}	metric tons of carbon dioxide equivalent
MW	megawatt(s)
MWh	megawatt-hour(s)
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NAVD 88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
OAERP	Operational Area Emergency Response Plan
OEHHA	Office of Environmental Health Hazard Assessment

Acronym/Abbreviation	Definition
OFFROAD	off-road emissions factor
OGR	Olivella Grooved Rectangle
OHP	California Office of Historic Preservation
OHWM	ordinary high-water mark
OPR	Governor's Office of Planning and Research
OSHA	U.S. Occupational Safety and Health Administration
OWTS	on-site wastewater treatment system
PCH	Pacific Coast Highway
PFC	perfluorocarbon
PM	particulate matter
PM ₁₀	particulate matter 10 microns (micrometers) or less in diameter
PM _{2.5}	particulate matter 2.5 microns (micrometers) or less in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Proposed Project	Topanga Lagoon Restoration Project
RCDSMM	Resource Conservation District of the Santa Monica Mountains
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RFS	Renewable Fuel Standard
RHA	Rivers and Harbors Act
ROW	right-of-way
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SAP	Sampling and Analysis Plan
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	California Historical Resources Information System – South Central Coastal Information Center
SC-DMMT	Southern California Dredged Material Management Team
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDI	subsurface drip irrigation
SEA	Significant Ecological Area
SERA	Significant Environmental Resource Area

Acronym/Abbreviation	Definition
sf	square feet
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	short-lived climate pollutant
SLF	Sacred Lands File
SLR	sea level rise
SMMNRA	Santa Monica Mountains National Recreation Area
SO ₂	sulfur dioxide
SO ₄ ²⁻	sulfates
SoCalGas	Southern California Gas Company
SPL	sound pressure level
SR	State Route
SRA	State Responsibility Area
Standards	<i>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i>
State Emergency Plan	State of California Emergency Plan
State Parks	California Department of Parks and Recreation
SUSMP	Standard Urban Stormwater Mitigation Plan
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCB	Topanga Cayon Boulevard
Title 24 standards	California Building Energy Efficiency Standards
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
TNW	traditional navigable water
TPZ	tree protected zone
TSP General Plan	Topanga State Park General Plan
UNFCCC	United Nations Framework Convention on Climate Change
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Acronym/Abbreviation	Definition
UST	underground storage tank
VdB	vibration velocity decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WBWG	Western Bat Working Group
WGS84	World Geodetic System 1984
WOTUS	waters of the United States
WRA	WRA, Inc.
WSQSTR	Water and Sediment Quality Study Technical Report
XSIC	Xerces Society for Invertebrate Conservation
ZEV	zero-emissions vehicle

EXECUTIVE SUMMARY

Topanga Lagoon Restoration Project Draft Environmental Impact Report

ES.1 Introduction

The California Department of Parks and Recreation (State Parks) has prepared this environmental impact report (EIR) in coordination with County of Los Angeles (County) and the California Department of Transportation (Caltrans). This EIR assesses the potential effects of implementing the Topanga Lagoon Restoration Project (hereinafter referred to as “Proposed Project” and refers to the range of alternatives being considered for implementation). State Parks is the lead agency under the California Environmental Quality Act (CEQA). This draft environmental impact report (Draft EIR) has been prepared in accordance with CEQA (Public Resources Code Sections 21000–21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387).

The information contained in this EIR may be used by federal agencies involved in permitting or funding this project to fulfill their responsibilities under federal environmental statutes, including the National Environmental Policy Act, and to support federal consultations under the Endangered Species Act (ESA) and the National Historic Preservation Act.

The Proposed Project involves the expansion of the Topanga Creek and lagoon ecosystem, replacement of the existing Pacific Coast Highway (PCH) bridge (SR-1 #53-0035) with a longer bridge to accommodate the lagoon expansion, development of visitor services in lower Topanga State Park, and the relocation of County of Los Angeles Department of Beaches and Harbors (DBH) facilities on Topanga Beach that are threatened by sea level rise (SLR). The Proposed Project includes construction of new visitor services at the northwest corner of the intersection of PCH and Topanga Canyon Boulevard (TCB), referred to as the “Gateway Corner.” The Proposed Project also evaluates beneficial reuse options for excavated sediment and options for on and off-site wastewater disposal.

The Proposed Project would facilitate implementation of an integrated, multiagency plan that would improve coastal access by redesigning existing visitor services to improve parking availability and configuration, pedestrian beach access routes, and emergency facilities such as the lifeguard and public restroom building and helicopter pad on Topanga Beach. In accordance with CEQA Guidelines Section 15123, this Executive Summary provides an overview of the Proposed Project and its environmental effects.

ES.2 Project Objectives

Based on feedback from community engagement meetings and other stakeholder input received since 2001, State Parks has identified the following objectives for the Proposed Project:

- Expand the lagoon ecosystem to improve estuarine hydrologic functions and to protect endangered species.
- Enhance coastal resilience for essential facilities in the Project area.
- Optimize beneficial reuse of excavated sediment by increasing sediment replenishment via nearshore placement and long-term conveyance increased by a wider bridge to the littoral cell¹ while maintaining the integrity of the surf break.
- Protect the surf break and beach recreation.
- Improve water quality and restore coastal wetland habitat and species diversity within the Topanga Creek watershed.
- Increase safety and coastal access for pedestrians and cyclists, including for visitors with disabilities.
- Improve evacuation and emergency service routes through the Project area.
- Improve and enhance coastal access and recreational facilities.
- Manage and maintain the lagoon ecosystem consistent with the guidelines in the Topanga State Park General Plan.
- Replace the narrow 1933 PCH bridge to accommodate lagoon restoration and recovery of anadromous steelhead trout.
- Establish a visitor-serving “Gateway Corner” at the northwest corner of the intersection of PCH and TCB, consistent with the Topanga State Park General Plan goal of providing a coastal gateway to the park.
- Manage historic and archaeological resources in the Project area consistent with the guidelines in the Topanga State Park General Plan.

ES.3 Project Description

ES.3.1 Project Location and Setting

The Proposed Project is located along the Pacific Ocean coastline at the base of the Santa Monica Mountains of unincorporated Los Angeles County, California, within the Santa Monica Mountains National Recreation Area, a large area of open space and parklands on the ancestral lands of the Gabrielino/Tongva people. Four alternatives were identified to restore Topanga Lagoon: The No Project/No Build–Managed Decline Alternative (Alternative 1) and three Build Alternatives (Alternatives 2–4). Each alternative is evaluated at an equal level of detail in the Draft EIR.

¹ *Sediment cells*, also known as *littoral cells*, are reaches of shoreline that encompass the intertidal and nearshore movement of sediment. A sediment cell basically consists of zones of erosion, transport, and deposition.

These alternatives allow consideration of the benefits and challenges of the different restoration approaches. A final “preferred” alternative will be selected at the end of the environmental review process that best meets the Project’s needs while minimizing adverse environmental impacts. The Proposed Project alternatives provide different road maps to restoring the lagoon area and adjacent seasonally wetted and riparian habitats, buffering resources from future SLR, providing visitor-serving functions, and meeting the Project objectives. The commonalities between the Build Alternatives is discussed after the following overview of each alternative.

After receiving comments from the public, project stakeholders, and reviewing agencies, a final EIR will be prepared. State Parks may prepare additional environmental or engineering studies to address project comments. The Final EIR will include responses to comments received on the Draft EIR and will identify the preferred alternative. State Parks will consider and certify before approving the Proposed Project that the EIR has been completed in compliance with CEQA, and that the EIR reflects State Parks’ independent judgment and analysis (CEQA Guidelines Section 15090(a)).

This EIR has identified and analyzed a range of possible Project alternatives. Each alternative includes multiple components that have been fully analyzed for potential environmental impacts. As State Parks considers which alternative to approve, some components from multiple alternatives may be combined to create a hybrid alternative. These could include inclusion of more than one wetted lagoon channel on the west side; road alignment and Topanga Ranch Motel configurations; implementation of living shoreline elements; alternative emergency access routes to the beach; and final placement of relocated beach facilities and helipad.

ES.3.2 Alternative 1: No Project/No Build–Managed Decline

Under the No Project/No Build–Managed Decline Alternative (Alternative 1), the Project would not be implemented. Existing conditions throughout the Project area would continue to deteriorate. Over time, emergency reactive measures would be required to maintain public safety and functionality of the facilities as feasible.

Under Alternative 1, there would be no change to the lagoon footprint, which is constrained by the narrow bridge span width, and no new bridge would be constructed. Habitat quality in the lagoon and riparian areas would continue to degrade because of increased non-native vegetation, accumulated litter and debris, water quality degradation, and other adverse effects of unauthorized human usage of the site. No improvements to riparian or upland habitat would occur.

The currently empty and unusable Topanga Ranch Motel structures would continue to deteriorate, and the existing leased buildings, including their nonconforming on-site wastewater systems (AOWTS), would remain in their current operation. However, at some point in the future, the nonconforming OWTS would become impermissible subject to future restriction or cessation as a result of their progressive failure, as occurs with all AOWTS over time. At some point in the future, the buildings would be either removed, substantially restored, or rebuilt to conform with building codes.

ES.3.3 Alternative 2: Maximum Lagoon Habitat

Under Alternative 2, the maximum increase in lagoon, wetland, and riparian bank habitats would occur (**Figures ES-1a through ES-1c**). Based on the 30 percent design, the restoration would in 9.5 wetted acres, with 23 riparian/transitional upland acres restored and beach expansion to 4.39 acres in the area by the lagoon. Overall, the sandy beach area throughout the Project area would expand by at least one acre. All existing structures on the north side of PCH would be removed.

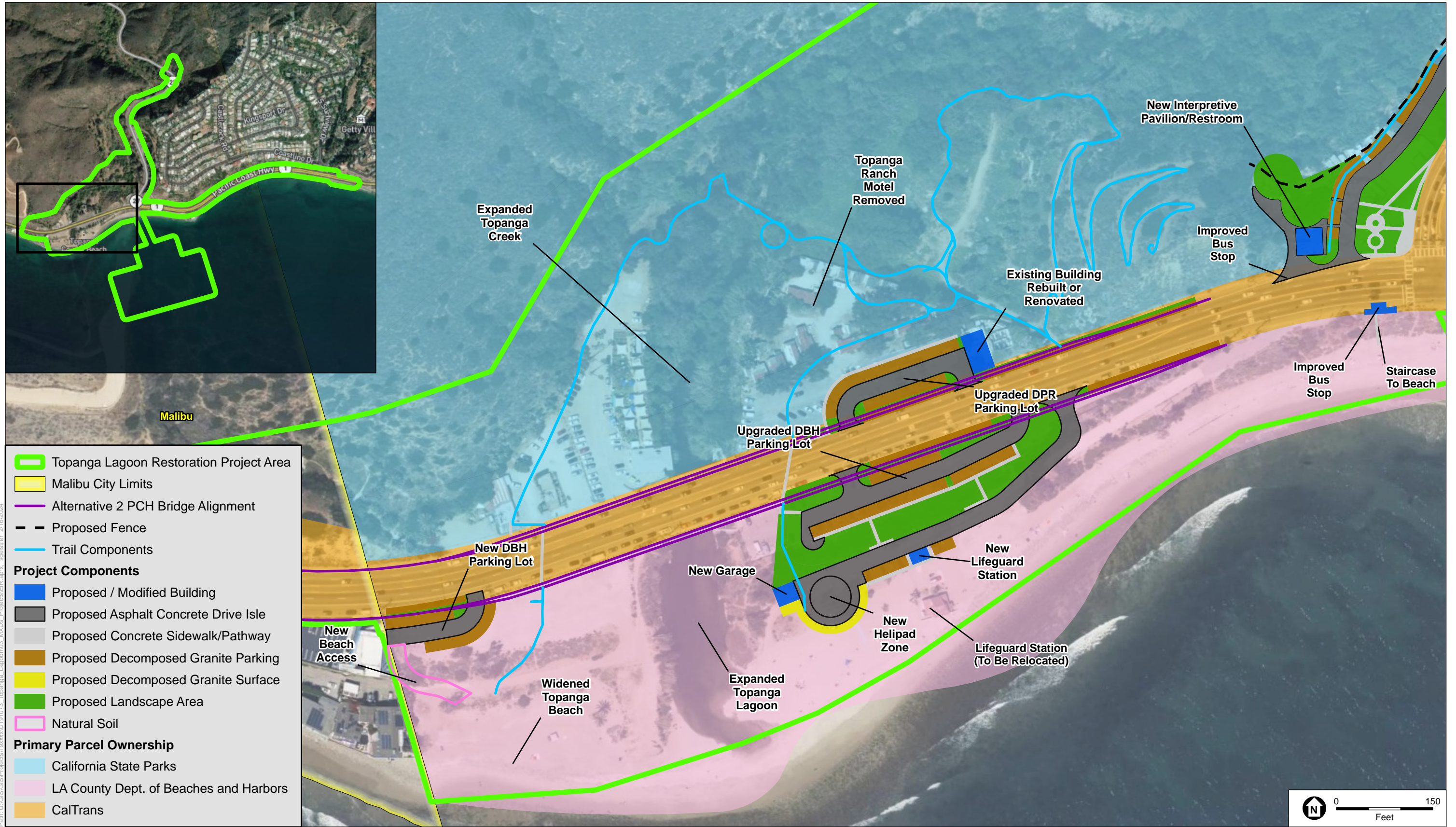
Alternative 2 includes restoration of the existing Topanga Lagoon and expansion of the floodplain. This alternative would lengthen the Caltrans bridge from 79 feet to approximately 460 feet but would not modify the alignment of PCH. Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated directly upslope of its current location to provide additional protection from future SLR. The helipad and new hydrant and two-car garage would be relocated adjacent to it on the west. The existing Topanga Beach parking lot would be modified, with existing spaces on the west end of the current paved lot removed and relocated to a new beach parking lot on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the greatest extent feasible, with surface runoff directed to bioswales to reduce pollution. Americans with Disabilities Act (ADA) parking would be maintained.

A total of 314 parking spaces would be included in this alternative. This total includes 20 concession exclusive spaces associated with the one State Parks lease retained, 201 public fee spaces (DBH = 87 and State Parks = 114), and 93 public free spaces (along PCH and TCB).

The total area graded would be 15.89 acres. No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acres) would occur temporarily during bridge demolition. The majority of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

Approximately 256,000 cubic yards (CY) of soil would be removed from the existing fill areas to contour the new lagoon and, if placed nearshore for beneficial reuse, would cover up to 35 acres as detailed further below. An additional 1,200 CY of roadway soil and 23,000 CY of soils potentially contaminated by aerielly deposited lead (ADL) would also be removed and hauled off-site. Approximately 10,810 CY of construction debris from demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills.

Under Alternative 2, all 25 existing structures of the Topanga Ranch Motel and all other buildings on State Parks property would be fully removed. All new State Parks development would be located at the Gateway Corner (NW corner of the intersection of TCB and PCH). The one exception is that a maximum 2,400-square-foot (sf) concession could remain at the current location of the Reel Inn restaurant just southeast of the historic motel. The concession could remain open during construction. The estimated 8,400 gallons per day (gpd) of wastewater generated under Alternative 2 would be handled by either on-site subsurface drip irrigation, on-site seepage pits, or an off-site sewer connection.

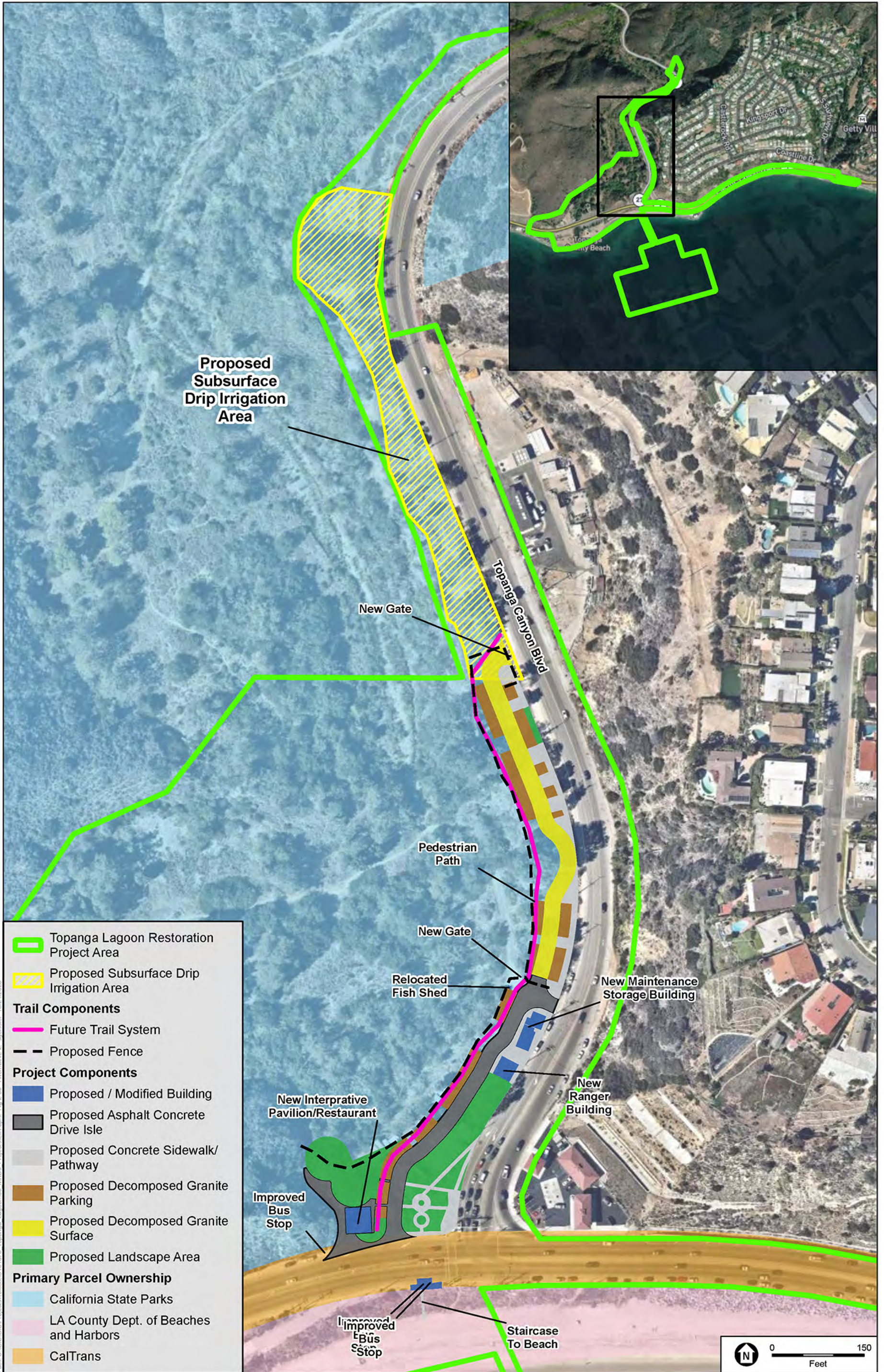


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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-1a
 Alternative 2
 Maximum Lagoon Habitat





SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-1b
 Project Area under Alternative 2



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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-1c
 Project Area under Alternative 2

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ES.3.4 Alternative 3: Limited Lagoon Habitat Expansion

Under Alternative 3, 20 of the structures comprising the Topanga Ranch Motel would be retained, thus limiting the lagoon restoration to 7.7 wetted acres, with 23.7 riparian/transitional/upland acres restored and beach expansion to 4.42 acres in the area by the lagoon (**Figures ES-2a through ES-2c**). Total graded area would be 15.3 acres. Overall, the sandy beach area throughout the Project area would expand by at least 1 acre. Only the western part of the main creek channel of the lagoon would be expanded for wetland, riparian, and transitional habitat creation. Limited habitat expansion would be restricted on the east side of the lagoon due to retention of the motel. Topanga Beach would be expanded slightly, providing opportunities for the use of living shoreline elements to be included primarily on the west side.

This alternative would lengthen the Caltrans bridge from 79 feet to 460 feet but would not modify the alignment of PCH. Stormwater and surface runoff would be captured in appropriate best management practices such as bioswales and rain gardens within parking areas.

Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated directly upslope and to the east of the current location to provide additional protection from SLR. The helipad and new hydrant would be relocated to the western edge of the parking lot on level with PCH. The new two-car parking garage would be located under the helipad at the beach access road level. Retaining walls would be needed to support the helipad and the remaining Topanga Ranch Motel units. ADA parking would be maintained.

The east Topanga Beach parking lot would be modified to accommodate the helipad on the west end of the existing paved lot. A new parking lot would be added on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the full extent feasible with surface runoff directed to bioswales to reduce pollution.

A total of 332 parking spaces would be included in this alternative. This total includes 25 Topanga Ranch Motel exclusive spaces, 20 concession exclusive spaces associated with the one State Parks lease retained, 194 public fee spaces (DBH = 79 and State Parks = 115), and 93 public free spaces (along PCH and TCB). The concession could remain open during construction.

No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acre) would occur temporarily during bridge demolition. Most of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

Approximately 166,000 CY of soil would be removed from the existing fill areas to contour the new lagoon and, if placed nearshore for beneficial reuse, would cover up to 35 acres. An additional 1,200 CY would be removed for roadway grading along with 23,000 CY of potentially ADL-contaminated soil and hauled off-site. Approximately 8,250 CY of construction debris from demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills or deposited in the nearshore.

Under Alternative 3, approximately 20 structures of the Topanga Ranch Motel would be retained and restored in the future in accordance with the Secretary of Interior's Standards, taking into account feasibility based on cost, long-term management, and current codes, such that the character, form, and features of the site would be retained. Restoration of the buildings would include removal of lead and mold, as well as repair or replacement of walls, windows, roofs, floors, and interior elements. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, park offices, interpretive displays, and storage.

An approximately 2,400-sf concession located at the site of the current Reel Inn restaurant would also be kept and could remain operational during construction. All other existing on-site leases and structures would be removed. Development of the Gateway Corner would mirror that proposed in Alternative 2, except that the proposed employee residence would be shifted to the motel area instead.

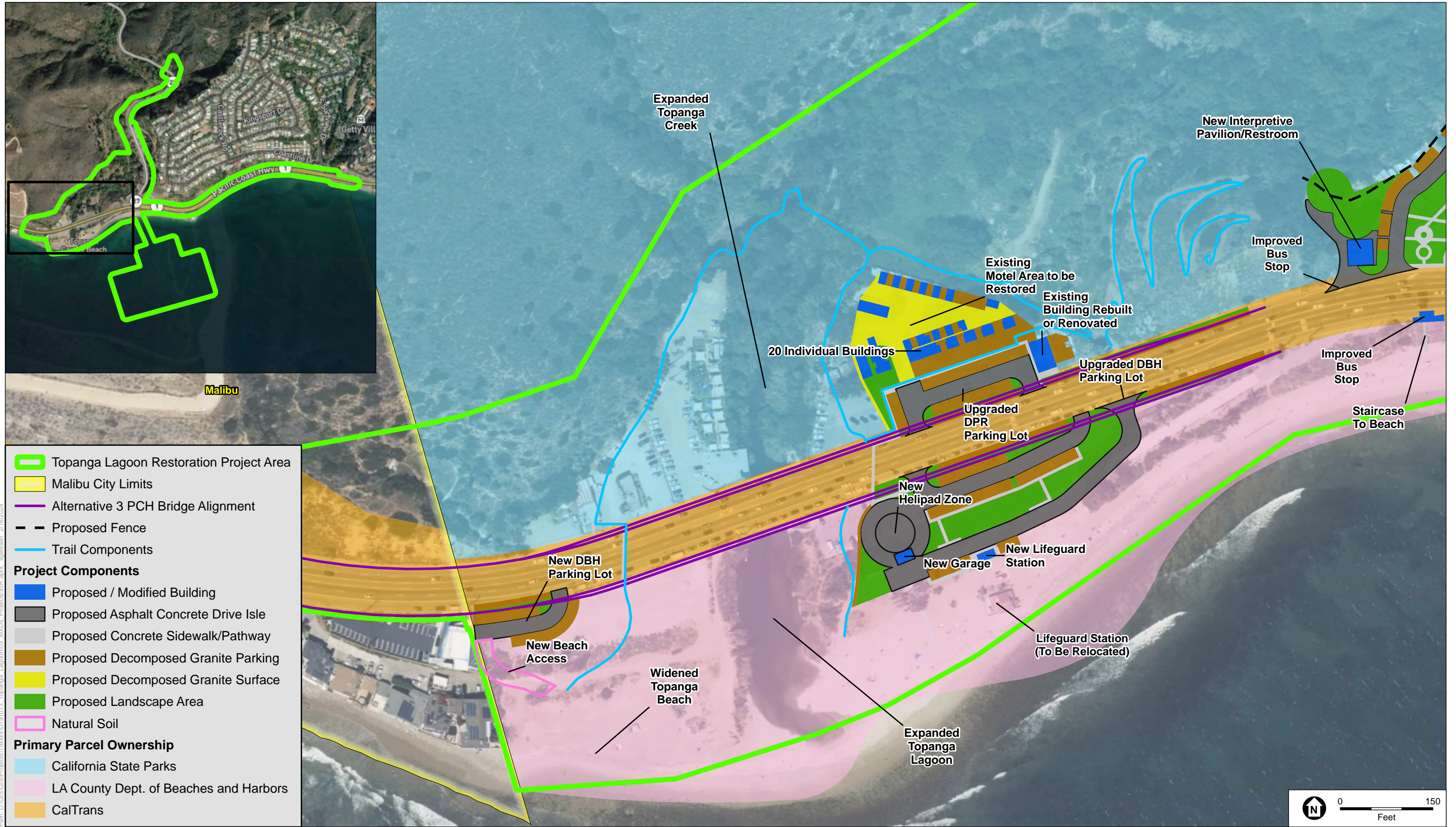
This alternative would generate approximately 12,400 gpd of wastewater from State Parks facilities and would be supported by either on-site seepage pits or an off-site sewer connection.

ES.3.5 Alternative 4: Maximum Managed Retreat

Under Alternative 4, 15 structures would be retained at the Topanga Ranch Motel site, limiting the lagoon restoration to 7.6 wetted acres, with 23.7 riparian/transitional upland acres restored and beach expansion to 4.56 acres (**Figures ES-3a through ES-3c**). Total graded area would be 14.7 acres. Overall, the sandy beach area throughout the Project area would expand by at least 1 acre. Only the western part of the main creek channel of the lagoon would be expanded for wetland, riparian, and transitional habitat creation. Limited habitat expansion would be restricted on the east side of the lagoon, given the retention of a portion of the motel and a concession near the location of the existing Reel Inn. Topanga Beach would expand the most under this alternative, providing the opportunity to include living shoreline elements. This alternative would maximize the managed retreat, recreational beach area, and living shoreline features such as dunes and would provide the most SLR resiliency for beach facilities.

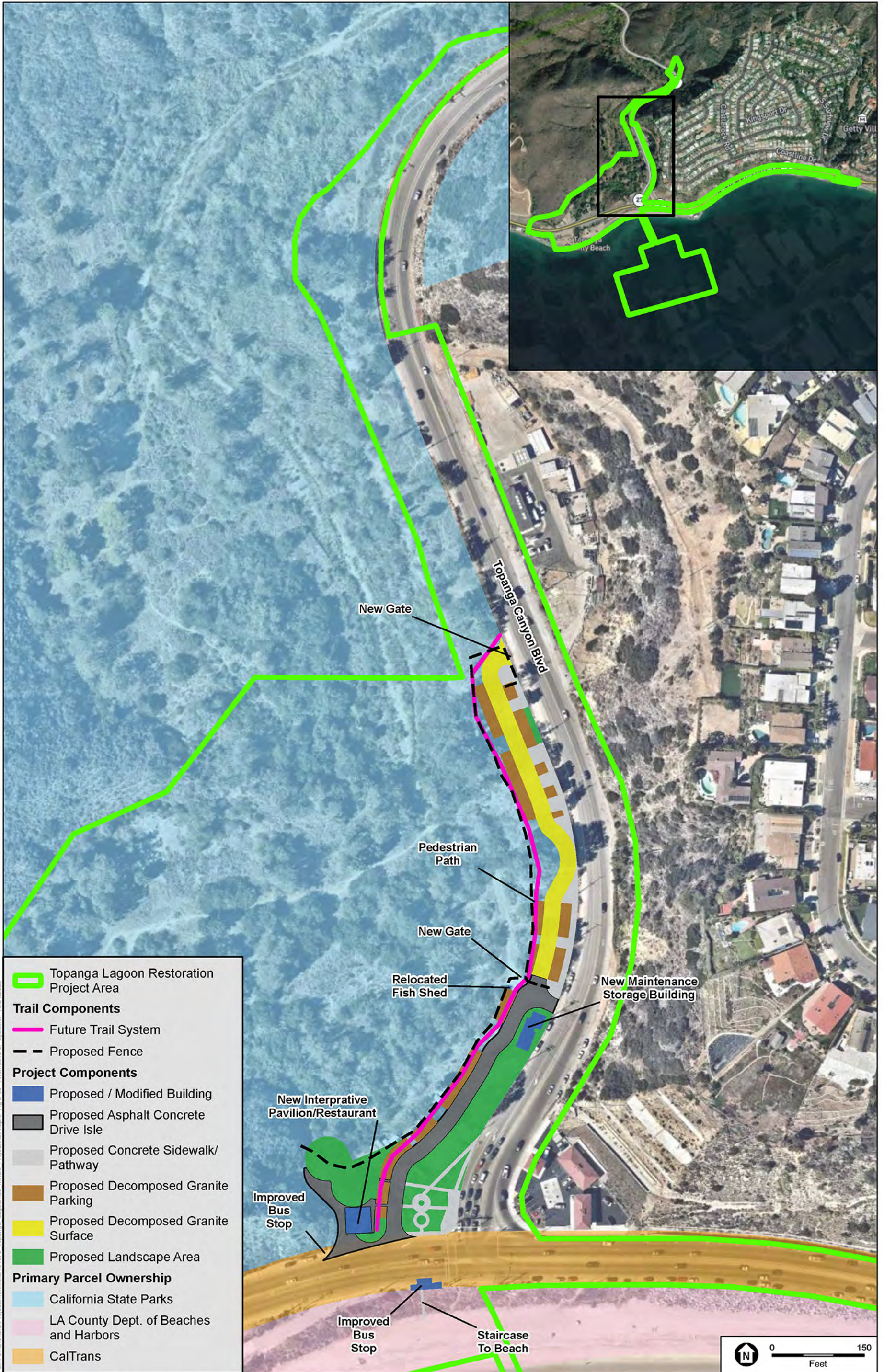
As part of Alternative 4, the alignment of PCH would move north, expanding the maximum amount of beach area and managed retreat, and would also lengthen the Caltrans bridge from 79 feet to approximately 460 feet. Stormwater and surface runoff would be captured in appropriate best management practices such as bioswales or rain gardens within parking areas.

Additionally, approximately 500 feet of 4- to 12-foot-high retaining walls would be required along the northern shoulder of PCH to accommodate adjacent slopes. A 91-foot-long, 4 to 6-foot-tall concrete masonry unit retaining wall would be needed on the south side of the bridge outside the creek channel to support the slopes on the east side. These retaining walls would be installed during construction of the northbound lanes outside of the wetted area and before excavation of the fill materials to avoid impacts on the wetted area.



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-2a
 Alternative 3
 Limited Lagoon Habitat Expansion



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-2b
 Alternative 3
 Project Area under Alternative 3





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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-2c
 Project Area under Alternative 3



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-3a
 Alternative 4
 Maximum Managed Retreat



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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure ES-3c
 Project Area under Alternative 4

Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated upslope of the current location, and north of the existing access road, to provide additional protection from SLR. The helipad and new hydrant and parking garage would be relocated adjacent to it on the west. The Topanga Beach parking lot would be modified to reduce spaces in the existing paved lot on the west end, expand spaces on the east end, and slightly shift the orientation of the lot shape to accommodate a new access road to the beach's lifeguard and public restroom building and garage, ADA parking, and helipad. If this alternative is selected, additional design modification for these elements is anticipated, to reduce potential impacts on tribal cultural resources. Additional spaces will be added in a new beach parking lot on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the extent feasible, with surface runoff directed to bioswales to reduce pollution.

A total of 343 parking spaces would be included in this alternative. This total includes 15 Topanga Ranch Motel exclusive spaces, 20 concession exclusive spaces associated with the one State Parks lease retained, 217 public fee spaces (DBH = 110 and State Parks = 107), and 91 public free spaces (along PCH and TCB). Parking during construction would be reduced on the DBH side and the concession would not be operational during construction due to access limitations.

The total graded area would be 14.71 acres. No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acre) would occur temporarily during bridge demolition. The majority of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

Approximately 210,000 CY of soil would be removed from the existing fill areas to contour the new lagoon and, if placed nearshore for beneficial reuse, would cover up to 35 acres. An additional 1,200 CY would be removed for the roadway realignment along with potentially 26,000 CY of ADL-contaminated soil and would be hauled off-site. Approximately 8,810 CY of construction debris from demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills or deposited in the nearshore.

Under Alternative 4, approximately 15 structures of the Topanga Ranch Motel would be retained and restored in accordance with federal standards considering feasibility and current codes, such that the character, form, and features of the site would be retained. Future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, park offices, interpretive displays, and storage are under consideration. A 2,400-sf concession near the site of the current Reel Inn restaurant would be renovated or constructed and would utilize shallow foundational systems to limit disturbance to cultural resources on-site. Because of the relocation and rebuilding, as well as access limitations, this concession would not be operational during construction. All other existing on-site leases and structures would be removed. Available parking near the Topanga Ranch Motel site and along PCH would be reduced

but would be relocated to the Gateway Corner and TCB areas. Development of the Gateway Corner would mirror that proposed in Alternative 3.

This alternative would generate approximately 11,400 gpd of wastewater and would be supported by either on-site seepage pits or an off-site sewer connection.

ES.3.6 Actions Common to All Build Alternatives

The Proposed Project elements described below are common to all Build Alternatives.

Expanded and Improved Habitats

Under all Build Alternatives, a subset of the Project area centered around the edge of the existing lagoon and PCH bridge would be graded, and the seasonally wetted and riparian habitat areas would be expanded. Expanding the wetted and riparian areas would require removing much of the native fill on-site to create a more natural topography and expanded open space area. The existing wetted lagoon area and riparian habitats would be protected with grading starting at the outer edge of the existing riparian trees, preserving the current lagoon banks and the majority of the existing riparian willows and native hardwoods. Most native trees would be retained throughout the Project area, and the lagoon's natural breaching pattern would be protected by grading outside the footprint of the existing wetted lagoon and working landward of the beach berm at its mouth.

Management of Excess Soil

The Proposed Project would remove locally sourced, naturally occurring sediments from adjacent filled banks on both the west and east sides of the creek. Under all Build Alternatives, the sediment material would be either trucked off-site for disposal or beneficially reused in a nearshore placement location, subject to approval by the regulatory agencies.

Beach Expansion/Bioengineered Stabilization/Living Shoreline Opportunities

Under all Build Alternatives, the area of Topanga Beach would increase. These additional areas would provide opportunities for increased recreational space and would incorporate bioengineered stabilization or living shoreline elements to both protect against storm surge and SLR and restore coastal habitats.

Bridge Improvements and Roadway Protection

To provide a wider lagoon and improve fish migration and refugia, the existing Caltrans bridge would be replaced with a longer bridge. The main span of the new bridge would increase to 200 feet, with 120- to 140-foot secondary spans, increasing the total bridge span length to approximately 460 feet. The Proposed Project would provide pedestrian access under the roadway on both sides of the lagoon. New lighting would be installed. Two of the Build Alternatives—Alternatives 2 and 3—would maintain the existing alignment of the bridge and PCH roadway, but Alternative 4 would relocate the alignment slightly to the north.

Under all Build Alternatives, the new bridge would continue to accommodate two lanes in each direction, with no expansion of roadway capacity. Traffic flows would also be maintained during bridge and lagoon construction via a temporary roadway and bridge alignment or other methods. All utilities would be continued during construction to the greatest extent possible, and eventually would be relocated underground or attached to the new bridge or supported on a separate utility bridge. All phases of construction and staging for the new bridge would be similar under each alternative.

Cultural Resources Protections

A monitoring and treatment plan approved by the State Historic Preservation Officer would identify specific archaeological and historical testing and monitoring during demolition and restoration to assess, document, and collect any encountered features or significant artifacts. The final suite of mitigation measures would be documented in a memorandum of agreement developed in consultation between State Parks and the State Historic Preservation Officer and incorporated into the final design and construction plans.

Coastal Access Improvements

Coastal access improvements are part of all Build Alternatives and include new trail construction and connectivity, improved parking availability and configuration, incorporation of pedestrian safety measures, and inclusion of amenities to support increased bicycle and bus use.

Coastal access would be maintained during construction and improved under all Build Alternatives. This would include the creation of a trail system through the Project area and provision of pedestrian access under PCH on the east and west sides of the lagoon. The new trail system has the potential to connect with regional systems such as the California Coastal Trail and Coastal Access Trail, which would facilitate connectivity between upper Topanga State Park and areas along the coast.

All Build Alternatives would provide a new configuration for parking that would better locate parking opportunities relative to beach and park access points. There would be a net increase in public fee parking given the reduction of concession parking and addition of new spaces at the new DBH lot west of Topanga Creek, the new Gateway Corner lots, and improvements to the existing DBH Topanga Beach and State Parks Topanga Ranch Motel lots to meet current code. Less free parking would be available along PCH; parking would not be permitted on the new and longer bridge deck but would be partially shifted to the TCB corridor. Concession exclusive parking for the one retained lease would remain.

The new distribution of parking would improve public access to all areas of lower Topanga State Park and Topanga Beach by more directly linking parking spaces with preferred recreation locations. It is hoped that this could reduce the frequency of unsafe jaywalking across PCH. All Build Alternatives would provide more convenient, safer pedestrian access by expanding the waiting area at the TCB/PCH intersection and move parking away from the immediate intersection. New beach access stairs and an improved bus stop area would be constructed. Visitors parking in the new west DBH lot would have easy access to the beach west of the lagoon

down an unpaved road from the parking lot. Visitors parking in the State Parks lots on the north side of PCH would have an underpass trail leading from the parking area directly to the beach on both sides of the lagoon and improve access to the crosswalk at PCH/TCB intersection. Lifeguard staff and ADA parking spaces at the beach level would be retained and additional spaces would be provided in State Parks lots under all Build Alternatives. The longer PCH bridge span would reduce shoulder parking, and controlled ingress into and egress from the parking lot would be available on both sides of PCH, as compared to none at present on the north side.

Under all Build Alternatives, the areas around the existing bus stops would be improved to be more visible and welcoming to public transportation users by providing shaded seating and closer access to restrooms. Bicycle use in the area would be improved via more controlled ingress into and egress from the parking areas and inclusion of bicycle parking, improvement of sight lines through regulated parking, and retention of a Class III bikeway (Bike Route) in each direction along PCH.

Department of Beaches and Harbors Facility Improvements

Under all Project Build Alternatives, key DBH facilities on Topanga Beach would be relocated farther from the ocean to protect structures from SLR. The existing lifeguard and public restroom building would be demolished and rebuilt closer to the realigned access road, and at a higher elevation. The new buildings would be of similar size and materials to the existing building and placement would vary between alternatives. A small two-car garage for staff would be added to the improvements. The helipad site would be relocated to the east side of the lagoon for improved access by the lifeguards and emergency responders. The size, setbacks and built elements of the new helipad would conform to all Federal Aviation Administration and County requirements and a new hydrant would provide water for wildland fire response.

The existing parking lot would be modified slightly, depending on the alternative. Staff and ADA parking at the beach level would be retained under all Build Alternatives. An unpaved emergency route from PCH to the beach level would be constructed from the proposed parking lot on the southwest side of the lagoon to allow lifeguard access, to both limit vehicle usage along the lagoon berm and provide access to the western beach even when the lagoon mouth is open.

California Department of Parks and Recreation Facility Improvements

Under all Build Alternatives, improvements to the State Parks facilities in Topanga State Park would occur through identification of the future use of the Topanga Ranch Motel, and improvements to park facilities, concessions, and parking. Improvements would be focused in two main areas: (1) the Topanga Ranch Motel and (2) a new “Gateway Corner” at the northwest corner of the intersection of PCH and TCB. The proposed treatment of the motel varies significantly by alternative, while development at the Gateway Corner would be largely the same under all Build Alternatives.

Under all Build Alternatives, the Gateway Corner would provide a focal entrance to the lagoon and lower areas of Topanga State Park and a needed transition between developed and adjacent open spaces. It would provide both a location for interpretation of on-site natural and cultural

resources and improved access to coastal recreation areas. Development at the Gateway Corner is anticipated to include at most approximately 5,500 sf of one-story structures, which would include a park office, an employee house, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included. The existing mobile mini shed used by the California Department of Fish and Wildlife for fish research would be moved slightly to the north but would remain.

An interpretive loop trail with ADA accessible sections would be developed to allow visitors to meander through the restored transitional upland areas in what is currently known as the Snake Pit area, north of the Topanga Ranch Motel site. A pedestrian bridge would cross the creek approximately at the location where a few remnant pilings from the early 1900s Malibu Road bridge remain. This would provide opportunities to explain the area's cultural, historical, and ecological functions, while allowing beach access from both sides of the PCH bridge.

All native trees would be retained in the Gateway Corner, along with most non-native trees, to provide shade. A pedestrian path would lead from the parking area south to the intersection of PCH and TCB, where a safe crossing of PCH to the beach would be available. Stairs providing beach access from PCH are proposed near the intersection as well. Additionally, the existing municipal bus stops on each side of PCH would be designed to be more visible and welcoming to visitors. Further development of these visitor services would occur once the final preferred alternative is selected and could require additional environmental review and approval by State Parks.

Wastewater Upgrades

Either a new advanced on-site wastewater treatment system (AOWTS) or a public sewer connection would be built to manage the wastewater created by the proposed State Parks visitor-serving facilities. The permitted AOWTS that services the DBH beach restroom would remain in place to service Topanga Beach facilities. Should the sewer extension become available, DBH could choose to also connect to it.

ES.3.7 Wastewater Management Options

Existing DBH facilities at Topanga Beach are supported by an AOWTS. The existing wastewater management systems for State Parks, however, are outdated. The State Parks concessions rely upon pumping, while the Topanga Ranch Motel is limited to a single closed tank supporting the on-site employee residence. Improvements to any State Parks visitor services would require upgrading wastewater management to meet current standards. A variety of options for managing wastewater were explored during a planning-level feasibility study. The feasibility study identified the following options for supporting the wastewater needs of the proposed new State Parks visitor services: on-site subsurface drip irrigation, on-site seepage pits, and connection to off-site sewer. Note that although the Project boundary includes potentially disturbed areas for both the seepage pits and sewer, only one of these would be carried forward to the final design.

ES.4 Areas of Known Controversy

Pursuant to CEQA Guidelines Section 15123(b)(2), the Draft EIR must disclose areas of controversy raised by agencies and the public during the public scoping process. Areas of controversy have been identified for the Proposed Project, based on comments made during the 30-day public review period in response to information published in the Notice of Preparation.

Commenting parties have requested that the Draft EIR evaluate impacts related to biological resources; recreational resources, including surfing; historical resources; and transportation. The greatest areas of known controversy from an environmental perspective are potential impacts related to hydrology, water quality, biological and marine resources, and tribal and cultural resources.

ES.5 Summary of Environmental Impacts

Table ES-1, at the end of this chapter, summarizes the impacts and mitigation measures identified for the Proposed Project. The complete impact statements and mitigation measures are presented in Chapter 3 of this Draft EIR. The level of significance for each impact was determined using significance criteria (thresholds) developed for each category of impacts; these criteria are presented in the appropriate sections of Chapter 3. *Significant impacts* are those adverse environmental impacts that would meet or exceed the significance thresholds; *less-than-significant impacts* would not exceed the thresholds. Table ES-1 indicates the measures that would be implemented to avoid, minimize, or otherwise reduce significant impacts to a less-than-significant level.

The CEQA Guidelines require that an EIR discuss the significant environmental effects of the Proposed Project (Section 15126.2(a)), which are summarized in Table ES-1 and provided in Chapters 3 and 4 of this Draft EIR. The CEQA Guidelines also require that an EIR discuss the significant environmental effects which cannot be avoided (Section 15126.2(b)) and significant irreversible environmental changes which would be caused by the Proposed Project should it be implemented (Section 15126.2(c)). These topics are discussed below.

ES.5.1 Significant Unavoidable Impacts

CEQA Guidelines Section 15126.2(c) states that the EIR must describe any significant impacts, including those that can be mitigated but not reduced to a less-than significant level. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons the project is being proposed, notwithstanding their effect, should be described. The Proposed Project is represented by three "build alternatives", all of which meet the project's primary goals via modified approaches. The only resource area impacts of the Proposed Project that would remain at a significant and unavoidable level even after implementation of mitigation measures would be impacts on historic resources under Alternative 2 and impacts on archaeological resources under Alternative 4.

ES.5.2 Cumulative Impacts

With implementation of mitigation measures, the Proposed Project's contribution to cumulative impacts would be less than significant except for cumulative impacts on historic resources for Alternative 2 and cumulative impacts on archaeological resources for Alternative 4, which would remain significant and unavoidable despite implementation of feasible mitigation measures.

ES.5.3 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(c) indicates that uses of nonrenewable resources during the initial and continued phases of a project may be irreversible because a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a street improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified.

Implementing the Proposed Project would commit nonrenewable (e.g., petroleum) or slowly renewable (e.g., timber) resources during construction. Machinery, equipment, materials (e.g., lumber, sand, gravel), and workers would be required for construction of the Proposed Project, representing an irreversible commitment of some of these resources. Once completed, the Proposed Project would not result in irreversible adverse environmental changes but would benefit ecological resources in the area and increase coastal resiliency in light of future SLR. As a result, the temporary irreversible changes have been deemed acceptable in light of the Proposed Project's overall benefits.

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impacts	Mitigation Measures	Significance after Mitigation
Visual/Aesthetics		
3.1-1: The Project would not have a substantial adverse effect on a scenic vista.	None Required	Less than Significant
3.1-2: The Project could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	None Required	Less than Significant
3.1-3: The Project could substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality.	None Required	Less than Significant
3.1-4: The Project could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.	AES-1: Lighting used during daytime or nighttime construction shall be shielded and pointed away from surrounding light-sensitive land uses and shall use Los Angeles County LIP Section 22.44.1270 as guidance. AES-2: All new permanent exterior lighting associated with Proposed Project components shall be shielded and directed downward to avoid any light spill onto neighboring lands or into nighttime skies and shall use Los Angeles County LIP Section 22.44.1270 as guidance. AES-3: All proposed aboveground facilities shall be designed to include non-glare exterior materials and coatings to minimize glare or reflection and shall use Los Angeles County LIP standard 22.44.1320. as guidance	Less than Significant with Mitigation
3.1-5: The Project could result in cumulatively considerable impacts to aesthetics.	AES-1: Lighting used during daytime or nighttime construction shall be shielded and pointed away from surrounding light-sensitive land uses and shall use Los Angeles County LIP Section 22.44.1270 as guidance. AES-2: All new permanent exterior lighting associated with Proposed Project components shall be shielded and directed downward to avoid any light spill onto neighboring lands or into nighttime skies and shall use Los Angeles County LIP Section 22.44.1270 as guidance. AES-3: All proposed aboveground facilities shall be designed to include non-glare exterior materials and coatings to minimize glare or reflection and shall use Los Angeles County LIP standard 22.44.1320. as guidance	Less than Significant with Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
Air Quality		
<p>3.2-1: The Project would not conflict with or obstruct implementation of the applicable air quality plan.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.2-2: The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.</p>	<p>AIR-1: Construction Equipment. The Applicant shall implement the following requirement for construction equipment operating at each Project site. This requirement shall be included in applicable bid documents and contractor(s) must demonstrate the ability to supply such equipment.</p> <ul style="list-style-type: none"> • The Project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency Tier 4 Final off-road emissions standards or equivalent for equipment rated at 100 horsepower or greater, where available within the Air Basin. Such equipment shall be outfitted with Best Available Control Technology (BACT), which means a CARB-certified Level 3 diesel particulate filter or equivalent. A copy of each unit’s certified tier specification, BACT documentation, and CARB or South Coast Air Quality Management District operating permit at the time of mobilization of each applicable unit of equipment shall be provided. 	<p>Less than Significant with Mitigation</p>
<p>3.2-3: The Project would not expose sensitive receptors to substantial pollutant concentrations.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.2-4: The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.2-5: The Project would not result in cumulatively considerable impacts to air quality.</p>	<p>None Required</p>	<p>Less than Significant</p>
Biological Resources		
<p>3.3-1: The Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>BIO-1: Special-Status Plant Protections. The following measures shall be implemented to avoid and minimize impacts on special-status plants:</p> <ul style="list-style-type: none"> • Preconstruction plant surveys shall occur in the appropriate blooming period preceding construction, and again within two weeks prior to construction activities affecting vegetation. • In the event a special-status plant is identified, steps shall be taken to avoid, or if infeasible, collect propagules for propagation and installation on-site. CDFW, USFWS, and CCC shall be coordinated with to discuss findings and actions. • Special-status plants shall be incorporated into the Habitat Restoration and Adaptive Management Plan (HRAMP) plant palette and sourced from genetically appropriate stock. Species shall be chosen that are well matched to on-site soils, exposure, and water regime: 	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
	<ul style="list-style-type: none"> • Southern California black walnut shall be included. • The following species shall be considered for inclusion as they are special status species that could occur historically on-site: Coulter's saltbush (<i>Atriplex coulteri</i>), Malibu baccharis (<i>Baccharis malibuensis</i>), Lewis' evening-primrose (<i>Camissoniopsis lewisii</i>), Santa Monica dudleya (<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>), white-veined monardella (<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>), and south coast branching phacelia (<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>). • Additional special-status wetland species shall be incorporated that would be expected in similar wetland systems in Santa Monica Bay. • Native species from the region identified by the Gabrielino/Tongva tribe as traditionally important will be included. <p>BIO-2: Monarch Butterfly Measures. The following measures shall be implemented to protect and minimize impacts on overwintering monarchs:</p> <ol style="list-style-type: none"> 1. During the overwintering season (October 15–March 15) prior to the start of restoration activities, a qualified biologist shall conduct a roosting monarch survey every two weeks to monitor the size of the population and map the locations of roosting monarchs. Roosting monarch surveys shall follow the Xerces Society monarch count protocol. 2. To prevent disturbance of monarchs during the overwintering season by construction personnel or work activity, roosting trees will be flagged, and snow fencing, or a similar technique shall be used to cordon off monarch roost trees at a reasonable distance of at least 25 feet away from the roosting monitor. The monitor shall determine the placement of the fencing to protect the monarchs while allowing work to continue. 3. While work is occurring in the Project vicinity during the overwintering season, the monitor shall visit the property a minimum of two times per week to verify protection measures remain in place and document that roosting monarchs are not disturbed by work activities. The monitor shall have authority to stop work if monarchs show signs of unnatural disturbance. If monarchs are being disturbed or affected, protection measures shall be relocated by the monitor in consultation with the foreman. 4. Work crew shall be educated on the monarch protection measures and how the measures apply to their work. 5. During the overwintering season when monarchs are present, activities that could result in vibration and thus movement of monarch clusters, shall be avoided within 200 feet of occupied trees. A qualified biologist can modify the buffer with approval of the regulatory agencies if adjacent activities are determined not be disturbing. 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>6. Aerial pesticide applications or pesticides that are harmful to butterflies shall be avoided within 200 feet of overwintering sites when monarch overwintering is occurring. Small cut and paint efforts or directed spot spraying when it is not windy will be allowed if required to control invasive arundo treatments or other highly invasive species to avoid invasive regrowth in the Project area. All weed treatments shall be under the supervision of a qualified biologist to ensure no impacts on monarchs occur. Any weed treatments shall be under the supervision of a Qualified Applicator Certificate and conducted per State Parks and California Department of Pesticide Regulation guidelines.</p> <p>7. Monarch nectary plants shall be incorporated into the plant palette of the HRAMP near potential overwintering sites.</p> <p>BIO-3: Crotch’s Bumble Bee Measures. The following measures shall be implemented to protect and minimize impacts on Crotch’s bumble bees:</p> <ol style="list-style-type: none"> 1. Surveys for Crotch’s bumblebee shall be conducted within one year of vegetation removal/ground disturbance by a qualified entomologist familiar with the identification, behavior and life history of the species. A minimum of three surveys during peak flying season shall be conducted when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983), non-lethal survey methodology shall be used and photo vouchers for species confirmation will be obtained (CBBA 2023). At minimum, a survey report shall provide the following: <ol style="list-style-type: none"> a. A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch’s bumble bee. b. Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. c. Map(s) showing the location of nests/colonies. 2. If Crotch’s bumble bee is detected, the following shall be implemented: <ol style="list-style-type: none"> a. The qualified entomologist shall: <ol style="list-style-type: none"> i. Identify the location of all nests within and adjacent to the Project site. ii. Provide a summary of the physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. This shall include native plant composition (e.g., density, cover, and abundance) within affected habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species). iii. Establish a 15-meter no disturbance buffer zone around any identified nest(s) to reduce the risk of disturbance or 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>accidental take. The buffer zone will be expanded as necessary to prevent disturbance or take to the extent feasible.</p> <ul style="list-style-type: none"> b. If complete avoidance of the buffer zone is not feasible, consultation with CDFW shall occur to identify any additional measures needed to avoid impact on the species, confirm allowable activities within the buffer zone, and determine if take authorization from CDFW is required. c. Floral resources associated with Crotch's bumble bee that require removal during restoration activities shall be replaced at a 1:1 ratio and with guidance from CDFW. Floral resources will be planted within 200 meters of the original plant location or in the most centrally available location relative to identified Crotch's bumble bee nests and be located no more than 1.5 kilometers from the nest sites. d. The Habitat Restoration and Adaptive Management Plan will include native and local plant species preferred by Crotch's bumblebee within the plant palette to further support the existence and expansion of the species on-site. <p>BIO-4: Fish Protection Measures During Work in Wetted Areas. Formal consultation with USFWS/NMFS will further refine these measures and the Project shall comply with all permit requirements. The following measures shall be implemented to protect and minimize impacts on tidewater goby and steelhead trout, their critical habitat, and other special-status aquatic species during construction:</p> <ul style="list-style-type: none"> 1. Cofferdam, sediment curtain, and/or another method approved by NMFS/USFWS shall be used to cordon off the area (approximately 0.33 acre) around the existing bridge abutment to both exclude fish and wildlife and to contain construction debris and runoff within the work area. Final construction design shall meet all permit conditions and be developed by the contractor in coordination with State Parks. <ul style="list-style-type: none"> a. The cofferdam shall not be fully dewatered until the supervising biologist determines that no fish remain within the area. <ul style="list-style-type: none"> i. Dewatering shall be done slowly with supervision to ensure that any fish trapped in the area can be captured and relocated reducing the risk of injury or stress. ii. Pumps shall be properly screened to prevent fish from entering the intake. iii. Dewatering and flow diversion shall comply with permit requirements from USFWS and NMFS. iv. Once the supervising biologist has confirmed that the work area is isolated, all fish are excluded, and there is no risk of entraining fish, then the pump screen may be removed. v. Water removed from the work area shall be directed to an adjacent holding area according to permit requirements before 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>being infiltrated into the existing fill or release into the lagoon or ocean downstream of the work area.</p> <ul style="list-style-type: none"> vi. Water quality testing including turbidity, temperature, salinity, dissolved oxygen, pH, and conductivity, nutrients (and potentially metals if required) shall be monitored and documented at the start, middle and end of each day. <ul style="list-style-type: none"> b. Blocking nets providing a buffer area outside the work zone shall remain in place until all work is completed and the coffer dam removed. <ul style="list-style-type: none"> i. Blocking nets shall be inspected at least three times a day (start, middle, end) or more if requested by the supervising biologist. If fish are impinged on the net, or weather/flow conditions change significantly, the supervising biologist can increase inspection efforts. c. Silt curtains may also be installed inside the blocking nets to further reduce potential for water quality impacts. <p>2. All construction activities within or directly adjacent to the lagoon, creek, and wetted areas will occur preferentially outside of the steelhead migration season (December through March). In the event, this time frame cannot be avoided, measures shall be implemented with the approval of NMFS and CDFW to avoid impacts such as allowing passage through a protected portion of the work area and implementation of additional BMPs to buffer fish from adjacent work, such as use of silt curtains within the wetted edge and silt fence along the dry edge, etc.).</p> <p>3. If fish upstream are observed in distress, a fish kill occurs, or spills occur, the supervising biologist shall immediately contact the contractor to stop work, contact the relevant agencies, and work with the contractor to correct the problem.</p> <p>4. Upon completion of the removal of the old bridge within the coffer dam area, water quality shall be tested within the work area before removal of the walls. Flow shall be restored slowly, and fish shall remain excluded upstream of the work area pending confirmation that water parameters are suitable for direct release into the lower lagoon.</p> <p>BIO-5: Fish Relocation Measures. Formal consultation with USFWS will further refine these measures and the Project will comply with all permit requirements. The following measures shall be implemented to protect and minimize direct impacts on special-status fish species:</p> <ul style="list-style-type: none"> 1. All fish shall be relocated out of the BSA by a permitted biologist prior to work within the lagoon, creek, and wetted areas. The fish shall be relocated in an approved location upstream (or downstream if conditions are suitable). Assessment of carrying capacity and crowding shall be made at the time of relocation in conjunction with 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>USFWS to ensure that there is sufficient area to support any fish that are moved.</p> <ol style="list-style-type: none"> 2. Downstream blocking nets (having no greater than 1/8-inch mesh) shall be secured to both banks and the bottom to prevent movement downstream or upstream of the work area in the main lagoon. 3. Fish shall be herded upstream above the limit of the proposed work area and then seining will continue until all fish are captured. The upstream blocking net shall be installed and secured so that no fish can move back into the work area. 4. Fish that are not herded but captured in the seine nets shall be placed in buckets of cool, clean water collected from an undisturbed area of the lagoon with bubblers attached at the sides and then immediately hand carried upstream above the upstream blocking net or downstream into the main lagoon if conditions are suitable. 5. Fish shall not be crowded or held in buckets for more than 10 minutes. 6. Fish handling shall be minimized while the supervising biologist documents the species, number, size class, and condition of release. 7. Individuals handling fish shall ensure that their hands are clean and free of potentially harmful substances such as sunscreen, insect repellent, etc. 8. Should there be any mortality, the fish incidentally killed shall be preserved whole on ice then frozen, data on species, size and cause of mortality will be documented, and the remains delivered to the appropriate agencies. 9. If the limits of incidental take are approached, the supervising biologist shall postpone work until the appropriate agency is notified and a plan developed to further reduce potential for further stress or injury. <p>BIO-6: Fish Hydroacoustic Buffering Measures. Formal consultation with USFWS/NMFS will further refine these measures and the Project will comply with all permit requirements. The following measures shall be implemented to protect and minimize direct and indirect impacts on special-status fish species from hydroacoustics:</p> <ol style="list-style-type: none"> 1. Construction of the bridge foundation and footings shall be completed within the existing fill material. 2. Construction of the temporary bridge shall avoid placement of any foundations within or immediately adjacent to the wetted area and any construction shall be completed within existing fill material. 3. Construction of the coffer dam or other devices within or immediately adjacent to the wetted area associated with removal of the existing bridge shall comply with all Caltrans requirements as outlined in the 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p><i>Technical Guidance for Assessment and Mitigation of Hydroacoustic Effects of Pile Driving on Fish (Caltrans 2020).</i></p> <p>BIO-7: General BMPs for Biological Resources. To minimize temporary and limited turbidity or water pollution impacts from adjacent ground disturbing activities, the following BMPs shall be implemented at a minimum. If more stringent measures are identified in the Project permits and Storm Water Pollution Prevention Plan (SWPPP), they will also be implemented.</p> <ol style="list-style-type: none"> 1. Siltation fences, or other suitable material, shall be installed at the edge of the work areas to be graded to avoid movement of soil into wetted areas. 2. Vegetation removal shall be conducted so that materials are not permitted to fall into wetted areas. 3. Stockpiles shall be located away from the lagoon and creek corridor and will be contained by standard BMPs such as wattles, tarps, or burlap to ensure materials are not moved into the creek due to wind, rain, gravity, or flooding. 4. No equipment maintenance or refueling shall be permitted within 100 feet to avoid accidental spills from entering the lagoon and/or creek. 5. Soil shall be stabilized in bare areas with mulch, straw matting, hydroseeding or other approved methods as described in the Restoration Plan to avoid movement of soils into wetted areas. 6. Ground disturbing activities shall not occur during rain events. Within 24 hours of a projected likely rain event, the site will be “buttoned up” with appropriate BMPs such as covers over stockpiles and wattle installation at graded area boundaries and along slopes so that soil and Project materials will not wash into adjacent areas. 7. Access roadways shall be periodically swept (paved) or wetted down (unpaved) to minimize soil movement into adjacent areas due to wind. 8. Construction lighting shall be directed away from non-work areas and directed downward to avoid adversely affecting adjacent species and their movement corridors. <p>BIO-8: Herpetofauna Measures. The following measures shall be implemented to protect and minimize impacts on protected herpetofauna:</p> <ol style="list-style-type: none"> 1. Thirty days prior to ground disturbance or grading activities, a qualified biologist shall conduct pre-construction surveys to detect the presence of special status herpetofauna. A minimum of three preconstruction surveys shall be conducted during periods when the target species are most likely to be active. Periods of lower temperatures, generally December through February, should be avoided. 2. In the event special status herpetofauna are identified during preconstruction surveys, a capture and relocation plan shall be 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>developed for review and approval of CDFW. The plan shall, at a minimum, include the timing and location of the surveys, trapping and relocation methods and locations, species exclusions methods from active work areas, and required documentation/recordation data. Species specific guidance shall be included.</p> <p>3. Exclusion fencing (e.g., 4- to 6-foot-high silt fence keyed in) shall be installed around the active work area to limit the potential for re-colonization of the site prior to construction activities. Fence stability shall be surveyed daily and repaired within 24 hours.</p> <p>4. A qualified biologist will be present during vegetation removal or initial ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Special attention shall be given to burrows and allowing animals to escape during earthwork. Earthwork and vegetation removal should be sequenced where feasible to facilitate animal movement towards open space areas.</p> <p>BIO-9: Nesting Bird Measures. If the nesting bird season cannot be avoided and construction or vegetation removal occurs between February 1 through August 1 (February 1–September 15 for large tree removal), the Project shall do the following to avoid and minimize impacts on nesting birds and raptors:</p> <ol style="list-style-type: none"> 1. A qualified biologist shall conduct a nesting bird study within two weeks of the anticipated start date, and again within two days prior to ground disturbance, to identify any active nests within 500 feet of the development footprint. 2. If an active nest is found, the nest shall be avoided, and a suitable avoidance buffer shall be delineated in the field where no impacts may occur until the chicks have fledged the nest as determined by a qualified biologist. Construction buffers shall be 300 feet for passerines or up to 500 feet for raptors or as identified by a qualified biologist. Avoidance buffers may be modified at the discretion of the qualified biologist in coordination with CDFW, depending on the species, location of the nest, species tolerance to human presence, and the type of construction-related noises and vibrations that would occur. 3. In the event a communal nesting site becomes established before completion of restoration activities, coordination with CDFW and USFWS shall occur to determine avoidance and minimization measures. In the event it is determined that the communal nesting site needs relocation, a relocation plan shall be prepared for CDFW and USFWS. The plan shall identify methods and locations for construction of new sites making use of recently used nest materials. <p>BIO-10: Bat Roost Measures. The most suitable bat roosting habitats on the Proposed Project are along the PCH bridge, within the motel, lifeguard and public restroom building, and within oak, palms, and other large, mature trees. Rock crevices could also be used. Bats are their</p>	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>most vulnerable during their maternity roosting period (May 1 to October 31) and during hibernation periods (December 1 to March 31). The following measures shall be implemented to protect and minimize impacts on protected and roosting bats:</p> <ol style="list-style-type: none"> 1. When feasible, disturbance to suitable bat roosting habitat shall be scheduled in November and April, or otherwise outside of sensitive hibernation and roosting periods. 2. Within two weeks prior to disturbance of potential bat roosting sites (large trees, structures, rocky crevices), a qualified bat specialist shall conduct a visual and acoustic pre-construction survey of the Proposed Project and surrounding 200 feet for possible roosting habitat. The bat specialist shall document all survey results and prepare a summary report to CDFW. 3. In the event no roosting bats are present within the survey area, one-way exclusion devices shall be installed prior to structure demolition to exclude bat use and avoid their potential harm. 4. If potential roosting sites are identified, an additional survey to pinpoint roosting locations should occur within seven days prior to disturbing activities. The biologist, in coordination with CDFW, shall refine a 200-foot or other agreed-upon buffer to keep in place during construction until the roosting site is confirmed to be no longer in use for hibernation or dependent young. Night lighting for construction shall not be directed towards these roost sites. 5. Large tree cutting, or removal shall be supervised by a qualified biologist to document the presence or absence of bats that might be affected. A local bat rehabilitation facility shall be available in the event tree-felling results in unanticipated injury to any bat. 6. If bat roosts are affected during construction, the Project applicant shall provide replacement roosts within similar habitat and with a gap no greater than 3.8 centimeters and interior surface comparable to that of the original roost. The replacement roost shall be swabbed with bat guano and urine collected from the original roost. <p>BIO-11: San Diego Woodrat Measures. The following measures shall be implemented to protect and minimize impacts on protected woodrats:</p> <ol style="list-style-type: none"> 1. Exclusion fencing (e.g., 4- to 6-foot-high silt fence keyed in) shall be installed around the active work area to limit the potential for re-colonization of the site prior to construction activities. Fence stability shall be surveyed daily and repaired within 24 hours. 2. Thirty days prior to construction activities, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego desert woodrat. 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>3. If inactive woodrat nests are found, they shall be disassembled and relocated out of the active work area under the supervision of a qualified biologist.</p> <p>4. If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone, a construction fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist. Clearing and construction within the fenced area shall be postponed or halted until young have left the nest. The biologist shall be present during those periods when disturbance activities will occur near active nest areas to avoid inadvertent impacts on these nests.</p> <p>5. If San Diego desert woodrat nest avoidance is not possible, the Project biologist shall clear vegetation from areas immediately surrounding the active nests, followed by a night without further disturbance to allow woodrats to vacate the nest. Preference will be given to non-breeding-season destruction of the nests (May through October) and relocation of adults shall target undeveloped areas of the Project, including salvage of nest-building material—rocks, sticks, etc. Each occupied nest shall subsequently be gently disturbed by a qualified wildlife biologist to entice any remaining woodrats to leave the nest and seek refuge outside the Project construction area. The stick nests shall be carefully removed from the Project construction area and be placed near suitable vegetation or rocky substrate like original nest location. The Project biologist shall document all woodrat nests moved and provide a written report to CDFW.</p> <p>6. Results of the surveys and relocation efforts shall be provided to CDFW.</p> <p>BIO-14: Protected Native Tree Survey. (See Impact BIO 3.3-5, below.)</p> <p>BIO-15: Protected Native Tree Survey. (See Impact BIO 3.3-5, below.)</p>	
<p>3.3-2: The Project could have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by California Department of Fish and Game or U.S. Fish and Wildlife Service.</p>	<p>BIO-12: Habitat Restoration and Adaptive Management Plan. Impacts on sensitive plant communities shall be mitigated with implementation of the following measures:</p> <ol style="list-style-type: none"> 1. The Project shall complete on-site restoration and enhancement of sensitive plant communities (e.g., removal of invasive species; transplantation, seeding, or planting of representative plant community species; salvage/dispersal of duff and seed bank) at a ratio of no less than 1:1 for temporary impacts and not less than 2:1 for permanent impacts. 2. A HRAMP shall be prepared and reviewed by CCC and CDFW for compliance prior to ground disturbance. The HRAMP shall be consistent with and include the monitoring and adaptive management provisions detailed in the Topanga Lagoon CHRAMP. The plan shall focus on the creation of equivalent sensitive plant 	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
	<p>habitats within disturbed habitat areas within the Proposed Project or directly off-site within Topanga State Park and Topanga Beach. In addition, the plan shall provide details as to the implementation of the plan, maintenance, and future monitoring including the following components:</p> <ul style="list-style-type: none"> • Description of existing sensitive habitats on the Proposed Project. • Summary of permanent impacts on sensitive communities based on approved Project design. • Proposed location for mitigation areas, either on-site or off-site, with description of existing conditions prior to mitigation implementation. • Detailed description of restoration or enhancement goals. • Inclusion of sensitive communities and plant species with the goal to provide a net increase in the quantity and quality of them on-site. • Description of implementation schedule, site preparation, erosion control measures, planting plans, and seed collection or plant propagation of genetically appropriate plant materials. • Provisions for mitigation site maintenance and control on non-native invasive plants. • Monitoring plan, including performance standards, adaptive management measures, and monitoring reporting to CDFW. <p>3. The HRAMP shall include the following measures to minimize the spread of invasive species:</p> <ul style="list-style-type: none"> • Stockpiled soil, and vegetation when blooms or seeds are present, shall be covered to avoid spread of weed seed. • If any soil is slated to be used off-site outside of being disposed in a landfill, it shall be inspected by a qualified biological monitor prior to removal to avoid inclusion of invasive propagules (e.g., sections of Arundo, ivy) that reproduce vegetatively and could spread from the receiver site. • Haul trucks shall be covered to avoid seed dissemination during soil and vegetation treatment. • Areas slated for planting shall be pretreated for emergent weeds prior to planting. Typical measures include irrigating and then spot treating germinating weeds three times prior to planting to reduce the invasive seed base. This is usually initiated three to four months prior to planting. Any herbicide use shall be approved by State Parks and a Pest Control Advisor and shall be conducted by trained staff overseen by a supervisor with a Qualified Applicator License or Certification from the Department of Pesticide Regulation. All herbicide application shall be in accordance with state and federal requirements. 	

Impacts	Mitigation Measures	Significance after Mitigation
<p>3.3-3: The Project could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	<ul style="list-style-type: none"> • Any weed removal work shall take an Integrated Pest Management approach where manual, mechanized, cultural and chemical methods are all considered to determine the most environmentally friendly and functional methods. State Parks policies and Department of Pesticide Regulation guidelines shall be followed when limited pesticide use is determined to be needed. • Use of jute netting, landscape cloth, or mulch, as appropriate, shall be used to cover bare soil and reduce the area available for weed intrusion. • Irrigation design shall consider weed control. Drip systems are preferred if feasible, as water is directed solely at the target plant species. • Biodegradable materials shall be used when available for erosion control and soil management. All plant-derived materials (mulch, straw) shall be certified weed free. • Monthly weeding shall be required for the first-year post planting. Quarterly weeding will be required thereafter for the five-year mitigation and monitoring period. • Success criteria shall include the following for five-years post restoration: <ul style="list-style-type: none"> i. Native vegetation shall reach 85 percent cover except for areas such as mudflats, rocky slopes, beach areas and other habitats that are not naturally or highly vegetated. ii. No highly invasive plants shall be present on-site. <p>BIO-7: General BMPs for Biological Resources. (See Impact BIO 3.3-1, above.)</p> <p>BIO-13: Jurisdictional Waters/Wetlands Habitat Restoration and Adaptive Management Plan. Prior to any permanent or temporary impacts on wetlands or waters, State Parks shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, Streambed Alteration Agreement pursuant to under Section 1602 of the CFGC from CDFW, and a CDP from the CCC.</p> <p>In addition, prior to impacts on wetlands or waters, a Habitat Restoration and Adaptive Management Plan (HRAMP) shall be prepared by State Parks and submitted to the USACE, RWQCB, CDFW, and CCC in support of wetland/waters permit applications. The Jurisdictional Waters/Wetlands HRAMP shall be consistent with and include the monitoring and adaptive management provisions detailed in the Topanga Lagoon CHRAMP. Impacts on wetlands and other waters will be restored/enhanced on-site or within adjacent and equivalent habitat areas within Topanga State Park and Beach at no less than a 2:1 ratio for permanent impacts, with no net loss of wetlands. Areas affected temporarily will be restored to a pre-Project condition or better via removal of invasive species, revegetation with native species, or</p>	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
	<p>other appropriate measures. The HRAMP required in Mitigation Measure BIO-3.3-12 may also satisfy this mitigation measure if wetlands and waters impacts and restored wetlands/waters are incorporated into that plan.</p>	
<p>3.3-4: The Project could 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.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.3-5: The Project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	<p>BIO-12: Habitat Restoration and Adaptive Management Plan. (See Impact BIO 3.3-2, above.)</p> <p>BIO-13: Jurisdictional Waters/Wetlands Habitat Restoration and Adaptive Management Plan. (See Impact BIO 3.3-3, above.)</p> <p>BIO-14: Protected Native Tree Survey and Mitigation. A preconstruction survey of protected native trees shall be conducted once an alternative and wastewater treatment option has been selected and prior to construction. The Project is an extensive restoration project that not only restores natural topography and hydrology followed by extensive planting in a 7.50- to 9.21-acre area, it also provides additional enhancements via weed management and focused planting in a 30.03- to 31.21-acre enhancement area (Table 3.3-9). Due to the significant net benefits of the Project to native trees and habitats, and State Parks/RCDSMM track record of approximately 75 percent survivorship of native tree plantings, protected native trees being removed or affected during construction shall be planted at 5:1 ratio. Protected trees that are encroached upon within 3 feet of the trunk or more than 30 percent of the tree protected zone (TPZ) shall be replaced at a 3:1 ratio. Protected trees that are encroached into 10–30 percent of the TPZ shall be replaced at a 1:1 ratio. Volunteer native seedlings within the BSA can be mapped and used as mitigation trees. No mitigation shall be required for protected native trees if they are encroached by less than 10 percent of the TPZ, but these trees shall be monitored. Annual monitoring of all encroached protected trees shall occur for 5 years post impact and shall require annual reporting to document any tree death. If any replacement trees die during the annual monitoring period, the tree shall be mitigated at a 2:1 ratio. Watering of replacement trees shall be scheduled to have fully removed additional watering by year 4–5 to promote natural survival. Trees shall be preferentially incorporated into appropriate open space habitat areas, but also incorporated into the plant palettes of the developed and transitional areas.</p> <p>BIO-15: Tree Management and Preservation Program. Prior to the removal of any protected native tree, a Tree Management and Preservation Program shall be prepared by a certified arborist or qualified biologist for review by CDFW, CCC, and the County. The plan shall include details for protective fencing to be placed at the limits of the tree protected zone (TPZ) of all oak and native trees within or</p>	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
	extending into the Biological Study Area that may be affected by or are in close proximity (50 feet) with construction activities. In addition, the plan shall describe the protection and maintenance provisions for all native trees and the replacement trees for those native trees removed and annual reporting requirements.	
3.3-6: The Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Implement Mitigation Measures BIO-12, BIO-13, BIO-14, and BIO-15 (see Impacts BIO 3.3-2, 3.3-3, and 3.3-5, above).	Less than Significant with Mitigation
3.3-7: The Project could result in cumulatively considerable impacts on biological resources.	Implement Mitigation Measures BIO-1 through BIO-15 (see Impacts BIO 3.3-1, BIO 3.3-2, BIO 3.3-3, and BIO 3.3-5, above).	Less than Significant with Mitigation
Cultural Resources		
3.4-1: The Project could cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.	<p>CUL-1: Historical Resources Monitoring and Treatment Plan. After State Parks approval of the Proposed Project and before the start of Project construction activities, a Historical Resources Monitoring and Treatment Plan (HRMTP) shall be prepared documenting the actions and procedures to be followed to ensure the avoidance or minimization of impacts on archaeological and historic architectural resources that qualify as historical resources under CEQA. Archaeological resources and historic architectural resources may be addressed in one or separate HRMTPs at the discretion of State Parks. General information and procedures to be addressed in the HRMTP shall include but not be limited to the following:</p> <ul style="list-style-type: none"> • A listing of Project personnel and contact information, description of roles and responsibilities, reporting relationships, activities requiring notification, and notification procedures and time frames. • Construction worker cultural resources sensitivity training to be implemented before the start of Project construction activities, consistent with Mitigation Measure CUL-2 (Cultural Resources Sensitivity Training). <p>Specific archaeological resources procedures to be addressed in the HRMTP shall include but not be limited to the following:</p> <ul style="list-style-type: none"> • Avoidance and preservation in place of three archaeological resources—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and the non-historic component of P-19-003759 (multicomponent site)—to the extent feasible, consistent with Mitigation Measure CUL-3 (Avoidance and Preservation in Place). • If avoidance is not feasible, development of treatment options that reduce or minimize impacts on P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and the non-historic component of P-19-003759 (multicomponent site). Such options include implementation of Environmentally Sensitive Areas for portions of resources that can be avoided, archaeological testing and/or data 	<i>Alternative 2:</i> Significant and Unavoidable; <i>Alternatives 3 and 4:</i> Less than Significant with Mitigation Incorporated

Impacts	Mitigation Measures	Significance after Mitigation
	<p>recovery, capping of archaeological deposits, and/or the development of interpretation/educational materials and/or exhibits.</p> <ul style="list-style-type: none"> • An archaeological and Native American monitoring plan to be implemented during Project ground-disturbing activities, consistent with Mitigation Measure CUL-4 (Archaeological and Native American Monitoring). The monitoring component of the HRMTP shall include the detailed locations of monitoring activities and types of construction work requiring monitoring; protocols to be followed during monitoring activities and during discovery situations; roles of archaeological and Native American monitors; communication and notification procedures between the construction contractor, monitors, and State Parks; and archaeological monitor reporting requirements. • Actions to be taken if archaeological resources are inadvertently discovered during ground-disturbing activities or previously recorded archaeological resources are affected in an unanticipated manner. Such actions include: <ul style="list-style-type: none"> ○ Redirection of work to avoid the area. ○ Establishment of a temporary exclusion zone. ○ Inspection of the resource by a qualified archaeologist. ○ Development of a research design that provides context for significance evaluation. ○ Evaluation of the resource for listing in the National Register and California Register under Criteria A/1 through D/4. ○ Development of avoidance and/or treatment protocols such as establishment of an Environmentally Sensitive Area, data recovery, and interpretive/educational or other creative treatment solutions. ○ Preparation of a technical report documenting the methods and results of the treatment following Archaeological Resources Management Report guidelines. ○ Appropriate curation of all recovered materials. <p>Specific historic architectural resources procedures to be addressed in the HRMTP shall include but not be limited to the following:</p> <ul style="list-style-type: none"> • Avoidance and preservation in place of historic architectural resource (P-19-192464 [Topanga Ranch Motel]) to the extent feasible. • If avoidance is not feasible, development of treatment options that reduce or minimize impacts on P-19-192464 (Topanga Ranch Motel) such as implementation of Environmentally Sensitive Areas for portions of the resource that can be avoided; Historic Architectural Building Survey documentation before demolition; relocation and restoration of buildings for reuse or interpretive purposes as feasible; 	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>and/or the development of interpretation/educational materials and/or exhibits.</p> <p>Procedures for the appropriate treatment of human remains, Mitigation Measure CUL-6 (Human Remains).</p> <p>CUL-2: Cultural Resources Sensitivity Training. Cultural resources sensitivity training for all construction personnel shall be conducted before the start of Project construction. The sensitivity training shall be led by a qualified archaeologist. Native Project site; restrictions around Environmentally Sensitive Areas; information on how to identify archaeological resources; approved access routes and equipment/foot traffic restrictions for workers; specific procedures to be followed in the event of an inadvertent discovery consistent with the HRMTP (see Mitigation Measure CUL-1); safety procedures when working with monitors; and consequences in the event of noncompliance.</p> <p>CUL-3: Avoidance and Preservation in Place. Project implementation shall be carried out in a way that avoids or minimizes impacts on significant cultural resources to the extent feasible. Avoidance and preservation in place shall be the preferred manner of mitigating impacts on significant historic architectural resources and archaeological resources.</p> <p>Where State Parks has determined that avoidance will be implemented, the construction area shall be narrowed or otherwise altered to avoid resources. An Environmentally Sensitive Area shall be delineated with protective fencing and/or flagging by a qualified archaeologist, including an adequate buffer to be determined in coordination with State Parks. Protective fencing shall remain in place during construction activity until State Parks authorizes its removal.</p> <p>CUL-4: Archaeological and Native American Monitoring. Full-time archaeological and Native American monitoring shall be conducted during Project-related ground-disturbing activities consistent with the HRMTP (see Mitigation Measure CUL-1) to identify and avoid impacts on archaeological resources. Ground-disturbing activities include but are not limited to demolition, brush clearance, grubbing, excavation, trenching, and grading. The qualified archaeologist shall have the authority to modify monitoring locations and frequencies based on soil observations in coordination with State Parks.</p> <p>Each archaeological monitor shall have a degree in anthropology, archaeology, or a related field, and experience with the archaeology of the Southern California coastal region. Archaeological monitors shall work under the direct supervision of a qualified archaeologist and shall complete daily monitoring logs. The monitoring logs shall document dates of monitoring and monitoring participants, activities observed, soil types observed, and any archaeological resources encountered.</p> <p>CUL-5: Inadvertent-Discovery Procedures. In the event that previously unrecorded archaeological resources are inadvertently discovered, or previously recorded archaeological resources are</p>	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>inadvertently affected during ground-disturbing activities, work shall be halted immediately within a 100-foot radius of the resource and temporary protective measures shall be implemented pursuant to provisions of the HRMTP. No work shall occur within 100 feet of the resource until it has been evaluated by a qualified archaeologist and any identified treatment implemented. Consistent with Mitigation Measure CUL-3 (Avoidance and Preservation in Place), avoidance and preservation in place shall be the preferred manner of mitigating impacts on archaeological resources to maintain the important relationship between artifacts and their archaeological context, to preserve each resource's scientific value, and to preserve the cultural values ascribed to resources by local Native American Tribes.</p> <p>All resources unearthed by the Project that cannot be avoided shall be evaluated by a qualified archaeologist for listing in the National Register and California Register. If the qualified archaeologist determines the find to constitute a "historical resource" or a "unique archaeological resource" under CEQA, State Parks shall coordinate with the qualified archaeologist and Native American Tribes to develop treatment to reduce or minimize impacts on the resource consistent with Mitigation Measure CUL-1 (Historical Resources Monitoring and Treatment Plan).</p>	
<p>3.4-2: The Project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5.</p>	<p>Implement Mitigation Measures CUL-1 through CUL-5.</p>	<p>Less than Significant with Mitigation</p>
<p>3.4-3: The Project could disturb human remains, including those interred outside of formal cemeteries.</p>	<p>Implement Mitigation Measures CUL-1 through CUL-5. CUL-6: Human Remains. In the event human remains are encountered, pursuant to California Health and Safety Code Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to PRC Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision about the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the NAHC must be contacted within 24 hours. The NAHC must then immediately identify the Most Likely Descendant (MLD) upon receiving notification of the discovery. The MLD shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in PRC Section 5097.98 and consistent with Mitigation Measure CUL-1 (Historical Resources Monitoring and Treatment Plan).</p>	<p>Less than Significant with Mitigation</p>
<p>3.4-4: The Project could result in cumulatively considerable impacts on cultural resources.</p>	<p>Implement Mitigation Measures CUL-1 through CUL-6.</p>	<p><i>Alternative 2: Significant and Unavoidable; Alternatives 3 and 4: Less than Significant with Mitigation Incorporated</i></p>

Impacts	Mitigation Measures	Significance after Mitigation
Energy		
3.7-1: The Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	None Required	Less than Significant
3.7-2: The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None Required	Less than Significant
3.7-3: The Project would not result in cumulatively considerable impacts to energy.	None Required	Less than Significant
Geology, Soils, and Paleontology		
3.6-1: The Project would indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides.	GEO-1: A soils report and geotechnical investigation report shall be prepared by a California licensed geotechnical engineer for the Project area including Topanga State Park, Topanga Lagoon, the PCH bridge area, and Topanga Beach. These reports shall evaluate various geotechnical characteristics including existing liquefaction risk and soil stability. The reports shall provide recommendations for facility design per these findings. These recommendations shall be incorporated into facility design. GEO-2: During final design, State Parks/DBH will prepare a quality assurance/quality control plan that will be maintained during construction. The plan will include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will periodically prepare reports while grading excavation and construction activities are underway.	Less than Significant with Mitigation
3.6-2: The Project would not result in substantial soil erosion and loss of topsoil.	None Required	Less than Significant
3.6-3: The Project could 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.	Implement Mitigation Measures GEO-1 and GEO-2.	Less than Significant with Mitigation
3.6-4: The Project would not be located on expansive soil creating substantial direct or indirect risks to life or property.	Implement Mitigation Measures GEO-1 through GEO-4	No Impact
3.6-5: The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	None Required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
<p>3.6-6: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</p>	<p>Mitigation Measure GEO-3: State Parks shall retain a paleontologist who meets the Society of Vertebrate Paleontology’s (SVP 2010) definition for Qualified Professional Paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources. Before the start of ground-disturbing activities that would affect the Tuna Canyon Formation and the Marine Terrace Deposits (Qtm), the Qualified Paleontologist or their designee shall provide paleontological resources sensitivity training to all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. State Parks and the relevant land managers shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.</p> <p>Mitigation Measure GEO-4: Paleontological monitoring shall be conducted during ground-disturbing activities in the Cretaceous Tuna Canyon Formation and the Marine Terrace Deposits. The formation crops out along the valley walls in the southeast Project area. Monitoring shall be conducted by a qualified paleontological monitor (SVP 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.</p> <p>Mitigation Measure GEO-5: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor’s discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at an accredited repository.</p> <p>If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall</p>	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
	<p>cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described in this measure.</p> <p>Mitigation Measure GEO-6: At the conclusion of paleontological monitoring, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring, any salvage efforts, and the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to State Parks, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and required mitigation measures.</p>	
<p>3.6-7: The Project would not result in cumulatively considerable impacts to geology, soils, seismicity, topography, and paleontology.</p>	<p>Implement Mitigation Measures GEO-1 through GEO-6</p>	<p>Less than Significant with Mitigation</p>
<p>Greenhouse Gas Emissions</p>		
<p>3.9-1: The Project would not generate greenhouse gas emissions, either directly or indirectly, that would not have a significant impact on the environment.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.9-2: The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.9-3: The Project would not result in cumulatively considerable impacts to greenhouse gas emissions.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>Hazards, Hazardous Materials, and Wildfire</p>		
<p>3.8-1: The Project could create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal, or the accidental release of hazardous materials.</p>	<p>HAZ-1: Before initiating ground disturbance and construction activities, Project landowners/managers (State Parks, Caltrans, the County of Los Angeles Department of Beaches and Harbors) shall collect representative samples of soils and fill material to be analyzed for lead, asbestos, and chromium and any other substances required by the regulatory agencies. Landowners/managers shall avoid if feasible, or otherwise remove from the Project area, soils and fill material identified as containing hazardous quantities of contaminants and shall dispose of such soils and fill material in accordance with applicable hazardous waste regulations. No contaminated soils or fill materials will be eligible for nearshore placement.</p> <p>HAZ-2: Before construction, a geophysical survey shall be conducted to evaluate the Project area for the potential presence of USTs. In the event that USTs are detected, the USTs shall be removed in accordance with all applicable federal, state, and local regulations.</p>	<p>Less than Significant with Mitigation</p>
<p>3.8-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</p>	<p>None Required</p>	<p>No Impact</p>

Impacts	Mitigation Measures	Significance after Mitigation
3.8-3: The Proposed Project would not 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 not create a significant hazard to the public or the environment.	None Required	No Impact
3.8-4: For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area.	None Required	No Impact
3.8-5: The Project could impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.	Implement Mitigation Measure TRA-1 (refer to Section 3.16, <i>Traffic and Transportation</i>)	Less than Significant with Mitigation
3.8-6: The Project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	Implement Mitigation Measures FIRE-1 and TRA-1.	Less than Significant with Mitigation
3.8-7: The Project could cause an increase in airborne insect populations.	HAZ-3: State Parks shall coordinate with the County of Los Angeles Department of Public Health and the Greater Los Angeles County Vector Control District before Project operations to develop, and if necessary to implement, appropriate insect abatement methods. Such methods shall not utilize any substances that may contaminate water or harm wildlife.	Less than Significant with Mitigation
3.8-8: The Project could result in cumulatively considerable impacts related to hazards and hazardous materials.	Implement Mitigation Measures HAZ-1, HAZ-2, HAZ-3, TRA-1, and FIRE-1.	Less than Significant with Mitigation
Hydrology and Water Quality		
3.9-1: The Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Implement Mitigation Measures HAZ-1 and HAZ-2 (refer to Section 3.8, <i>Hazards and Hazardous Materials</i>).	Less than Significant with Mitigation
3.9-2: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.	None Required	Less than Significant
3.9-3: The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows.	None Required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
3.9-4: The Project could, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	Implement Mitigation Measures HAZ-1 and HAZ-2 (refer to Section 3.8, <i>Hazards and Hazardous Materials</i>)	Less than Significant with Mitigation
3.9-5: The Project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None Required	No Impact
3.9-6: The Project could result in a cumulatively considerable impact related to hydrology and water quality.	Implement Mitigation Measures HAZ-1 and HAZ-2 (refer to Section 3.8, <i>Hazards and Hazardous Materials</i>).	Less than Significant with Mitigation
Land Use and Planning		
3.10-1: The Project would not physically divide an established community.	None Required	No Impact
3.10-2: The Project could cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	None Required	Less than Significant
3.10-3: The Project could result in cumulatively considerable impacts to land use and land use planning.	None Required	Less than Significant
Marine Resources		
3.11-1: The Project could have a substantial adverse effect, either directly or through habitat modifications, including direct disturbance, removal, filling, hydrological interruption, or discharge, on any species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, EFH) or as identified by CDFW, USFWS, or NMFS.	<p>MAR-1: Marine Resources Protection Measures. The following measures will be implemented to protect and minimize impacts on special-status marine species or managed fish species and their habitats during construction. Additional measures required by regulatory agencies as part of Project approvals will also be incorporated. When a conflict exists between specific measures, the most protective measure will be implemented.</p> <ol style="list-style-type: none"> 1. Before the initiation of Project construction, focused surveys will be conducted for marine biological habitats and communities within a suitable buffer of the shoreline and the nearshore nourishment area (including the proposed pipeline corridor) to identify marine resources and potential Project impacts. Consultation with the resource agencies will occur to implement the best methods for avoiding and minimizing resource impacts. 2. Placement of pipeline will avoid rocky intertidal boulder fields, subtidal rocky reefs, surfgrass beds, kelp beds, gorgonian and sandcastle tubeworm beds, and sand dollar beds, if present, to the maximum extent feasible. If possible, risers will be used to avoid impacts on these areas or pipelines will be rerouted into sand channels. 3. Support vessels will avoid anchoring over hard-bottom habitat to minimize damage to sensitive habitat and surfgrass beds. 4. Sediment placement methods will include controlling the flow of sediment into different parts of the nearshore nourishment area to 	Less than Significant with Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	<p>allow natural movement of material and minimize direct burial and mortality of sensitive marine resources. Sediment placement should be conducted farther from shore to reduce the depth of sediment deposition down the coast.</p> <p>5. A qualified monitor will monitor the placement of marine equipment and structures, including support vessels, to ensure that sensitive marine resources are avoided to the extent practicable and are in compliance with all resource agency permits. If marine resources are threatened by Project activities, the qualified monitor will have the authority to stop work until resource agency consultation occurs and the threat has been resolved,</p> <p>MAR-2: Avoidance of California Grunion Spawning Season. The following measures will be implemented to protect and minimize impacts on California grunion spawning season (March through August) during construction.</p> <ol style="list-style-type: none"> 1. Bright lights at night will not be permitted. To avoid spawning impacts, night lighting on the beach face should not exceed 100 mlux, approximately equal to the light of a full moon (Simons et al. 2022). 2. Construction will avoid work within 10 feet of the higher high-tide line (as represented by the highest limit of dry wrack), as this area can be used for grunion spawning. If avoidance of this area during construction is infeasible, a qualified biologist will permit work within the avoidance zone only if it can be confirmed that spawning has not occurred in that area since the last full or new moon. Spawning runs can be forecast within four nights after a full or new moon, at the highest tides and for two hours beyond. If significant spawning is documented, the areas should be marked and protected from disturbance until the next full or new moon. 3. Grunion monitoring shall be conducted by a qualified biologist for 30 minutes before and two hours after the predicted start of each nightly spawning event. Sufficient qualified biologists shall be employed to ensure that the entire construction site is monitored during the predicted grunion run. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale (Martin et al. 2021). Every individual fish shall be counted to determine the Walker Scale value (e.g., 0, 1, 2, 3, 4, or 5) of each 300-foot segment within the proposed work area. 4. Education programs developed for the Project shall incorporate grunion to both minimize and mitigate impacts on grunion associated with the anticipated increase in beach use and provide regional educational resources about the grunion that addresses a gap in statewide programs. Recommended elements include: <ol style="list-style-type: none"> i. Post interpretive signage that provides information about grunion, rules and regulations for recreational fishing, and ways to protect the species. 	

Impacts	Mitigation Measures	Significance after Mitigation
	<ul style="list-style-type: none"> ii. Develop and implement grunion run education programs similar to those in place at Cabrillo Beach in San Pedro with the Cabrillo Marine Aquarium, and at La Jolla Shores with the Birch Aquarium at Scripps. <p>5. The following management measures shall be implemented after construction:</p> <ul style="list-style-type: none"> i. To retain the natural deposition of wrack along the beach, mechanical beach grooming will not occur on-site. Trash and debris should be removed by hand as necessary. ii. Vehicle use on the beach shall be limited to that required for emergency response and occasional required maintenance. All vehicles must drive above the higher high-tide line during March–September unless no grunion spawning occurred in the task location during the last full or new moon. 	
<p>3.11-2: The Project could threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels.</p>	None Required	Less than Significant
<p>3.11-3: The Project could interfere substantially with the movement of any native resident or migratory fish or marine wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native marine wildlife nursery sites.</p>	None Required	Less than Significant
<p>3.11-4: The Project could introduce or spread an invasive aquatic species.</p>	<p>MAR-3: Invasive Aquatic Species Control Measure. All Project support vessels shall have underwater surfaces cleaned before entering Southern California waters and immediately before transiting to the offshore construction area. Additionally, and regardless of vessel size, ballast water for all Project vessels must be managed consistent with the California State Lands Commission's ballast management regulations, and Biofouling Removal and Hull Husbandry Reporting Forms shall be submitted to State Lands Commission staff.</p>	Less than Significant with Mitigation
<p>3.11-5: The Project could result in a cumulatively considerable impact on marine resources.</p>	Implement Mitigation Measures MAR-1, MAR-2, and MAR-3 (see Impacts MARINE 3.11-1 and MARINE 3.11-3).	Not Cumulatively Considerable with Mitigation Incorporated
Noise and Vibration		
<p>3.12-1: The Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p>	<p>NOISE-1: Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited. For construction activities occurring outside of the 7:00 a.m. to 7:00 p.m., Monday through Friday time period, the Proposed Project would be required to obtain a variance in accordance with County Code, Section 12.08.440 and comply with applicable specifications as issued by the health officer.</p>	Less than Significant with Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	<p>NOISE-2: Monitor construction noise to verify compliance with the limits. Provide the contractor the flexibility to meet the applicable construction noise limits in the most efficient and cost-effective manner. The contractor would have the flexibility of either prohibiting certain noise-generating activities during daytime and/or nighttime hours or providing additional noise control measures to meet the applicable noise limits. To meet required noise limits, the following noise control mitigation measures will be implemented as necessary, for daytime and/or nighttime only as needed to meet the applicable noise limits:</p> <ul style="list-style-type: none"> • Monitor and maintain equipment to meet noise limits. • Install a temporary construction site sound barrier near a noise source. • Use acoustic enclosures, shields, or shrouds for equipment and facilities. • Use moveable sound barriers at the source of the construction activity. • Use low-noise emission equipment. • Minimize the use of generators to power equipment. • Limit conducting noisy nighttime construction activities in or within 100 feet of residential neighborhoods. • Prohibit aboveground jackhammering and impact pile driving during nighttime hours. • Limit the use of public address systems and loudspeakers. • During nighttime work, use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace them with spotters. • Locate stationary construction equipment as far as possible from noise-sensitive sites. • Implement noise-deadening measures for truck loading and operations. • Line or cover storage bins, conveyors, and chutes with sound-deadening material. • Use high-grade engine exhaust silencers and engine-casing sound insulation. • To mitigate noise related to pile driving, cast-in-drilled-hole (CIDH) piles will be used instead of pile driving to reduce noise levels substantially. CIDH piles will meet applicable U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service standards and conditions. 	

Impacts	Mitigation Measures	Significance after Mitigation
3.12-2: The Project would not generate excessive groundborne vibration or groundborne noise levels.	NOISE-3: To mitigate vibration related to pile driving, cast-in-drilled-hole (CIDH) piles will be used instead of pile driving to reduce vibration levels substantially. CIDH piles will meet applicable U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service standards and conditions.	Less than Significant
3.12-3: The Project would not expose people residing or working in the Project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport).	None Required	No Impact
3.12-4: The Project could result in cumulatively consider impacts to noise and vibration.	Implement Mitigation Measures NOISE-1 through NOISE-3 .	Less than Significant with Mitigation
Public Services		
3.13-1: The Project could create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of 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 fire protection and emergency services.	Implement Mitigation Measure TRA-1 .	Less than Significant with Mitigation
3.13-2: The Project could create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of 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 sheriff protection.	Implement Mitigation Measure TRA-1 .	Less than Significant with Mitigation
3.13-3: The Project could result in cumulatively considerable impacts to public services.	Implement Mitigation Measure TRA-1 .	Less than Significant with Mitigation
Parks and Recreation		
3.14-1: The Project could 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.	PR-1: Temporary Access Restrictions. During final design, the Project Engineer in coordination with the officials with jurisdiction (i.e., State Parks or DBH) shall evaluate all proposed temporary impact areas to identify opportunities to further reduce their size and the duration of temporary access restrictions. All temporary impact areas shall be shown on the Project plans and specifications and shall include notes that the Construction Contractor shall not increase the size of those areas without consultation with the Project Engineer and subsequent environmental review. The Construction Contractor shall also be responsible for the following: 1. Ensure all temporary impact areas within parks and recreational facilities are appropriately signed and gated to restrict access.	Less than Significant with Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	<p>2. Maintain the fencing throughout the time period each temporary impact area is used and to remove the fencing only after all construction activity in an area is completed, the temporary impact area is no longer needed, and the land is ready to be returned to the property owner.</p> <p>3. Provide signage at each temporary impact area explaining why the area is fenced and why access is restricted, the anticipated completion date of the use of the land, and contact information for the public to solicit further information regarding temporary impact areas and the Proposed Project.</p> <p>PR-2: Temporary Surf Break Access. During construction, a temporary access way to the surf break shall be constructed, to provide continued access for surfers, beach goers, and other offshore recreational uses at Topanga Beach. Prior to any beach closures, the Project Engineer in coordination with the County, shall develop detour signs notifying surfers and beach goers of the upcoming temporary closures and directing uses to the temporary accessway with estimated timeframes.</p>	
<p>3.14-2: The Project would include recreational facilities and require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.</p>	<p>Implement Mitigation Measures PR-1, PR-2, and TRA-1.</p>	<p>Less than Significant with Mitigation</p>
<p>3.14-3: The Project would not result in cumulatively considerable impacts to recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The Project would result in the expansion of recreational facilities which would have a cumulatively considerable benefit to the environment.</p>	<p>Implement Mitigation Measures PR-1, PR-2, and TRA-1.</p>	<p>Less than Significant with Mitigation</p>
<p>Tribal Cultural Resources</p>		
<p>3.15-1: The Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 5020.1(l).</p>	<p>Implement Mitigation Measures CUL-1 through CUL-5.</p>	<p><i>Alternatives 2 and 3:</i> Less than Significant with Mitigation Incorporated; <i>Alternative 4:</i> Significant and Unavoidable.</p>
<p>Transportation and Circulation</p>		
<p>3.16-1: The Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.</p>	<p>TRA-1: Construction and Emergency Traffic Management Plan. During final design and prior to the issuance of demolition, grading or any construction permits, a qualified traffic engineer shall prepare a Transportation Management Plan that would address potential traffic flow disruptions on local roadways prior to construction. The Plan shall incorporate and build upon requirements from the City of Malibu Emergency Evacuation Plan and the Los Angeles County Evacuation Plan and would be developed in coordination with Caltrans, City of Malibu, Los Angeles County, State Parks, DBH, and emergency service responders, which include fire departments, police departments, and ambulances that have jurisdiction within the Project area. The Plan</p>	<p>Less than Significant</p>

Impacts	Mitigation Measures	Significance after Mitigation
	<p>shall be included in the final design plans and prepared in accordance with the California Manual on Uniform Traffic Control Devices, Caltrans Standard Plans (2023), and current standards and best practices of the reviewing and approving agencies. The Plan shall be coordinated with applicable agencies regarding construction and maintenance schedules and worksite Traffic Control Plans including, but not limited to, Caltrans, the California Highway Patrol (CHP), and local fire and police departments. The Plan shall include, but is not limited to the following measures:</p> <ul style="list-style-type: none"> • Maintain four lanes, two lanes in each direction, of circulation on PCH within the bridge area, at least one lane in each direction on all other public roadways, and access to neighboring commercial establishments during construction of all Proposed Project components other than the sewer extension within PCH • Prepare an Emergency Evacuation Route Plan approved by Caltrans and other emergency agencies for installation of the sewer extension within PCH requiring closure of one lane of traffic. The Plan shall ensure the following at a minimum: <ul style="list-style-type: none"> ○ No more than one lane of traffic will be closed at any time ○ Nighttime work shall be used to minimize lane closures during daytime hours ○ Four lanes of traffic shall be maintained during peak traffic hours. Lane closures shall not be allowed during weekend days or holiday days ○ Emergency service providers shall be provided expedited through-passage at all times • Minimize traffic delays and effectively maintain an acceptable level of traffic flow throughout the transportation system during construction • Minimize detours and impacts to pedestrians and bicyclists • Maintain operation of PCH for use as an emergency evacuation route at all times during construction, especially during red-flag days • Establish communication plan between State Parks, DBH, Caltrans, City of Malibu, Los Angeles County Fire, construction contractors, and emergency service providers • Ensure that temporary speed limit reduction for the traffic detour approaches and exits conforms to safe highway design speeds • Have a flagger present to coordinate north-south traffic during those limited times that only a single lane is open • Prepare of a public outreach campaign and signage plans for public notification prior to and during the construction period <p>TRA-2: Construction Parking Plan. Prior to the issuance of demolition, grading, or any other construction permits, a Construction</p>	

Impacts	Mitigation Measures	Significance after Mitigation
	<p>Parking Management Plan shall be prepared and submitted for review and approval by Caltrans, State Parks, and the County of Los Angeles. The Construction Parking Management Plan shall include, at a minimum, the following measures, which shall be implemented during all construction activities as overseen by the Construction Contractor:</p> <ul style="list-style-type: none"> • All temporary construction parking areas shall be located within previously disturbed or developed areas within the Project area • Temporary parking areas shall provide a minimum replacement parking ratio of 1:1 for standard parking spaces to the greatest extent feasible, as well as ADA spaces • Temporary parking areas shall be identified on the final design plans and signage shall be provided prior to the start of construction activities to notify travelers of the location and duration of the temporary parking provisions • Temporary parking shall be developed and available for use prior to start of construction 	
<p>3.16-2: The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.16-3: The Project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</p>	<p>Implement Mitigation Measures TRA-1 and TRA-2.</p>	<p>Less than Significant with Mitigation</p>
<p>3.16-4: The Project could result in inadequate emergency access.</p>	<p>Implement Mitigation Measures TRA-1 and TRA-2.</p>	<p>Less than Significant with Mitigation</p>
<p>3.16-5: The Project could result in cumulative impacts to transportation and circulation.</p>	<p>Implement Mitigation Measures TRA-1 and TRA-2.</p>	<p>Less than Significant with Mitigation</p>
<p>Utilities and Service Systems</p>		
<p>3.17-1: The Project would require the relocation of existing utilities and will require the construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the relocation or construction of which could cause significant environmental effects.</p>	<p>Implement Mitigation Measure UTS-1.</p>	<p>Less than Significant with Mitigation</p>
<p>3.17-2: The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.</p>	<p>None Required</p>	<p>Less than Significant</p>
<p>3.17-3: The Project would 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.</p>	<p>Implement Mitigation Measure UTS-1.</p>	<p>Less than Significant with Mitigation</p>

Impacts	Mitigation Measures	Significance after Mitigation
3.17-4: The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	None Required	Less than Significant
3.17-5: The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	None Required	Less than Significant
3.17-6: The Project could result in cumulatively considerable impacts to utilities and service systems.	Implement Mitigation Measure UTS-1.	Less than Significant with Mitigation
Wildfire		
3.18-1: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Implement Mitigation Measure TRA-1 (refer to Section 3.16, <i>Transportation and Circulation</i>).	Less than Significant with Mitigation
3.18-2: The Project, due to slope, prevailing winds, and other factors, would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	FIRE-1: Before the issuance of a grading or building permit, State Parks shall submit a fuel modification plan to the State Fire Marshal and Los Angeles County Fire Department for review and approval. The plan shall identify fuel modification zones around the Project area and the type of landscaping allowed within these zones. The plan shall also ensure that the height and density of restoration planting and vegetation around the Project area is designed to reduce the risk of wildfire.	Less than Significant with Mitigation
3.18-3: The Project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Implement Mitigation Measure FIRE-1.	Less than Significant with Mitigation
3.18-4: The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes	None Required	Less than Significant
3.18-5: The Project could result in cumulatively considerable impacts to wildfire.	Implement Mitigation Measure TRA-1 (refer to Section 3.16, <i>Transportation and Circulation</i>) and Mitigation Measure FIRE-1.	Less than Significant with Mitigation

CHAPTER 1

Introduction

The California Department of Parks and Recreation (State Parks) has prepared this environmental impact report (EIR) in coordination with the County of Los Angeles (County) and the California Department of Transportation (Caltrans). This EIR assesses the potential effects of implementing the Topanga Lagoon Restoration Project (hereinafter referred to as “Proposed Project”). The Proposed Project is represented by three “build alternatives”, all of which meet the project's primary goals via modified approaches. State Parks is the lead agency under the California Environmental Quality Act (CEQA). This draft environmental impact report (Draft EIR) has been prepared in accordance with CEQA (Public Resources Code Sections 21000–21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387).

The information contained in this EIR may be used by federal agencies involved in permitting or funding this project to fulfill their responsibilities under federal environmental statutes, including the National Environmental Policy Act, and to support federal consultations under the Endangered Species Act and the National Historic Preservation Act.

1.1 Purpose of the Draft EIR

The purpose of this Draft EIR is to provide the public and pertinent agencies with information about the potential effects on the regional and local environment associated with construction and operation of the Proposed Project. The Draft EIR describes the environmental impacts of the Proposed Project and suggests mitigation measures where necessary to avoid or reduce any significant impacts. The impact analyses are based on a variety of sources, including publicly available documents, agency consultation, technical studies, and field surveys. The purpose of the Draft EIR is to assist decision-makers in making an informed evaluation of whether or not to approve the Proposed Project based on its potential environmental impacts, and to provide actions to avoid, minimize, or mitigate those impacts.

After receiving comments from the public, project stakeholders, and reviewing agencies, a final EIR will be prepared. State Parks may prepare additional environmental or engineering studies to address project comments. The Final EIR will include responses to comments received on the Draft EIR and will identify the preferred alternative. State Parks will consider and certify before approving the Proposed Project that the EIR has been completed in compliance with CEQA, and that the EIR reflects State Parks’ independent judgment and analysis (CEQA Guidelines Section 15090[a]).

The three public landowners (State Parks, the County, and Caltrans) are working collaboratively on the Proposed Project. The County Department of Beaches and Harbors is the managing department of the County within the Project area. The City of Malibu also has jurisdiction over a small portion of the Project area along the western boundary. The California Coastal Commission will evaluate consistency with the California Coastal Act, with reference to the Santa Monica Mountains Local Coastal Program's requirements for the bridge and lagoon restoration. This document will be used to accompany a Consolidated Coastal Development Permit request that will require approval by the California Coastal Commission. Caltrans is using this EIR to fulfill the Project Approval and Environmental Document Phase 0. The engineering Project Report specific to the bridge will be prepared as a separate document.

1.2 Format of the Draft EIR

This Draft EIR has been organized into the following chapters:

- **Executive Summary.** This chapter summarizes the contents of the Draft EIR.
- **Chapter 1, *Introduction*.** This chapter discusses the Draft EIR process and explains the purpose of the Draft EIR.
- **Chapter 2, *Project Description*.** This chapter provides an overview of the Proposed Project; describes the need for and objectives of the Proposed Project; provides a background of the Project area and key stakeholders; explains planning for construction, operation, and management of the Proposed Project; and presents a preliminary list of the agencies and entities, in addition to State Parks, that would use this EIR in their consideration of specific permits and other discretionary approvals for the Proposed Project.
- **Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*.** This chapter describes the environmental setting and identifies the direct, indirect, and cumulative impacts of each alternative of the Proposed Project for each of the following environmental topics: Visual/Aesthetics; Air Quality; Biological Resources; Cultural Resources; Energy; Geology, Soils, Seismicity, Topography, and Paleontology; Greenhouse Gas Emissions/Climate Change; Hazards and Hazardous Materials; Hydrology/Floodplain and Water Quality/Stormwater Runoff; Land Use and Land Use Planning; Marine Resources; Noise and Vibration; Public Services; Parks and Recreation; Transportation and Circulation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire. For the assessment of cumulative impacts, past, current, and probable future projects are considered together with the Proposed Project. Measures to avoid, minimize, and mitigate the impacts of the Proposed Project are presented for each environmental topic where potential significant impacts have been identified.
- **Chapter 4, *Other CEQA Considerations*.** This chapter describes compliance with federal laws and relevant executive orders.
- **Chapter 5, *Growth Inducement*.** This chapter describes the potential for the Proposed Project to induce growth.
- **Chapter 6, *Alternatives Analysis*.** The section presents a comparison of four alternatives including the No Project/No Build–Managed Decline Alternative, and a description of alternatives considered but eliminated from further analysis.
- **Chapter 7, *Report Preparers*.** This chapter identifies the parties involved in preparing this Draft EIR, including persons and organizations consulted.

- **Appendices.** The appendices include materials related to the Notice of Preparation (NOP) and scoping process, as well as technical studies that support the impact analyses.

1.3 Environmental Review Process

1.3.1 CEQA Process Overview

The basic purposes of CEQA are to (1) inform decision-makers and the public about the potential significant adverse environmental effects of proposed governmental decisions and activities; (2) identify the ways those environmental effects can be avoided or significantly reduced; (3) prevent significant, avoidable and adverse environmental effects by requiring changes in projects through the use of alternatives or mitigation measures when feasible; and (4) disclose to the public the reasons why an implementing agency may approve a project even if significant unavoidable environmental effects are involved.

An EIR uses a multidisciplinary approach, applying social and natural sciences to make a qualitative and quantitative analysis of all the foreseeable environmental impacts that a proposed project would exert on the surrounding area. As stated in CEQA Guidelines Section 15151:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible.

This Draft EIR has been prepared to comply with CEQA and the CEQA Guidelines and is to be used by local regulators and the public in their review of the potential significant adverse environmental impacts of the Proposed Project and alternatives, and mitigation measures that would minimize or avoid those potential environmental effects. State Parks and other relevant landowners will consider the information presented in this Draft EIR, along with other factors, before making any final decisions regarding the Proposed Project.

1.3.2 Notice of Preparation and Public Scoping

Pursuant to CEQA Guidelines Section 15082, on May 23, 2022, an NOP was published for a 30-day review period. The NOP was circulated to federal, state, and local agencies, including responsible and trustee agencies, and to organizations and persons who expressed interest in the Proposed Project, through the California Governor's Office of Planning and Research, State Clearinghouse. The NOP comment period extended through June 23, 2022. The NOP provided a general description of the Proposed Project including a summary of all proposed alternatives, a description of the Project area, and details on how to attend the public scoping meeting. The NOP was made available on the websites of the Resource Conservation District of the Santa Monica Mountains and State Parks. A copy of the NOP and comment letters are included in this Draft EIR in **Appendix A**.

On June 11, 2022, State Parks held a virtual public scoping meeting to describe the Proposed Project, identify the environmental topics to be addressed in the EIR, and describe the CEQA process for the EIR. To notify the public of the scoping meeting, State Parks published legal notifications in the *Los Angeles Times*, *The Canyon Chronicle*, and the *Topanga New Times* and mailed the NOP to persons who had previously expressed interest in the Proposed Project. State Parks provided an opportunity for attendees to submit written or verbal comments on the scope of the environmental analysis to be included in this Draft EIR. The meeting was facilitated and recorded using Zoom, a virtual communication program.

In total, 82 written and verbal comments were received during the NOP comment period from agencies and private citizens, including citizens with concession leases on-site.

Known Areas of Controversy and Issues of Concern

Pursuant to CEQA Guidelines Section 15123(b)(2), the Draft EIR must disclose areas of controversy raised by agencies and the public during the public scoping process. Areas of controversy have been identified for the Proposed Project based on comments made during the 30-day public review period in response to information published in the NOP.

Commenting parties have requested that the Draft EIR evaluate impacts related to biological resources, recreational resources including surfing, historical resources, and transportation. The greatest areas of known controversy from an environmental perspective are potential impacts related to hydrology, water quality, biological and marine resources, and tribal and cultural resources.

1.3.3 Draft EIR

This Draft EIR has been prepared pursuant to the requirements of CEQA Guidelines Section 15126. The Draft EIR provides an analysis of reasonably foreseeable impacts associated with the construction, operation, and maintenance of the Proposed Project. The environmental baseline for determining potential impacts is the date of publication of the NOP for the Proposed Project (CEQA Guidelines Section 15125[a]). The impact analysis is based on changes to existing conditions that would result from implementation of the Proposed Project.

In accordance with CEQA Guidelines Section 15126, Chapter 3 of this Draft EIR describes the Project area and the existing baseline environmental setting; identifies potential short-term, long-term, and cumulative adverse environmental impacts associated with Proposed Project implementation; and identifies mitigation measures for potentially significant adverse impacts. Significance criteria are defined at the beginning of each environmental consequences section for each environmental topic analyzed in this Draft EIR. In addition, Chapter 5 of this Draft EIR analyzes potential growth-inducing impacts, and Chapter 6 provides a comparison of alternatives to the Proposed Project.

1.3.4 Draft EIR Public Review

In accordance with Section 15105 of the CEQA Guidelines, this Draft EIR has been submitted to the State Clearinghouse, a division of the California Governor’s Office of Planning and Research, for review by state agencies. In addition, this Draft EIR has been circulated to federal and local agencies and interested parties who may wish to review and provide comments on its contents. Because of the complexity of this project, the review period is 60 days. The Draft EIR is available for public review from February 12, 2024, to April 12, 2024. Please submit all comments to:

California Department of Parks and Recreation
 1925 Las Virgenes Road
 Calabasas, CA 91302
 Attn: John Ota, Environmental Scientist
John.Ota@parks.ca.gov

During the maximum 60-day public review period, State Parks will hold two public meetings (one hybrid in-person/virtual and one in-person meeting) to receive public comments on the environmental analysis in the Draft EIR. The meetings will include a brief presentation providing an overview of the Proposed Project and alternatives and the findings of the Draft EIR. After the presentations, oral comments will be accepted. Written comments also may be submitted anytime during the review period. The public meeting will be held as follows:

Public Meeting Details

Date: February 24, 2024	Date: February 28, 2024
Time: 10 a.m.–noon	Time: 6:00–8:00 p.m.
Location: Annenberg Beach House, 415 Pacific Coast Highway, Santa Monica, CA 90402	Location: Topanga Community Center, 1440 N. Topanga Canyon Blvd., Topanga, CA 90290
Meeting Format: Hybrid in-person/virtual; recording available afterward at project website	Meeting Format: In-person; recording available afterward at project website
Watch/Comment on Meeting Live: youtube.com/@rcdsmm	Project Website: https://www.topangalagoonrestoration.org
Project Website: https://www.topangalagoonrestoration.org	

1.3.5 Final EIR Publication and Certification

After the public review period for this Draft EIR ends on April 12, 2024, State Parks will prepare written responses to all comments. The final environmental impact report (Final EIR) will consist of this Draft EIR, responses to comments received on the Draft EIR, and any changes or corrections to the Draft EIR that are made as part of the responses to comments. State Parks will make the Final EIR available for public review before considering any final decision regarding approval of the Proposed Project (CEQA Guidelines Section 15089[b]). The Final EIR must be available to commenting agencies at least 10 days before certification (CEQA Guidelines Section 15088[b]).

Before considering the Proposed Project for approval, State Parks, in coordination with the County and Caltrans, will review and consider the information presented in the Final EIR and will certify that the Final EIR has been adequately prepared in accordance with CEQA. Once the Final EIR is certified, State Parks' Deputy Director of Park Operations may proceed to consider any final decisions regarding the Proposed Project (CEQA Guidelines Sections 15090 and 15096[f]). Before approving the Proposed Project, State Parks must make written findings in accordance with Section 15091 of the CEQA Guidelines. In addition, State Parks must adopt a Statement of Overriding Considerations concerning each significant environmental effect identified in the Final EIR (if any) that cannot be fully mitigated to a less-than-significant level. If one is needed, then the Statement of Overriding Considerations will be included in the record of the Proposed Project's approval and mentioned in the Notice of Determination following CEQA Guidelines Section 15093(c). Pursuant to CEQA Guidelines Section 15094, State Parks will file a Notice of Determination with the State Clearinghouse and County Clerk within five working days if the Proposed Project is approved.

1.3.6 Mitigation Monitoring and Reporting Program

CEQA Guidelines Section 15097 requires lead agencies to “adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects” (CEQA Guidelines Section 15097[a]). The mitigation measures adopted as part of the Final EIR, if any, will be included in a mitigation monitoring and reporting program and implemented by the appropriate agency/entity.

CHAPTER 2

Project Description

2.1 Introduction

The Project Area is located along the Pacific Ocean coastline at the base of the Santa Monica Mountains of unincorporated Los Angeles County, California, within the Santa Monica Mountains National Recreation Area, a large area of open space and parklands. The Project area includes three publicly managed areas:

- Pacific Coast Highway (PCH) and Topanga Canyon Boulevard (TCB), managed by the California Department of Transportation (Caltrans).
- Lower Topanga State Park, managed by the California Department of Parks and Recreation (State Parks).
- Topanga Beach, owned by the County of Los Angeles (County) and managed by the County Department of Beaches and Harbors (DBH).

The closest access to the Project area is from PCH and TCB (**Figure 2-1**). The Proposed Project involves the expansion of the Topanga Creek and lagoon ecosystem, replacement of the existing PCH bridge (SR-1 #53-0035) with a longer bridge to accommodate the lagoon expansion, development of visitor services in lower Topanga State Park, and relocation of DBH facilities on Topanga Beach that are threatened by sea level rise (SLR). The Proposed Project includes construction of new visitor services at the northwest corner of the intersection of PCH and TCB, referred to as the “Gateway Corner.” The Proposed Project also evaluates beneficial reuse options for excavated sediment and options for on- and off-site wastewater disposal.

The Proposed Project would facilitate implementation of an integrated, multiagency plan that would improve coastal access by redesigning existing visitor services to improve parking availability and configuration, pedestrian beach access routes, and emergency facilities such as the lifeguard station and helicopter pad on Topanga Beach (**Figure 2-2**).

2.2 Background

The Project area is almost entirely publicly owned and covers a 91-acre area, of which 35 acres are in the marine zone. The remaining 56 acres are terrestrial and include the lagoon restoration, visitor services development, and wastewater infrastructure development. Of this, approximately 30 acres are managed by State Parks, 10 by Los Angeles County, 15 Caltrans and less than 1 acre is privately owned.

2.2.1 Topanga State Park

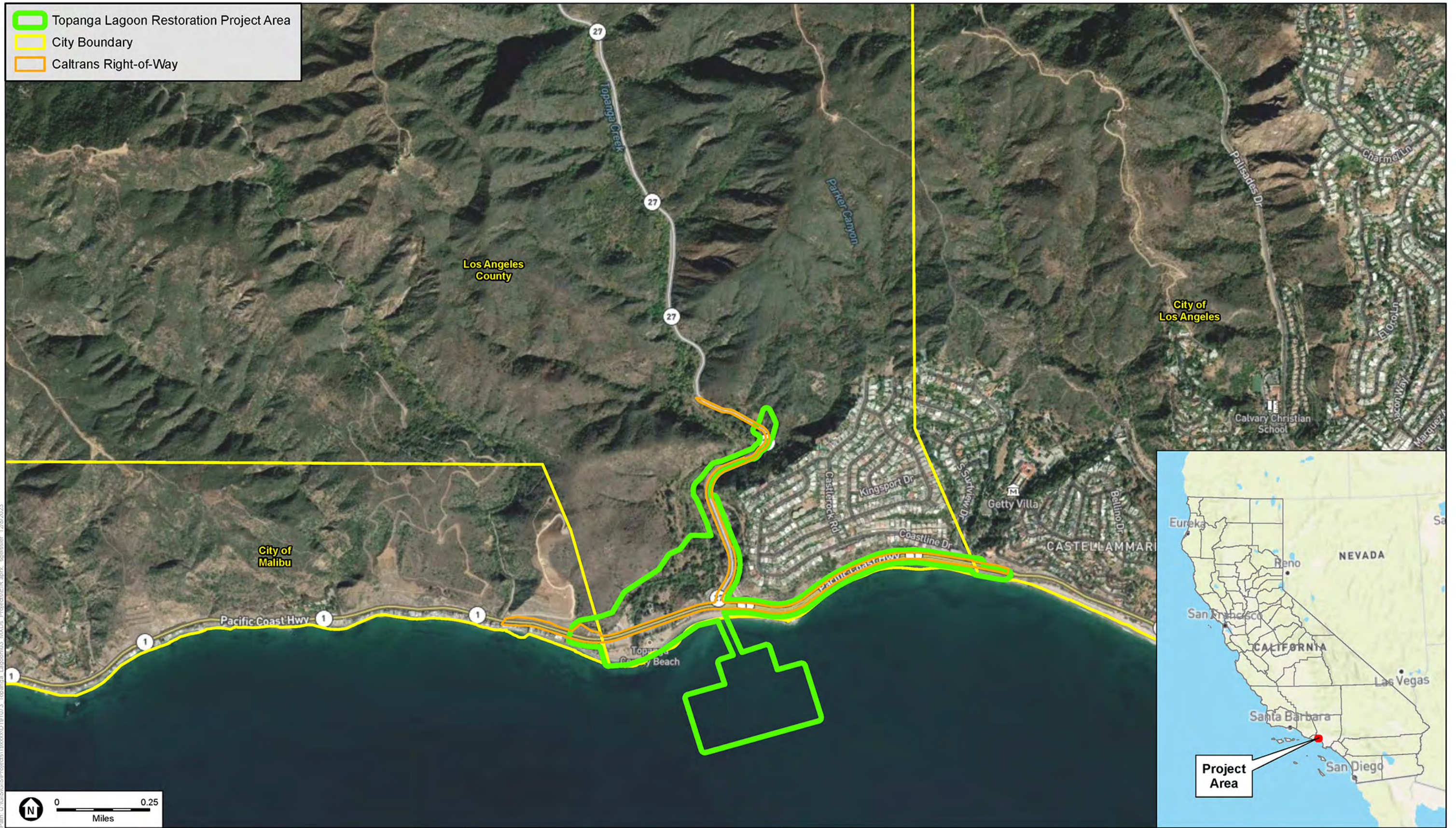
Opened to the public in 1973, Topanga State Park features 36 miles of trails through open grassland and live oaks and offers views of the Pacific Ocean and Topanga Beach (State Parks 2022). The 11,525-acre Park borders TCB (SR-27) and extends into the upper and adjacent watersheds. Portions of the Proposed Area are located within lower Topanga State Park, which has sparse public use, limited food and shopping options, and a small picnic area. Most of the business leasees were present before State Parks completed the Lower Topanga Acquisition in 2001 and are operating on either short-term leases or month-to-month rental arrangements. There is no public entry into the Topanga Ranch Motel area because of safety hazards associated with its deteriorating condition.

In 2012, State Parks prepared and approved the Topanga State Park General Plan, which established a set of goals and guidelines that address recreational, operational, interpretive, and resource management of the park (State Parks 2012). The Topanga State Park General Plan is the guiding policy document for operations and land-use management of Topanga State Park. The Proposed Project is designed to meet the objectives established in the general plan. Same capitalization problem as Park.

2.2.2 Topanga Lagoon

Topanga Lagoon is in the Topanga Creek watershed at the terminus of Topanga Creek. The lagoon is present within both the Topanga State Park and Topanga Beach properties and is spanned by the PCH Caltrans bridge. Topanga Creek drains an 18-square-mile watershed in the Santa Monica Mountains to the Pacific Ocean. It conveys flood flows to the lagoon during rain events and low flows during dry weather. A berm typically develops on the beach during summer wave conditions, and seasonally restricts direct flow of the creek into the Pacific Ocean. The berm is breached during storms with sufficient flow volumes and velocities in the creek, and during combined large coastal storm wave and tide events. This episodically allows seawater to flow into the lagoon, thus creating a connection and fish passage opportunities (Moffatt & Nichol 2022a).

Once more than 30 acres, Topanga Lagoon currently ranges between 0.59 and 0.75 acre, depending on seasonal weather patterns, and is constrained on both the east and west sides by at least 30 feet of fill from construction of the PCH bridge. **Figure 2-3** illustrates the changes from circa 1916 to present. Construction of the 1933 bridge destroyed roughly 93 percent of the original lagoon wetland habitat area (Dagit and Webb 2002).



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-1
 Project Location



Path: U:\GIS\GISProjects\191073_Topanga_Lagoon\03_IAXDs_Projects\EIR\aprx_splines\12/8/2023

SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-2
 Project Area





Topanga Lagoon circa 1916



Topanga Lagoon in 2022

Topanga Lagoon Restoration Project

Figure 2-3
Historic and Current Topanga Lagoon Photographs

Despite the existing use patterns and restrictions, Topanga Lagoon and Creek still host a robust population of the federally listed endangered tidewater goby (*Eucyclogobius newberryi*) and the only currently reproducing population of the federally listed endangered and state candidate endangered steelhead trout (*Onchorynchus mykiss*) within the Santa Monica Mountains (State Parks and RCDSMM 2022). The lagoon and adjacent creek habitat is significantly degraded because the use of locally sourced fill dirt to support the PCH bridge impeded the natural hydrologic connection to the ocean. Much of the sediment that is to be managed was generated from the nearby coastal bluffs as the highway was being widened in the early 1930s. These sediments are from naturally occurring sources that generally supply the nearshore of this area through bluff erosion but were artificially impounded in the lagoon during the construction of PCH. In addition, sand and cobble from Topanga Creek is deposited under the PCH bridge, creating sand berms that further constrain the lagoon. The current lagoon and bridge configuration is too constrained to support a healthy ecosystem, especially one under the threat of SLR. The Proposed Project would at least double the existing lagoon and creek footprint.

2.2.3 Pacific Coast Highway (PCH) Bridge

PCH opened in the late 1920s as part of the Roosevelt Highway, a 1,400-mile road that traced the western margin of the United States. This upgraded an earlier coastal road built in the early 1920s that terminated at the entrance to the Rindge Ranch at approximately Las Flores Canyon. The Roosevelt Highway provided the first direct link between Newport Beach and Laguna Beach and between Ventura and Santa Monica. Passing directly through many beach towns, the Roosevelt Highway was renamed Pacific Coast Highway in 1941 (KCET 2012). The original alignment of PCH in the 1920s included an approximately 250-foot bridge that spanned Topanga Lagoon. In 1933, the PCH segment within the Project area was widened and a 79-foot-long bridge (Bridge Number 53 0035, Post Mile 40.99) was constructed over Topanga Lagoon, replacing the original longer bridge (Caltrans 2003).

The PCH bridge is not eligible for replacement by Caltrans based on its current “good” condition, although it was built in 1933. However, the bridge’s short span has impeded fish passage and minimized lagoon habitat and function, and its replacement is listed as a priority fish passage restoration project for Caltrans District 7 in the California Fish Passage Assessment Database (PAD 716891). Caltrans is contributing project oversight for its facilities to support the Proposed Project to the end of construction at no cost because the Proposed Project would benefit the environment, the region, the economy, and the State Highway System. In coordination with Caltrans, the Proposed Project would lengthen the PCH bridge to approximately 460 feet to accommodate the restoration and expansion of the lagoon and to provide resilience to coastal erosion and SLR.

2.2.4 Topanga Beach

Topanga Beach is located just south of where TCB meets the Pacific Ocean at PCH (**Figure 2-4**). Topanga Beach includes an ocean frontage of approximately 35 acres, receives more than 750,000 visitors each year, and is popular with surfers because of the orientation of the beach (DBH 2022). Topanga Beach is accessible via Bus 534 at Stop “PCH and TCB” and provides a metered parking lot (at the upper level) and Americans with Disabilities Act (ADA) parking (at the upper and lower levels), beach wheelchairs, a lifeguard and public restroom building, and a picnic area.



Topanga Lagoon Restoration Project

Figure 2-4
Pacific Coast Highway Bridge over Topanga Lagoon in 2023

Similar to other beaches along the coastline, Topanga Beach faces threats from current coastal erosion and future SLR. The high estimates for SLR scenarios anticipate that Topanga Beach could lose its entire beach area by 2040 (Noble 2016). To protect essential visitor services at Topanga Beach, the Proposed Project would relocate the beach parking lot and the lifeguard and restroom building farther inland and farther upslope, while retaining ADA and staff parking at the beach level. The helipad is currently located on a dirt knoll on the southwest side of Topanga Lagoon. The Proposed Project would relocate the helipad to east of the lagoon and inland under all alternatives and would provide access to water so that it could assist with wildfire response.

2.3 Community Engagement in Development of Project

Efforts to envision restoration opportunities for Topanga Lagoon were initiated with the Lower Topanga Acquisition in 2001. A series of community design meetings was held, resulting in the development of potential restoration alternatives that were used to develop the Caltrans Project Study Report/Project Development Support document in 2004. After certification of the Topanga State Park General Plan in 2012, the Resource Conservation District of the Santa Monica Mountains (RCDSMM) collaborated with State Parks to obtain funding to further develop restoration alternatives. A technical advisory committee was convened in 2019 to guide the development of design alternatives. The technical advisory committee includes more than 100 representatives of relevant permitting agencies, landowners and utilities within and adjacent to the Project area, and restoration practitioners from a variety of universities. With funding provided by a Proposition 12 Santa Monica Bay Restoration Grant, administered by the California State Coastal Conservancy, RCDSMM and State Parks hosted public workshops in February 2020 and February 2021 to receive additional stakeholder design input.

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15083, State Parks held a public scoping meeting in June 2022, followed by public update and outreach meetings to the community in 2023. The community engagement meetings produced a list of public concerns, summarized below.

Anticipated Future Impacts of Climate Change and Sea Level Rise

- Topanga Beach space available for public use would continue to be reduced.
- Additional damage to recreational facilities along the coast would occur with SLR, and relocation of facilities inland would be required.
- Existing habitats and sensitive biological resources would be reduced and pushed inland, which would reduce the diversity and health of vegetation, fish, and wildlife.
- Local species would be increasingly stressed by changes in temperatures and rainfall patterns. Diversity and abundance would likely decrease. Endangered species could be extirpated.
- Fish passage would be adversely affected by a reduced lagoon size.

Ongoing Biological Resources Threats

- Lagoon habitat is severely limited (less than 1 acre of the historic 30 acres) and restricted due to adjacent development.
- Biodiversity is reduced due to the limited lagoon size and range of habitat types present, high disturbance levels, and invasive species.
- Fish passage is limited through the lagoon into Topanga Creek due to high storm flow velocities associated with the existing 79-foot-long PCH bridge span. A wider span is needed to reduce storm flow velocities.
- The population of federally listed endangered steelhead trout is precipitously declining in the Santa Monica Bay and regionally.
- Supporting the continued existence of sensitive species on-site is vital for regional species survival, as it protects a source of genetic diversity and allows for recolonizations of areas affected by environmental disaster (fire, drought, etc.).
- Flood impacts on the riparian¹ corridor, lagoon, and beach during high storm events.

Ongoing Cultural Resources Deterioration

- The historic Topanga Ranch Motel is an unattractive nuisance in its current state and continues to deteriorate due to lack of use and maintenance.

Ongoing Recreation Facilities Threats

- The DBH lifeguard and restroom building is subject to wave runup² during storms and king tides.
- The Topanga Beach front is retreating due to sediment starvation and storm surge erosion, leaving limited “towel space” during high tides, especially to the east downcoast toward Coastline Drive.
- Substandard on-site wastewater treatment systems (AOWTS) business leases and the employee residence require high levels of maintenance. The existing wastewater system is nonconforming and will require upgrades to meet state standards.
- Maintenance costs of the facilities in the Project area are increasing due to growing unregulated public use (homeless, school groups) and degrading on-site structures.

Unaddressed Recreational Needs

- Limited pedestrian beach access from the north side of PCH.
- Limited emergency access for helicopters and ambulances, lifeguards, and rangers.
- Limited trails and no interpretive information regarding the archaeological, cultural, and historic stories.
- No coordinated visitor-serving and recreation plan.
- The Topanga Ranch Motel cannot provide overnight accommodations in its current condition.

¹ A *riparian zone* or *riparian area* is the interface between land and a river or stream.

² *Wave run-up* is the maximum onshore elevation reached by waves, relative to the shoreline position in the absence of waves.

2.4 Project Objectives

Based on feedback from the community engagement meetings, and other stakeholder input received since 2001, State Parks has identified the following objectives for the Proposed Project:

- Expand the lagoon ecosystem to improve estuarine hydrologic functions and to protect endangered species.
- Enhance coastal resilience for essential facilities in the Project area.
- Optimize beneficial reuse of excavated sediment by increasing sediment replenishment via nearshore placement and long-term conveyance increased by a wider bridge to the littoral cell³ while maintaining the integrity of the surf break.
- Protect the surf break and beach recreation.
- Improve water quality and restore coastal wetland habitat and species diversity within the Topanga Creek watershed.
- Increase safety and coastal access for pedestrians and cyclists, including for visitors with disabilities.
- Improve evacuation and emergency service routes through the Project area.
- Improve and enhance coastal access and recreational facilities.
- Manage and maintain the lagoon ecosystem consistent with the guidelines in the Topanga State Park General Plan.
- Replace the narrow 1933 PCH bridge to accommodate lagoon restoration and recovery of anadromous steelhead trout.
- Establish a visitor-serving “Gateway Corner” at the northwest corner of the intersection of PCH and TCB, consistent with the Topanga State Park General Plan goal of providing a coastal gateway to the park.
- Manage historic and archaeological resources in the Project area consistent with the guidelines in the Topanga State Park General Plan

2.5 Purpose of and Need for the Project

The purpose of the Proposed Project is to provide resiliency against SLR and beach erosion, protect and enhance coastal access and visitor services, implement goals established in the Topanga State Park General Plan, restore sediment to the littoral cell, and restore lagoon ecosystem habitat for two federally listed endangered species: the tidewater goby and the southern steelhead trout. The Proposed Project would expand and enhance habitat and improve coastal resilience in the Project area. All Proposed Project alternatives were designed to minimize harm while accomplishing the restoration. The following discussion substantiates the importance of the Proposed Project and the need for restoration.

³ *Sediment cells*, also known as *littoral cells*, are reaches of shoreline that encompass the intertidal and nearshore movement of sediment. A sediment cell basically consists of zones of erosion, transport, and deposition.

2.5.1 Protect Coastal Wetlands

Coastal wetlands and lagoons are unique habitats that support specially adapted native species that thrive in a dynamic seasonal mix of saltwater and freshwater environments. More than 95 percent of the historic coastal wetlands in California have been lost to development and coastal erosion within the last 150 years. Coastal wetlands are highly productive and biologically diverse systems that enhance water quality, control erosion, maintain streamflows, sequester carbon, and provide a home for at least one-third of all threatened and endangered species (NPS 2016).

Topanga Lagoon habitat is significantly degraded due to the locally derived fill dirt used in 1933 to support the widening of PCH and construction of the existing PCH bridge. Expansion of the lagoon would protect and create essential wetland and riparian habitat for the tidewater goby, the juvenile southern steelhead, and many other native aquatic and terrestrial species. Topanga Lagoon is dominantly fresh water, as it is nontidal, except for brief times during the winter when high tides and storms breach the beach and create a connection or overwash. All of the Project's Build Alternatives (i.e., Alternatives 2–4) were designed to maintain or improve the frequency and duration of breach events to provide longer windows of opportunity for fish passage and additional refugia⁴ for tidewater goby and juvenile southern steelhead trout.

2.5.2 Improve Coastal Access

The California Coastal Act establishes coastal land use, access, and management policy in California that strives to balance public trust asset management with sound development and habitat conservation policy. As stated in Section 30001.5 of the California Coastal Act, the basic goals of the state for the coastal zone are to:

- (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.
- (b) Ensure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.
- (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
- (d) Ensure priority for coastal-dependent and coastal-related development over other development on the coast.
- (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

Both State Parks and the County have developed coastal land use plans that identify beneficial uses, goals, and development policies to manage the Project Area consistent with the California Coastal Act. The Proposed Project has been developed to facilitate implementation of recreation and coastal access policies outlined in the Topanga State Park General Plan and the Santa Monica Mountains Local Coastal Program that are currently underdeveloped on the Project site.

⁴ *Refugia* are habitats that components of biodiversity retreat to, persist in and can potentially expand from under changing environmental conditions.

2.5.3 Increase Coastal Resilience

The California coastline is subject to current coastal erosion impacts, which will be magnified by future climate change, such as effects of SLR on coastal erosion and flooding. Changing sediment loads, extreme tide and storm events, and salinities will affect coastal ecosystems by altering the plant community composition and structure that provide critical habitat. The current infrastructure within the Project area is subject to this effect. The proposed Build Alternatives all propose to remove existing locally derived fill material for beneficial reuse by strategically placing it in the nearshore to naturally help renourish and restore the littoral cell, which would provide additional resilience to the beach both downcoast and within the Project area. Improvements to PCH by Caltrans, to visitor services and land uses by State Parks, and to coastal access and recreational facilities by DBH are needed to adapt to future SLR and improve the coastline's resiliency in the Project area. The Proposed Project would increase coastal resiliency for essential public functions, including emergency services, and would provide climate-change refugia for the Topanga Lagoon ecosystem from the negative effects of SLR, which would include recreational beach and open space habitat areas. Another good paragraph for explaining multi-alternatives.

2.5.4 Protect the Topanga Point Surf Break

Surfing is an important and valuable public recreational resource at Topanga Point. Surfing can be affected by changes to any of the following conditions: bathymetric contours⁵ below the higher high-tide line; changes to or blockage of arriving wave swell windows⁶; and changes in the beach profile. All Build Alternatives were designed to avoid impacts on surfing conditions. There is no change proposed below the higher high-tide line that could alter the beach face or the swell window. Proposed beach profile changes are limited to the sections of the beach area where existing fill would be removed to match the current beach elevation. The Proposed Project would provide additional space for recreation and living shoreline projects, but it would not change the interface profile where the ocean meets the beach, beyond removing human-made structures that are at or above the mean high-water line (Integral 2023..

Sediment delivery from the creek under the Proposed Project is anticipated to remain consistent with current levels, which are limited by natural rainfall events. Under all Build Alternatives, the lagoon mouth is anticipated to continue trending west rather than east because the lagoon and bridge would be widened predominantly to the west (**Appendix B**, *Topanga Lagoon Restoration Technical Report for Shoreline Morphology Analyses*).

Placement of sediment in the nearshore for beneficial reuse is proposed at the east end of Topanga Beach. It is anticipated that sediment would be carried downcoast and away from Topanga Point and Mastro's Point, potentially renourishing the coastline beach area east of Mastro's restaurant (**Appendix C**, *Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration*). The Topanga Beach shoreline faces due south, and waves refracting around Topanga Point generate a longshore drift direction to the east, such that

⁵ A *bathymetric contour line* represents a corresponding imaginary line on the bottom of the ocean that has the same elevation or depth along its entire length.

⁶ A *wave swell window* is the opening through which swell and waves may pass between islands or around points of land.

placement of excavated material in the proposed nearshore location would not affect the surf break. Once a preferred alternative is selected, a wave uprush study and additional shoreline studies will be prepared to ensure that no impacts on surf conditions would occur.

Access to the surf and beach would be maintained at all times during construction, although the access paths are expected to migrate to safely work around construction staging and implementation. **Appendix H**, *Surf Quality Impact Assessment for Topanga Lagoon Restoration*.

2.5.5 Protect Cultural-Historic Resources

The Project area is located on the ancestral home of the Gabrielino/Tongva people and contains a former village site named *Topaa'nga*, which translates roughly to “where the water meets the rocks” and is the name from which the creek, canyon, and community of Topanga derive their modern place-names.

The protection of prehistoric cultural artifacts is a main Project objective; therefore, a cap of 2–4 feet of fill would be retained to avoid any disturbance, although potential disturbance could affect cultural deposits at or near the existing ground surface in a portion of Alternative 4. The locations of deeper footings for the bridge have been placed outside the sensitive wetted zones as well. Because the fill material underlying the Topanga Ranch Motel does not meet current seismic standards, is experiencing slope instability and erosion, and has potential for liquefaction due to the high groundwater table, foundational upgrades could be required to support overnight use (**Appendix D**, *Geotechnical Investigation Report Visitor Services at the Topanga Ranch Motel Site, Topanga Lagoon Restoration Project*)

Recommendations for shallow foundation types that would minimize impacts on tribal resources (e.g., mat, or floating foundations) will be examined once a preferred alternative is selected. Additional cultural documentation and testing would be implemented as needed to identify the boundaries of buried Native American cultural deposits and avoid and minimize impacts on such deposits.

The Rancho Topanga Malibu Sequit land grant was granted to José Bartolomé Tapia in 1804 and was sold to Matthew Keller in 1857 and to Frederick Hastings Rindge in 1892. A wagon road along the coast providing access to Santa Monica was improved in the early 1900s, followed by development of the Roosevelt Highway, which eventually became PCH.

During development of the highway, numerous residences and businesses were developed within the Project area, including the Cooper's Autocamp tent cabins, which evolved into the Topanga Ranch Motel in the 1930s. The Topanga Ranch Motel was determined as eligible for listing in the National Register of Historic Places and restoration of some function is included in Alternatives 3 and 4.

All Build Alternatives include protection of cultural resources and development of interpretive and mitigation measures for any impacts on historical resources.

2.6 Description of Alternatives

Four alternatives were identified to restore Topanga Lagoon: the No Project/No Build–Managed Decline Alternative (Alternative 1) and three Build Alternatives (Alternatives 2–4). The Proposed Project was designed to minimize impacts on existing natural resources: The surf break would be undisturbed, sediment movement to the ocean and natural breach frequency would be maintained, native trees would be retained, and lagoon and creek wetted areas would be protected. The following descriptions of habitat gains under each alternative are based on estimates at the 30 percent design phase for lagoon restoration prepared by Moffatt & Nichol in the *Topanga Lagoon Restoration Alternatives Analysis Report (Appendix E)*.

These alternatives allow consideration of the benefits and challenges of the different restoration approaches. A final “preferred” alternative will be selected at the end of the environmental review process that best meets the Project’s needs while minimizing adverse environmental impacts. The Proposed Project alternatives provide different road maps to restoring the lagoon area and adjacent seasonally wetted and riparian habitats, buffering resources from future SLR, providing visitor-serving functions, and meeting the Project objectives.

2.6.1 Actions Common to All Build Alternatives

The Project elements described below are common to all Build Alternatives.

Expanded and Improved Habitats

Under all Project Build Alternatives, a subset of the Project area within and centered around the existing lagoon and PCH bridge would be graded and the seasonally wetted and riparian habitat areas would be expanded from the existing 3.6 acres to 7.5 to 9.5 acres. The more upland/transition areas would increase from the 21.4 existing acres of mixed non-native vegetation to between 23 and 24 acres of native-dominated vegetation, depending on the alternative selected.

Expanding the wetted and riparian areas would require removing much of the native fill on-site to create a more natural topography and expanded open space area. The existing wetted lagoon area and riparian habitats would be protected with grading starting at the outer edge of the existing riparian trees, preserving the current lagoon banks and the majority of the existing riparian willows and native hardwoods. Most native trees would be retained throughout the Project area, and the lagoon’s natural breaching pattern would be protected by grading outside the footprint of the existing wetted lagoon and working landward of the beach berm at its mouth.

Management of Excess Soil

The Project construction footprint includes the interface between the Topanga Beach lagoon and the ocean and extends approximately 1,000 feet upstream into Topanga Creek. The Proposed Project would remove locally sourced, naturally occurring sediments from adjacent hillslopes on both the west and east sides of the creek. Under all Build Alternatives, the sediment material would be either trucked off-site for disposal or beneficially reused in a nearshore placement location, subject to approval by the regulatory agencies.

Beach Expansion/Bioengineered Stabilization/Living Shoreline Opportunities

Under all Build Alternatives, the area of Topanga Beach would increase, ranging from up to 50 feet of additional depth on the east cove beach under Alternative 2 or 3 to approximately 90 feet under Alternative 4. On the west side, the beach would expand by 0.65 acre under any of the Build Alternatives. Together, these expansions would add 1 to 1.2 acres of beach area. These additional areas would provide opportunities for increased recreational space and would incorporate bioengineered stabilization or living shoreline elements to both protect against storm surge and SLR and restore coastal strand⁷ and foredune⁸ habitats. Bioengineered stabilization and living shorelines typically feature low-impact installation of temporary fencing and native vegetation to encourage deposition of sand and include interpretive signage and pathway guidance. These elements would be installed above the ordinary high-water mark⁹ and would be located where they could protect lifeguard facilities. Additional design of these elements would be further developed for the preferred alternative in accordance with best management practices (BMPs) similar to those implemented along Santa Monica, Dockweiler, and Zuma beaches.

Bridge Improvements and Roadway Protection

To provide a wider lagoon and improve fish migration and refugia, the existing Caltrans bridge would be replaced with a longer bridge. The main span of the new bridge would increase to 200 feet, with 120- to 140-foot secondary spans, increasing the total bridge span length to approximately 460 feet. New lighting would be installed. Under all Project Build Alternatives, the length of the existing 79-foot-long Caltrans bridge would be expanded to accommodate a widened lagoon riparian area, which would allow the lagoon to adjust over time to SLR. The Proposed Project would lower flow velocities to improve opportunities for adult steelhead migration, increase refugia areas for tidewater gobies and juvenile steelhead, and increase the quantity and quality of lagoon habitats. The Proposed Project would provide pedestrian access under the roadway on both sides of the lagoon. As discussed below, two of the Project Build Alternatives—Alternatives 2 and 3—would maintain the existing alignment of the bridge and PCH roadway, but Alternative 4 would relocate the alignment to the north.

Under all Project Build Alternatives, the new bridge would continue to accommodate two lanes in each direction, with no expansion of roadway capacity. Traffic flows would also be maintained during bridge and lagoon construction via a temporary roadway and bridge alignment or other methods. All utilities would be continued during construction to the greatest extent possible, and eventually would be relocated underground or attached to the new bridge, or supported on a separate utility bridge. All phases of construction and staging for the new bridge would be similar under each alternative.

Cultural Resources Protections

All Build Alternatives would protect cultural resources. This would include protecting Native American cultural sites in place to the maximum extent feasible, by retaining an appropriate

⁷ *Coastal strand* is the vegetated zone that typically occurs between open beach and maritime hammock habitats.

⁸ A *foredune* is a dune ridge that runs parallel to the shore of an ocean.

⁹ An *ordinary high-water mark* is a point that represents the maximum rise of a body of water over land.

cover over the pre-contact period surface of no less than 2–4 feet (although potential disturbance could affect cultural deposits at or near a portion of the existing ground surface under Alternative 4), and necessarily limiting the lowering of the riparian bottomland surface to actual historic elevations. All bridge footings would be located outside of sensitive areas.

All Build Alternatives would also identify a plan for determining the future configuration of the historic Topanga Ranch Motel. The demolition of any motel structures would be documented through the National Park Service’s Historic American Building Survey. Retention of motel structures to be used for overnight accommodations may require additional soil management and foundation design, to address the existing fill condition below the structures and adjacent Native American cultural sites. On-site and/or digital interpretive exhibits would be developed to interpret cultural and historical resources, which may include one representative restored cabin. A monitoring and treatment plan approved by the State Historic Preservation Officer would identify specific archaeological and historical testing and monitoring during demolition and restoration to assess, document, and collect any encountered features or significant artifacts. The final suite of mitigation measures would be documented in a memorandum of agreement developed in consultation between State Parks and the State Historic Preservation Officer and incorporated into the final design and construction plans.

Coastal Access Improvements

Coastal access improvements are part of all Project Build Alternatives and include new trail construction and connectivity, improved parking availability and configuration, incorporation of pedestrian safety measures, and inclusion of amenities to support increased bicycle and bus use.

Coastal access would be maintained during construction and improved under all Project Build Alternatives. This would include the creation of a trail system through the Project area and provision of pedestrian access under PCH on the east and west sides of the lagoon. The new trail system has the potential to connect with regional systems such as the California Coastal Trail and Coastal Access Trail, which would facilitate connectivity between upper Topanga State Park and areas along the coast.

All Build Alternatives would provide a new configuration for parking that would better locate parking opportunities relative to beach and park access points. There would be a net increase in public fee parking given the reduction of concession parking and addition of new spaces at the new DBH lot west of Topanga Creek, the new Gateway Corner lots, and improvements to the existing DBH Topanga Beach and State Parks Topanga Ranch Motel lots to meet current code. Less free parking would be available along PCH; parking would not be permitted on the new and longer bridge deck but would be partially shifted to the TCB corridor. Concession exclusive parking for the one retained lease would remain.

The new distribution of parking would improve public access to all areas of lower Topanga State Park and Topanga Beach by more directly linking parking spaces with preferred recreation locations. It is hoped that this could reduce the frequency of unsafe jaywalking across PCH. All Project Build Alternatives would provide more convenient, safer pedestrian access by expanding the waiting area at the TCB/PCH intersection and moving parking away from the immediate

intersection. New beach access stairs and an improved bus stop area would be constructed. Visitors parking in the new west DBH lot would have easy access to the beach west of the lagoon down an unpaved road from the parking lot. Visitors parking in the State Parks lot on the north side of PCH would have an underpass trail leading from the parking area directly to the beach on both sides of the lagoon. Lifeguard staff and ADA parking spaces at the beach level would be retained and additional spaces would be provided in State Parks lots under all Build Alternatives. The longer PCH bridge span would reduce shoulder parking, and controlled ingress into and egress from the parking lot would be available on both sides of PCH, as compared to none at present on the north side.

Under all Build Alternatives, the areas around the existing bus stops would be improved to be more visible and welcoming to public transportation users by providing shaded seating and closer access to restrooms. Bicycle use in the area would be improved via more controlled ingress into and egress from the parking areas and inclusion of bicycle parking, improvement of sight lines through regulated parking, and retention of a Class III bikeway (Bike Route) in each direction along PCH.

Department of Beaches and Harbors Facility Improvements

Under all Project Build Alternatives, key DBH facilities on Topanga Beach would be relocated farther from the ocean to protect structures from SLR. The existing lifeguard and public restroom building would be demolished and rebuilt closer to the realigned access road, and at a higher elevation. The new buildings would be of similar size and materials to the existing building and placement would vary between alternatives. A small two-car garage for staff would be added to the improvements. The helipad site would be relocated to the east side of the lagoon for improved access by lifeguards and emergency responders. The size, setbacks, and built elements of the new helipad would conform to all Federal Aviation Administration and County requirements and a new hydrant would provide water for wildland fire response.

The existing parking lot would be modified slightly, depending on the alternative. Staff and ADA parking at the beach level would be retained under all Build Alternatives. An unpaved emergency route from PCH to the beach level would be constructed from the proposed parking lot on the southwest side of the lagoon to allow lifeguard access, to both limit vehicle usage along the lagoon berm and provide access to the western beach even when the lagoon mouth is open.

California Department of Parks and Recreation Facility Improvements

Under all Build Alternatives, improvements to the State Parks facilities in Topanga State Park would occur through identification of the future of the Topanga Ranch Motel, and improvements to park facilities, concessions, and parking. Improvements would be focused in two main areas: (1) the Topanga Ranch Motel and (2) a new “Gateway Corner” at the northwest corner of the intersection of PCH and TCB. The proposed treatment of the motel varies significantly by alternative, while development at the Gateway Corner would be largely the same under all Build Alternatives.

Under all Build Alternatives, the Gateway Corner would provide a focal entrance to the lagoon and lower areas of Topanga State Park and would provide a needed transition between developed

and adjacent open spaces. It would provide both a location for interpretation of on-site natural and cultural resources and improved access to coastal recreation areas. Development at the Gateway Corner is anticipated to include at most approximately 5,500 square feet of one-story structures, which would include a park office, an employee house, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included. The existing mobile mini shed used by the California Department of Fish and Wildlife for fish research would be moved slightly to the north but would remain.

An interpretive loop trail would be developed to allow visitors to meander through the restored transitional upland areas in what is currently known as the Snake Pit area, north of the Topanga Ranch Motel site. A pedestrian bridge would cross the creek approximately at the location where a few remnant pilings from the early 1900s Malibu Road bridge remain. This would provide opportunities to explain the area's cultural, historical, and ecological functions, while allowing beach access from both sides of the PCH bridge.

All native trees would be retained in the Gateway Corner, along with most non-native trees, to provide shade. A pedestrian path would lead from the parking area south to the intersection of PCH and TCB, where a safe crossing of PCH to the beach would be available. Stairs providing beach access from PCH are proposed near the intersection as well. Additionally, the existing municipal bus stops on each side of PCH would be designed to be more visible and welcoming to visitors. Further development of these visitor services would occur once the final preferred alternative is selected and could require additional environmental review and approval by State Parks.

Wastewater Upgrades

Either a new advanced on-site wastewater treatment system (AOWTS) or a public sewer connection would be built to manage the wastewater created by the proposed State Parks visitor-serving facilities. The permitted AOWTS that services the DBH beach restroom would remain in place to service Topanga Beach facilities. Should the sewer extension become available, DBH could choose to also connect to it.

2.6.2 Alternative 1: No Project/No Build–Managed Decline

Under the No Project/No Build–Managed Decline Alternative (Alternative 1), the Project would not be implemented; therefore, 0 acres of lagoon would be restored and actions to protect the beach from SLR would be limited. The site has 3.6 wetted acres, 21.4 acres riparian/transitional/upland acres dominated by non-natives, and 4.18 acres of beach in the area by the lagoon. The intended functions of existing structures throughout the Project area would remain the same as conditions deteriorate. Over time, emergency reactive measures would be required to maintain public safety and functionality of the facilities as feasible. The future changed conditions are assumed to include a continued decline in the condition of the existing buildings and infrastructure at the site, and continued coastal erosion that may be worsened by future SLR, along with continued habitat degradation. It is assumed that State Parks, Caltrans, and DBH would each implement emergency or reactive improvements to manage the declining conditions. Land ownership boundaries would not change.

Alternative 1 assumes a reasonably foreseeable future condition (consistent with Section 15126.6[e][2] of the CEQA Guidelines) in which some changes would occur at the site, compared with the baseline condition, that do not rely on approval or implementation of the Project. The *baseline condition* is the condition of the site at the time the Notice of Preparation was published.

Under Alternative 1, there would be no change to the lagoon footprint, which is constrained by the narrow bridge span width, and no new bridge would be constructed. Habitat quality in the lagoon and riparian areas would continue to degrade because of increased non-native vegetation, accumulated litter and debris, water quality degradation, and other adverse effects of unauthorized human usage of the site. No improvements to riparian or upland habitat would occur. This is inconsistent with the Topanga State Park General Plan's specific recommendations for the Lower Topanga Lagoon zone.

The threat of damage to the lifeguard and public restroom building from wave runup would continue. This may result in the installation of future armoring devices to protect the lifeguard and public restroom building, and eventually they may be moved farther inland. Beaches downcoast to at least Coastline Drive and potentially as far as Will Rogers State Beach would continue to erode and be starved of sediment input. SLR and coastal erosion would further damage existing facilities and reduce available beach habitat for recreational use and for fish and wildlife.

There would be no change to the existing condition for pedestrian coastal access, which provides only two access points to the beach for visitors parking on the north side of PCH. At the corner of TCB and PCH, visitors can press a pedestrian button allowing them to cross on the roadway; however, there is little space for them to stand while waiting that is outside of parking areas used by the leasee. The other pedestrian access is an underpass beneath the PCH bridge at the west end of the State Parks Topanga Ranch Motel lot, which connects to the DBH lot. From there, visitors walk east through the DBH lot to the stairs, or they walk west on the dirt lot to access the beach near the helipad.

The Topanga Ranch Motel structures would continue to deteriorate, and the existing leasee buildings, including their nonconforming AOWTS, would remain in their current operation. However, at some point in the future, the nonconforming AOWTS serving the leasee buildings would become impermissible subject to future restriction or cessation as a result of their progressive failure, as occurs with all AOWTS over time. Similarly, the structures may be evaluated as seismically unsafe, requiring improvements to conform with building codes. This may include substantial earthwork to ensure an appropriate foundation conforming to applicable building codes. The businesses would eventually be closed for these reasons unless substantial improvements are made to the wastewater systems and integrity of the structures. At some point in the future, the buildings would be either removed, substantially restored, or rebuilt to conform with building codes.

Developing the Gateway Corner and addressing the decline of the Topanga Ranch Motel are both identified as priorities in the Topanga State Park General Plan. Under Alternative 1, neither action would occur. The Topanga Ranch Motel would remain vacant except for one modified structure

used for staff housing. The structures would be maintained in a state of arrested decay, with minimal maintenance other than securing against vandalism, and would risk losing their integrity, and thus their federal and state historic eligibility.

Public access opportunities would not be improved under Alternative 1 and the 390 parking spaces, many of which are nonconforming with current standards, would remain in place. Current parking includes a mix of State Parks concession exclusive (124), State Parks public fee (50), public fee in DBH lot (97), and public free along PCH (79) and along TCB (40). An additional three ADA spaces and three lifeguard staff spaces on the beach level would be retained in all proposed alternatives and are not included in the counts listed. **Table 2-1** provides a detailed summary of existing parking conditions. Further details on existing parking opportunities are found in **Appendix F, *Parking Analysis Technical Memo***. No additional parking would be added along TCB or west of Topanga Creek along PCH, and no bus station or beach access stairs would be installed. A trail system improving public access into the interior of Topanga State Park, along both sides of the creek, and to regional trail networks would not be developed.

2.6.3 Alternative 2: Maximum Lagoon Habitat

Under Alternative 2, the maximum increase in lagoon, wetland, and riparian bank habitats would occur (**Figures 2-5a through 2-5c**). Based on the 30 percent design, the restoration would result in 9.5 wetted acres, with 23 riparian/transitional upland acres restored and beach expansion to 4.39 acres in the area by the lagoon. Overall, the sandy beach area throughout the Project area would expand by at least 1 acre. All existing structures on the north side of PCH would be removed.

This lagoon alternative includes restoration of more natural side channels connected to the western side of the existing lagoon based on historic topography, would expand the floodplain and potential channel areas on the east side, and would allow the lagoon system to evolve to accommodate changing SLR and storm surge conditions. This alternative is the most resilient to projected SLR for the lagoon and creek ecosystems, as it would expand the area of the existing lagoon ecosystem footprint and accommodate the lagoon by letting it self-adjust and respond over time if habitat needs to migrate inland. Topanga Beach would also be expanded, providing an opportunity for the inclusion of living shoreline elements (i.e., dunes).

This alternative would lengthen the Caltrans bridge from 79 feet to approximately 460 feet but would not modify the alignment of PCH. With this alternative, State Parks would contribute 0.05 acre to Caltrans and DBH would contribute 0.22 acre due to changes in ROW to bring PCH up to current standards. Stormwater and surface runoff would be captured in appropriate BMPs such as bioswales or rain gardens within parking areas. Parking areas would be permeable to the full extent feasible.

**TABLE 2-1
SUMMARY OF EXISTING PARKING OPPORTUNITIES**

Location	Motel Exclusive		Concession Exclusive		Public Free		Public Fee		TOTAL
	C	NC	C	NC	C	NC	C	NC	
State Parks									
NW of creek (Cholada/Wylie/Rosenthal)	0	0	63	18	0	0	0	0	81
NE of creek (Topanga Ranch Motel public parking, Reel Inn concession)	0	0	13	7	0	0	28	22	70
TCB (Feed Bin/Oasis)	0	0	22	1	0	0	0	0	23
State Parks Conforming	0	0	98	0	0	0	28	0	126
State Parks Nonconforming	0	0		26	0	0	0	22	48
State Parks Subtotal	0		124		0		50		174
Caltrans									
TCB north shoulder	0	0	0	0	0	20	0	0	20
TCB south shoulder	0	0	0	0	0	20	0	0	20
PCH north shoulder	0	0	0	0	0	30	0	0	30
PCH south shoulder	0	0	0	0	0	49	0	0	49
Caltrans Conforming	0	0	0	0	0	0	0	0	0
Caltrans Nonconforming	0	0	0	0	0	119	0	0	119
Caltrans Subtotal	0		0		119		0		119
DBH									
SE of creek (existing parking area)	0	0	0	0	0	0	87	10	97
SW of creek (potential parking area)	0	0	0	0	0	0	0	0	0
DBH Conforming	0	0	0	0	0	0	87	0	87
DBH Nonconforming	0	0	0	0	0	0	0	10	10
DBH Subtotal	0		0		0		97		97
SUBTOTAL: Conforming	0	0	98	0	0	0	115	0	213
SUBTOTAL: Nonconforming	0	0	0	26	0	119	0	32	177
TOTAL	0		124		119		147		390

NOTES: C = conforming; Caltrans = California Department of Transportation; DBH = County of Los Angeles Department of Beaches and Harbors; NC = nonconforming; NE = northeast; NW = northwest; PCH = Pacific Coast Highway; SE = southeast; State Parks = California Department of Parks and Recreation; SW = southwest; TCB = Topanga Canyon Boulevard

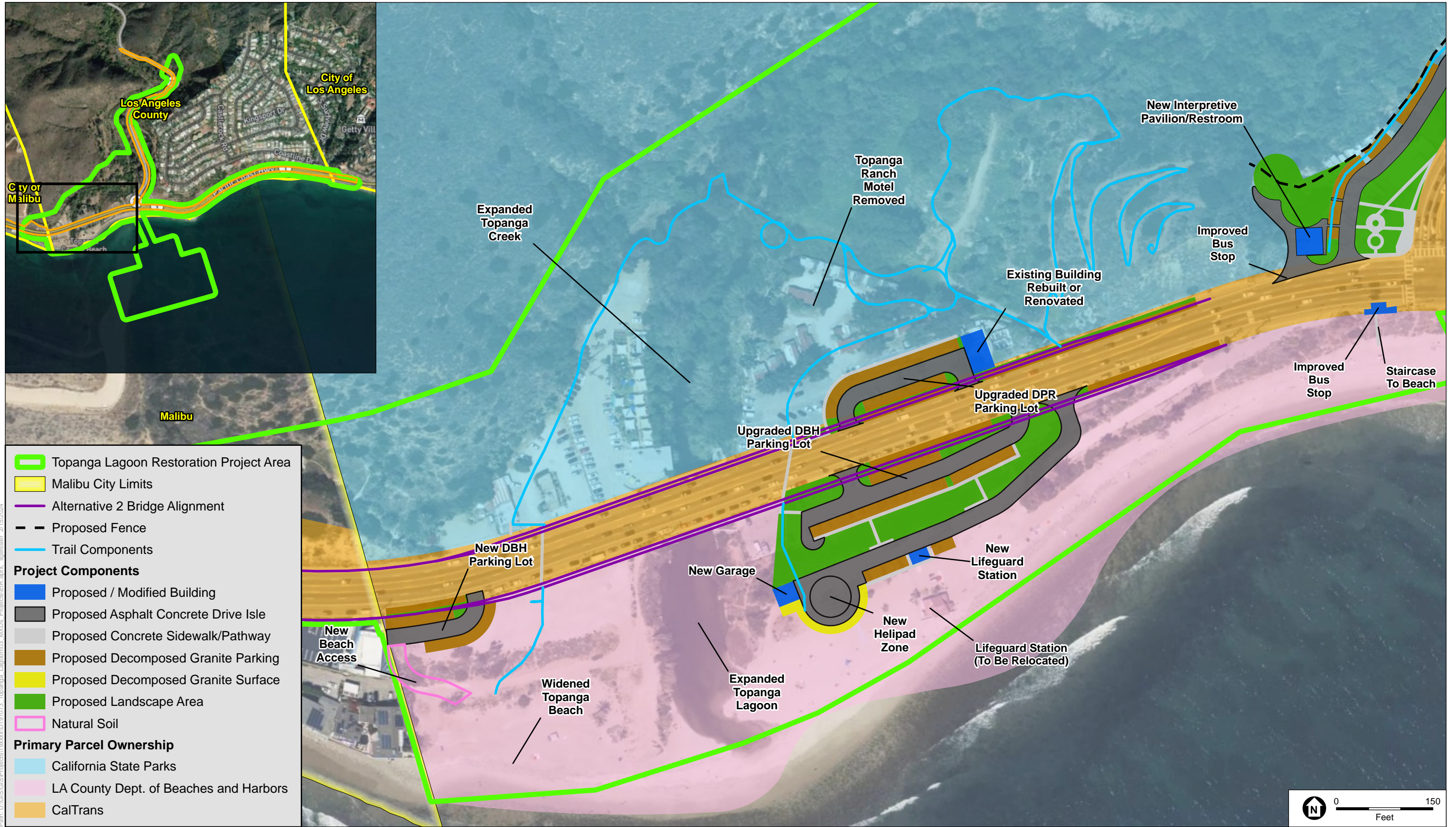
Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated directly upslope of its current location to provide additional protection from SLR. The helipad and new two-car garage would be relocated adjacent to it on the west. The existing Topanga Beach parking lot would be modified, with existing spaces on the west end of the current paved lot removed and relocated to a new beach parking lot on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the greatest extent feasible, with surface runoff directed to bioswales to reduce pollution.

A total of 314 parking spaces would be included in this alternative. This total includes 20 concession exclusive spaces associated with the one State Parks leasee retained, 201 public fee spaces (DBH = 87 and State Parks = 114), and 93 public free spaces (along PCH and TCB).

The total area graded would be 17.22 acres. No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acre) would occur temporarily during bridge demolition. The majority of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

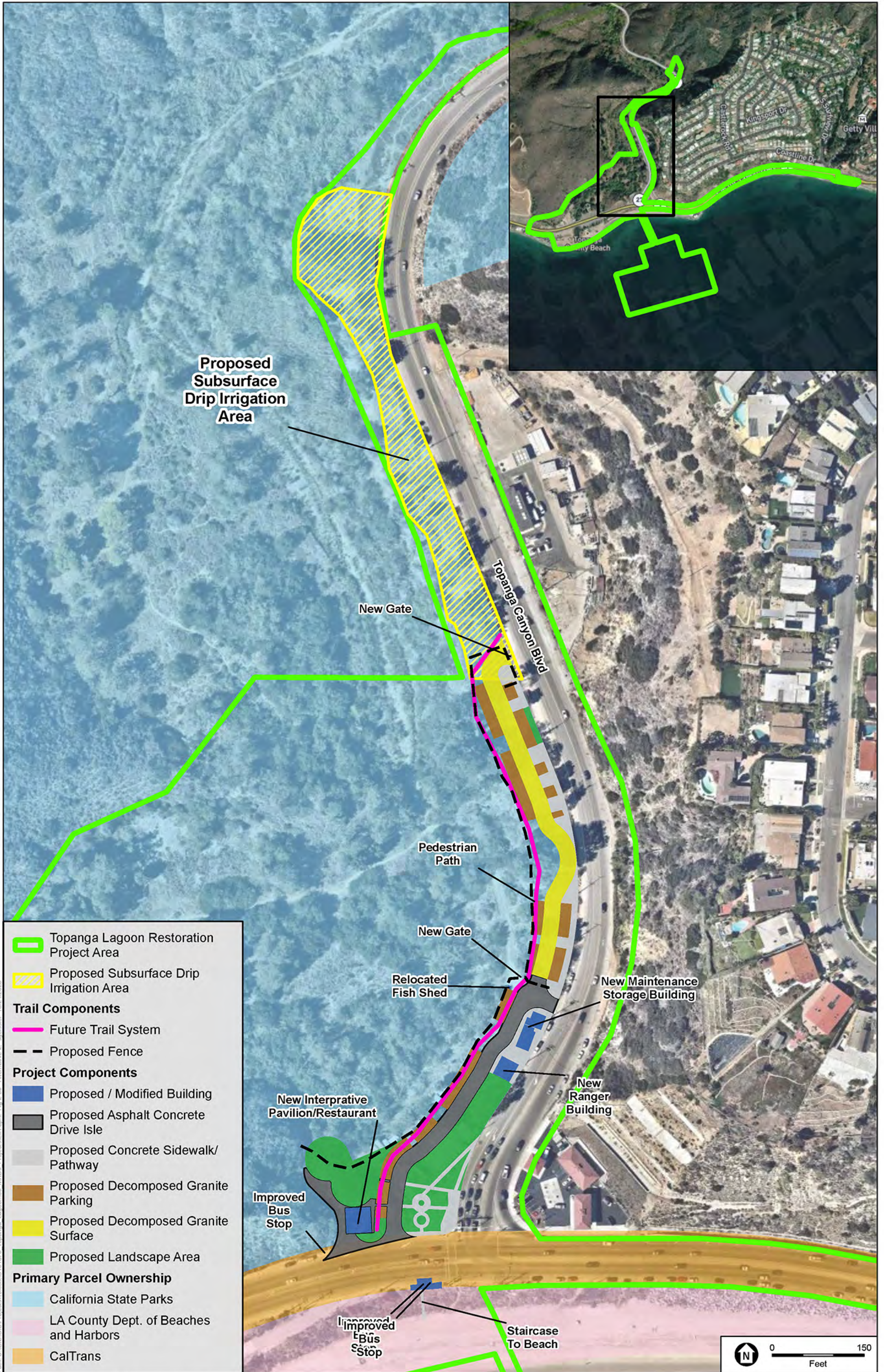
Approximately 256,000 cubic yards (CY) of soil would be removed from the existing fill areas to contour the new lagoon and, if placed nearshore, would cover up to 35 acres as detailed further below. An additional 1,200 CY of roadway soil and 23,000 CY of soils potentially contaminated by aerially deposited lead (ADL) would also be removed and hauled off-site. Approximately 10,810 CY of construction debris from demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills.

Under Alternative 2, all 25 existing structures of the Topanga Ranch Motel and all other buildings on State Parks property would be fully removed. All new State Parks development would be located at the Gateway Corner (intersection of TCB and PCH). The one exception is that a maximum 2,400-square-foot concession could remain at the current location of the Reel Inn restaurant just southeast of the historic motel. The concession could remain open during construction. The estimated 8,400 gallons per day (gpd) of wastewater generated under Alternative 2 would be handled by either on-site SDI, on-site seepage pits, or an off-site sewer connection as discussed further below.



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-5a
 Alternative 2
 Maximum Lagoon Habitat



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-5b
 Project Area under Alternative 2



Path: U:\GIS\GISProjects\101073_Topanga_Lagoon\03_IAXDC_Projects\EIR\area_sweeper_10242023

SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-5c
 Project Area under Alternative 2

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2.6.4 Alternative 3: Limited Lagoon Habitat Expansion

Under Alternative 3, the fill under the 20 structures retained in the Topanga Ranch Motel would limit the lagoon restoration to 7.7 wetted acres, with 23.7 riparian/transitional/upland acres restored and beach expansion to 4.42 acres in the area by the lagoon (**Figures 2-6a through 2-6c**). Overall the sandy beach area throughout the project would expand by at least 1 acre. Only the western part of the main creek channel of the lagoon would be expanded for wetland, riparian, and transitional habitat creation. Limited habitat expansion would be restricted on the east side of the lagoon due to retention of the motel. Topanga Beach would be expanded slightly providing opportunity for use of living shoreline elements to be included primarily on the west side. This alternative provides the least resilience to SLR as it retains much of the fill material on the east side of the creek thus reducing the restoration footprint and restricting potential for the lagoon habitat to respond.

This alternative would lengthen the Caltrans bridge from 79 feet to 460 feet but would not modify the alignment of PCH. With this alternative, State Parks would contribute 0.05 acre to Caltrans and DBH would contribute 0.22 acre due to changes in ROW to bring PCH up to current standards. Stormwater and surface runoff would be captured in appropriate BMPs such as bioswales or rain gardens within parking areas.

Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated directly upslope and to the east of the current location to provide additional protection from SLR. The helipad would be relocated to the western edge of the parking lot on level with PCH. The new two-car parking garage would be located under the helipad at the beach access road level. Retaining walls would be needed to support the helipad on top of the garage (92 feet of concrete masonry unit [CMU] wall, 8–10 feet tall underneath the south side, 72 feet on the north side of the helipad) and a 192-foot-long, 4- to 6-foot-tall wall to shore up the fill material supporting the remaining Topanga Ranch Motel units.

The east Topanga Beach parking lot would be modified to accommodate the helipad on the west end of the existing paved lot, reducing spaces there, which would be replaced by a new parking lot added on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the full extent feasible, with surface runoff directed to bioswales to reduce pollution.

A total of 332 parking spaces would be included in this alternative. This total includes 25 Topanga Ranch Motel exclusive spaces, 20 concession exclusive spaces associated with the one State Parks leasee retained, 194 public fee spaces (DBH = 79 and State Parks = 115), and 93 public free spaces (along PCH and TCB). The concession could remain open during construction.

The total area graded would be 15.3 acres. No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acre) would occur temporarily during bridge demolition. Most of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

Approximately 166,000 CY of soil would be removed from the existing fill areas to contour the new lagoon and, if placed in the nearshore, would cover up to 35 acres. An additional 1,200 CY would be removed for roadway grading along with 23,000 CY of potentially ADL-contaminated soil and hauled off-site. Approximately 8,250 CY of construction debris from demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills or deposited in the nearshore.

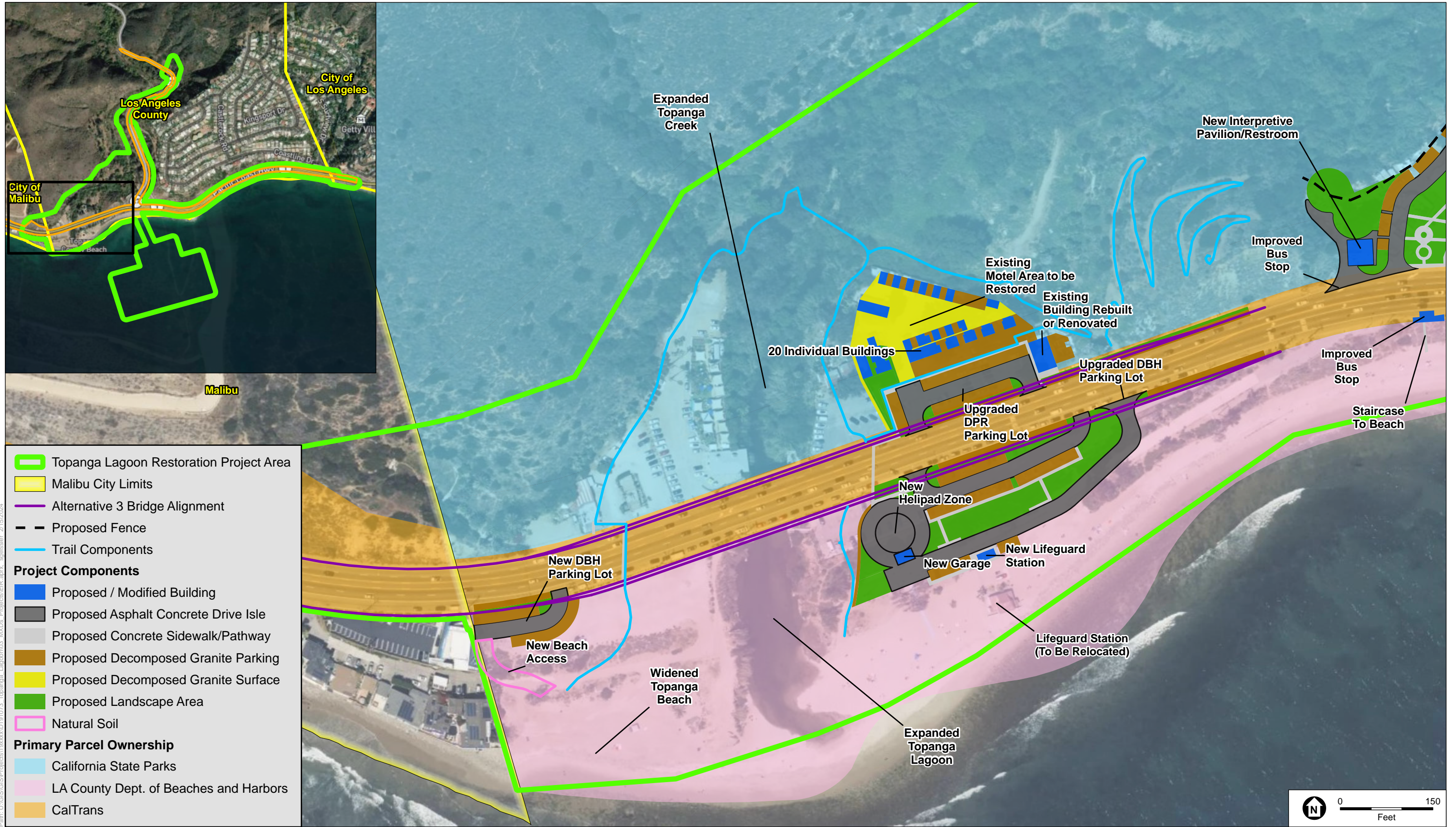
Under Alternative 3, approximately 20 structures of the Topanga Ranch Motel would be retained and restored in the future in accordance with the Secretary of Interior's Standards, taking into account feasibility based on cost, long-term management, and current codes, such that the character, form, and features of the site would be retained. To stabilize these structures according to current seismic and building codes, several options for foundations may be available, such as mat foundations combined with perimeter-retaining structures; however, to avoid impacts on sensitive archaeological resources, no foundations are expected to penetrate into the historic ground surface underlying the motel. Additional restoration of the buildings would include removal of lead and mold, as well as repair or replacement of walls, windows, roofs, floors, and interior elements. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, park offices, interpretive displays, and storage.

A 2,400-square-foot concession located at the site of the current Reel Inn restaurant would also be kept and could remain operational during construction. All other existing on-site leases and structures would be removed. Available parking near the motel and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development of the Gateway Corner would mirror that proposed in Alternative 2, except that the proposed employee residence would be shifted to the motel area instead.

Alternative 3 would generate approximately 12,400 gpd of wastewater from State Parks facilities and would be supported by either on-site seepage pits (Option 2) or an off-site sewer connection (Option 3), as discussed in Section 2.6.6, *Wastewater Management Options*.

2.6.5 Alternative 4: Maximum Managed Retreat

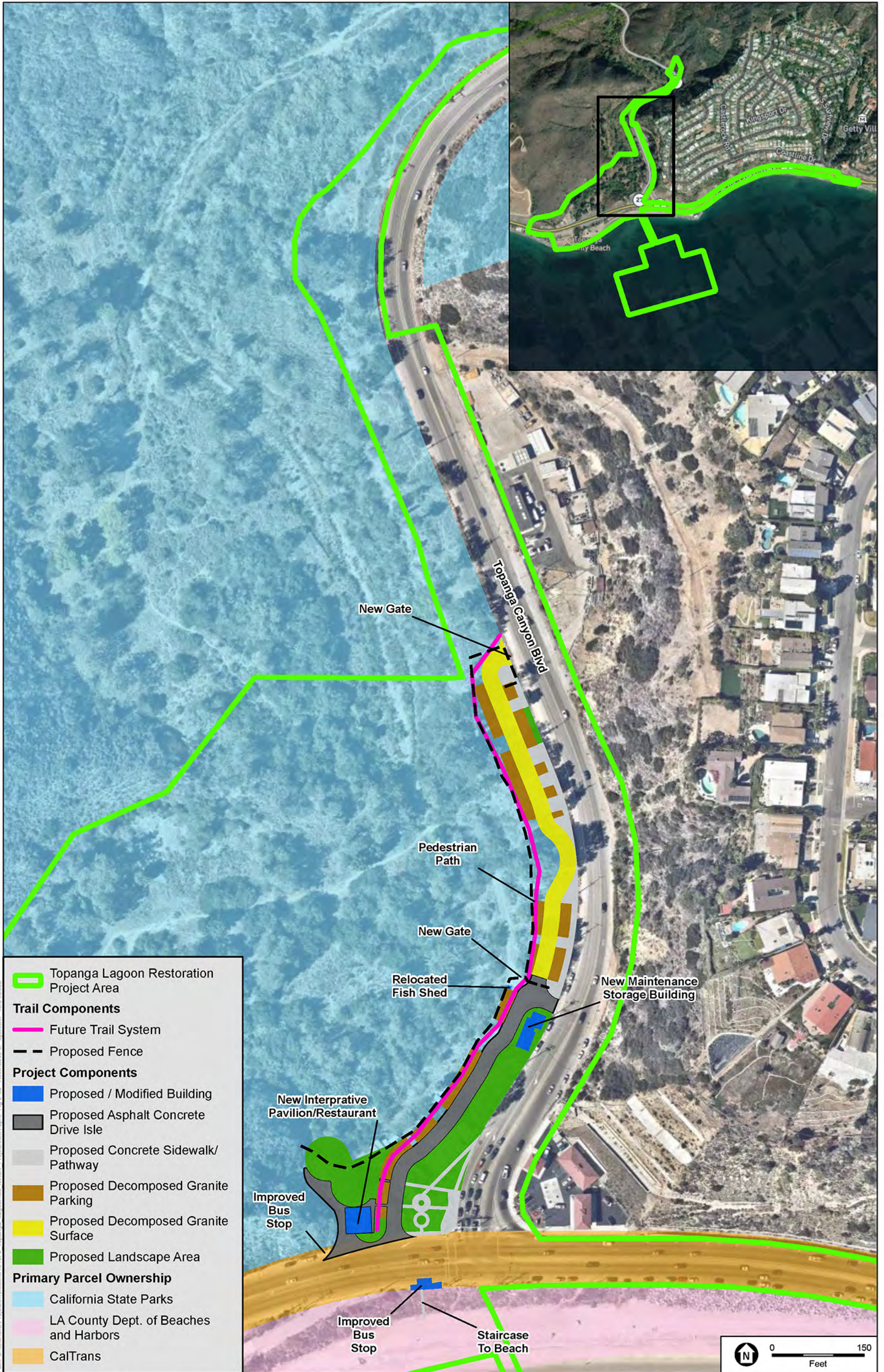
Under Alternative 4, fill beneath 15 structures retained at the Topanga Ranch Motel site would limit the lagoon restoration to 7.6 wetted acres, with 23.7 riparian/transitional upland acres restored and beach expansion to 4.56 acres in the area by the lagoon (**Figures 2-7a through 2-7c**). Overall, the sandy beach area throughout the Project area would expand by at least 1 acre. Only the western part of the main creek channel of the lagoon would be expanded for wetland, riparian, and transitional habitat creation. Limited habitat expansion would be restricted on the east side of the lagoon, given the retention of a portion of the motel and a concession near the location of the existing Reel Inn. Topanga Beach would expand the most under this alternative, providing the opportunity to include living shoreline elements. This alternative would maximize the managed retreat, recreational beach area, and living shoreline features such as dunes and would provide the most SLR resiliency to the infrastructure and beach, but it would not provide as much opportunity for lagoon habitat to evolve as in Alternative 2.



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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-6a
 Alternative 3
 Limited Lagoon Habitat Expansion



SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-6b
 Project Area under Alternative 3

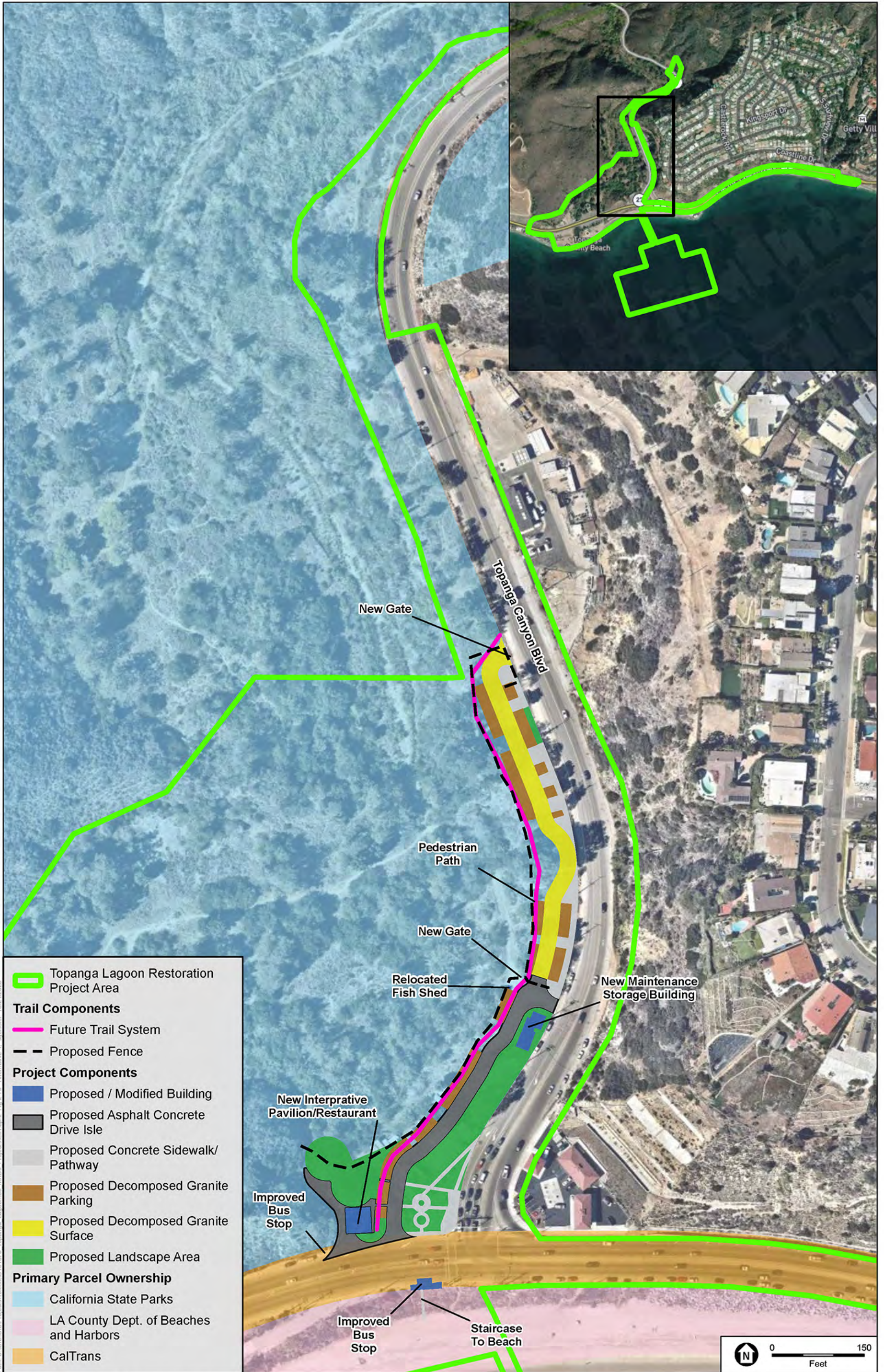


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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-7a
 Alternative 4
 Maximum Managed Retreat





Topanga Lagoon Restoration Project Area

Trail Components

- Future Trail System
- Proposed Fence

Project Components

- Proposed / Modified Building
- Proposed Asphalt Concrete Drive Isle
- Proposed Concrete Sidewalk/ Pathway
- Proposed Decomposed Granite Parking
- Proposed Decomposed Granite Surface
- Proposed Landscape Area

Primary Parcel Ownership

- California State Parks
- LA County Dept. of Beaches and Harbors
- CalTrans

SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-7b
 Project Area under Alternative 4



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SOURCE: NearMap, 2022-02-03 (Aerial); ESA, 2022

Topanga Lagoon Restoration Project
Figure 2-7c
 Project Area under Alternative 4

As part of Alternative 4, the alignment of PCH would move north, expanding the maximum amount of beach area and managed retreat, and would also lengthen the Caltrans bridge from 79 feet to approximately 460 feet. State Parks would contribute 0.60 acre to Caltrans and Caltrans would contribute 0.47 acre to DBH due to changes in ROW alignment. Stormwater and surface runoff would be captured in appropriate BMPs such as bioswales or rain gardens within parking areas. Parking areas would be permeable to the full extent feasible. Utilities would also require relocation underground, which would have the potential to affect tribal cultural resources.

Additionally, approximately 500 feet of 4- to 12-foot-high retaining walls would be required along the northern shoulder of PCH to accommodate adjacent slopes. A 91-foot-long, 4- to 6-foot-tall CMU retaining wall would be needed on the south side of the bridge outside the creek channel to support the slopes on the east side. These retaining walls would be installed before excavation of the fill materials to avoid impacts on the wetted area.

Within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and replaced. The new building would have the same footprint and would be built of similar materials, and it would be relocated upslope of the current location, and north of the existing access road, to provide additional protection from SLR. The helipad and new parking garage would be relocated adjacent to it on the west. The Topanga Beach parking lot would be modified to reduce spaces in the existing paved lot on the west end, expand spaces on the east end, and slightly shift the orientation of the lot shape to accommodate a new access road to the beach's lifeguard and restroom building and garage, ADA parking, and helipad. Additional design modification for these elements is anticipated if this alternative is selected to reduce potential impacts on tribal cultural resources. Additional spaces would be added in a new beach parking lot on the west edge of the Project area where there are no parking spaces currently. Parking areas would be permeable to the extent feasible, with surface runoff directed to bioswales to reduce pollution.

A total of 343 parking spaces would be included in this alternative. This total includes 15 Topanga Ranch Motel exclusive spaces, 20 concession exclusive spaces associated with the one State Parks leasee retained, 217 public fee spaces (DBH = 110 and State Parks = 107), and 91 public free spaces (along PCH and TCB). Parking during construction would be reduced on the DBH side and the concession would not be operational during construction due to access limitations.

The total graded area would be 14.7 acres. No excavation is proposed within regulated waters and wetlands; however, limited disturbance to this area (approximately 0.33 acre) would occur temporarily during bridge demolition. The majority of the proposed lagoon area would remain nontidal as a naturally freshwater-dominated, seasonally closed, bar-built estuary.

Approximately 210,000 CY of soil would be removed from the existing fill areas to contour the new lagoon and, if placed nearshore, would cover up to 35 acres. An additional 1,200 CY would be removed for the roadway realignment along with potentially 26,000 CY of ADL-contaminated soil and would be hauled off-site. Approximately 8,810 CY of construction debris from

demolition of the structures, the Topanga Ranch Motel, the temporary bridge, and the existing bridge would be hauled off-site for disposal at appropriate landfills or deposited in the nearshore.

Under Alternative 4, approximately 15 structures of the Topanga Ranch Motel would be retained and restored in accordance with federal standards considering feasibility and current codes, such that the character, form, and features of the site would be retained. To stabilize these structures according to current seismic and building codes, several options for foundations may be available, such as mat foundations combined with perimeter retaining structures; however, to avoid impacts on sensitive archaeological resources, no foundations would penetrate into the historic ground surface underlying the motel. Future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, park offices, interpretive displays, and storage are under consideration. A 2,400-square-foot concession near the site of the current Reel Inn restaurant would be renovated or constructed and would utilize shallow foundational systems to limit disturbance to cultural resources on-site. Because of the relocation and rebuilding, as well as access limitations, this concession would not be operational during construction. All other existing on-site leases and structures would be removed. Available parking near the Topanga Ranch Motel site and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development of the Gateway Corner would mirror that proposed in Alternative 3.

This alternative would generate approximately 11,400 gpd of wastewater and would be supported by either on-site seepage pits or an off-site sewer connection.

2.6.6 Sediment Disposal or Beneficial Reuse Options

Removal of the existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the three Build Alternatives. Placement in the nearshore has been identified as an opportunity to renourish the sediment-starved littoral cell and benefit the beaches downcoast and outside the Project area to the east. Placement of the material directly on the beach would not be possible given the incompatibility of grain size and color with current beach sediments (**Appendix G**, *Sediment Beneficial Reuse Study*).

The coastline in the Project vicinity is considered sediment starved. The Project could provide suitable grain size material to renourish severely eroded areas between Mastro's Point and Will Rogers State Beach (Appendix C). The potential exists to provide 156,000–256,000 CY to the nearshore for this purpose. The methods under consideration, pending approval from regulatory agencies, include Option 1: Mechanical Removal and Hydraulic Nearshore Placement, Option 2: Mechanical Removal and Upland Landfill Disposal, or some combination of both.

Option 1: Mechanical Removal and Hydraulic Nearshore Placement

Under this option, fill material would be removed from the Project area through nearshore ocean placement. Placing the material in the nearshore in the approximately 35-acre area would be environmentally beneficial because it would allow naturally driven processes (waves, longshore drift, and tidal currents) to disperse it to the surrounding littoral zone and beaches, nourishing them with additional sand and pebbles/cobbles, while silts and clays move farther offshore. For

these natural processes to take place, the material must be placed within the closure depth of the region (approximately 30 feet). Placement west of the Topanga Lagoon mouth and east of Mastro's Point was considered, but given the presence of important marine habitats, concerns about avoiding any impacts on the surf break, and construction limitations, the current area was selected.

Sidescan sonar survey, underwater video, and diver surveys were used to identify suitable sandy areas (**Appendix K**, *Topanga Marine Habitat Characterization Study*). The bottom substrate within the proposed placement area is primarily sand and the range of contours facilitates transport downcoast. The actual methods of placing materials within the nourishment area would be dictated by modeled dispersal and degradation rates, potential for turbidity, placement geometry, and the intent to minimize impacts on Essential Fish Habitat and other sensitive marine habitats.

Hydraulic nearshore placement would require that material be trucked on the beach to a staging area on the east side of Topanga Beach, where a sump pit or hopper would be used to mix the material into a slurry.¹⁰ Seawater would be pumped directly into the container or pit using a small submersible pump on the end of an intake line. This intake line would be screened so that organisms, debris, or other materials would not be impinged on the screen or pumped in from the ocean. A crawler crane would adjust the position of the pump within the sump pit or hopper to pump the slurry through a submerged discharge line to the nearshore placement site. There could be sediment buildup at the end of the discharge line, so a small derrick barge and support tug would adjust the seaward end of the line as needed to prevent line burial and clogs. The pipe would be temporarily anchored and placed on risers as needed to prevent any unintended impacts on sensitive marine resources. It is anticipated that the maximum thickness of sediment at the placement point would be a mound 5–20 feet high that would be distributed throughout the dispersal area and slope down as it is washed away by wave action, longshore drift, and tides.

Sediments are expected to migrate downcoast, transported by the current toward the narrow beach at Coastline Drive. Based on data from the Coast of California Storm and Tidal Waves, movement of sediments would not affect the Topanga Point surf break, as the placement site is downcoast of the point. The beaches downcoast from Topanga Lagoon are fairly narrow and experience regular seasonal and episodic erosion, and as such, any sediment added to the respective littoral cell would beneficially provide erosional protection and add recreational space for the public.

Option 2: Mechanical Removal and Upland Landfill Disposal

Should trucks be used to transport some or all of the material to either the Calabasas, Sunshine, or Scholl Canyon Landfill, two different navigation routes would be used. For material heading to the Calabasas Landfill, trucks would be staggered to either travel west on PCH and north on Malibu Canyon Road or travel east on PCH to Interstate 10 (Santa Monica Freeway), then west on U.S. Highway 101, to reduce traffic congestion and the need for highway crossings. Trucks

¹⁰ A *hopper* is a metal sediment containment box that would be roughly 40 feet by 15 feet and placed on the beach.

heading to either the Sunshine or Scholl Canyon Landfill would use PCH east to Interstate 10 (Santa Monica Freeway) and then Interstate 405 north to U.S. Highway 101 east.

The potential exists for as much as the top 3 feet of soil below the pavement approaches to the bridge to be contaminated with ADL. If ADL is shown to be present by soil testing at the time of excavation, this soil would be disposed of off-site at a hazardous materials landfill. Soils removed below a depth of 3 feet in a roadway excavation are assumed to be clean based on soil characterization studies and do not require any special handling.

Excavation and disposal of the maximum amount of excavated historic fill materials is anticipated to take up to 146 working days and approximately 32,000 truck trips. Construction would close portions of the beach for five to seven months, but a temporary access-way out to the surf break would be maintained at all times.

Excavation and disposal work would be scheduled to avoid the busy summer months from Memorial Day to Labor Day and avoid grunion breeding season, as well as steelhead migration or other sensitive species needs. Ideally the excavation would be conducted in the fall before the rainy season, as this timing would both minimize impacts on the beach and facilitate movement with the onset of winter storms.

2.6.7 Wastewater Management Options

Existing DBH facilities at Topanga Beach are supported by an AOWTS. The existing wastewater management systems for State Parks, however, are outdated. The State Parks concessions rely on pumping, while the Topanga Ranch Motel is limited to a single closed tank supporting the on-site employee residence. Improvements to any State Parks visitor services would require upgrading wastewater management to meet current standards. A variety of options for managing wastewater were explored during a planning-level feasibility study (**Appendix I, *Wastewater Management Options***) (**Figure 2-8**). The feasibility study identified the following options for supporting the wastewater needs of the proposed new State Parks visitor services: on-site subsurface drip irrigation (SDI), on-site seepage pits, and connection to off-site sewer. Note that although the Project boundary includes potentially disturbed areas for both the seepage pits and sewer, once a final preferred alternative is selected, only one of these would be carried forward to the final design.

Option 1: Subsurface Drip Irrigation

SDI would support effluent levels for State Parks facilities under Alternative 2 only. If SDI were selected, it would be installed on State Parks property directly north of the proposed parking area along TCB, within the Gateway Corner. Construction would require a pipe and pump system with treatment works to move effluent from the sources to the receiver site. Approximately 1,000 CY of excess fill material would be generated. All work and staging areas would be located on State Parks property. The SDI system could be constructed concurrently with other Project elements over a three- to six-month period at an estimated cost of \$1.6 million.



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SOURCE: ESA, 2023

Topanga Lagoon Restoration Project
Figure 2-8
 Wastewater Management Options



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Option 2: Seepage Pits

Seepage pits could support the effluent needs of State Parks facilities under all Project Build Alternatives. If chosen, construction of this option would occur concurrently with other Project elements and would require three to six months at an estimated cost of \$1.6 million. Construction would require a pipe and pump system with treatment works to move effluent from State Parks' visitor services development at the Gateway Corner and along PCH to the dispersal site. The pipe alignment between the treatment works and the dispersal site would be located outside of Caltrans ROW on the west shoulder of TCB on State Parks property, but the alignment would cross TCB through Caltrans ROW at approximately the 0.50-mile marker to terminate at the dispersal site on the east side of TCB on State Parks property. Approximately 1,000 CY of excess fill material would be generated. All staging is anticipated to be located within the dispersal site on State Parks property. Standard measures to minimize traffic impacts would be implemented, such as limiting work when crossing TCB to night hours, implementing traffic management, and providing community notices.

Option 3: Sewer

Connection to the public sewer system would involve constructing an extension of the Los Angeles County Sanitation Districts (LACSD) public sewer from existing facilities just south of the intersection of Coastline Drive/PCH, within the Will Rogers State Beach parking lot, to facilities associated with Topanga Beach and the Topanga Ranch Motel/Gateway Corner. Both DBH and State Parks could connect Project facilities to this sewer extension. Although they are not a part of the Project, the gas station and Mastro's restaurant could also investigate tying into the system, but there is insufficient capacity to expand the sewer west into the City of Malibu. Sewer construction is anticipated to take one year and would likely extend project construction an additional year for a total of six years. The DBH Coastline parking lot is proposed to be used for staging and storage during that construction. Sewer costs are anticipated to range from \$9.6 to 11 million, depending on the sewer type and installation method utilized. Approval from the Los Angeles County Local Formation Commission would be required to expand the LACSD sphere of influence to include the Project area. Caltrans approval for ROW use and other standard County and regulatory approvals would also apply.

The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible. The sewer alignment would run within the median of PCH between Coastline Drive and TCB, then cross PCH to shift to the north or south of PCH to connect to DBH and State Parks facilities. No extension into the City of Malibu or users farther west is proposed.

A combination of trenchless methods (jack and bore or microtunneling) and some open trench are likely to be used. Roughly 1,000 CY of excess excavated material is anticipated. Periodic closure of the #1 westbound lane during sewer installation could occur. The Will Rogers State Beach parking lot and Topanga Ranch Motel parking lot would be used for construction staging and storage. Traffic management and communication requirements of Caltrans, the County, State Parks, DBH, and other regulatory agencies would be implemented.

2.6.8 Consideration of Hybrid Alternatives

This EIR has identified and analyzed a range of possible Project alternatives. Each alternative includes multiple components that have been fully analyzed for potential environmental impacts. As State Parks considers which alternative to approve, some components from multiple alternatives may be combined to create a hybrid alternative. These could include inclusion of more than one wetted lagoon channel on the west side; road alignment and Topanga Ranch Motel configurations; implementation of living shoreline elements; alternative emergency access routes to the beach; and final placement of relocated beach facilities and helipad.

2.6.9 Proposed Final Parking Summary

Any future approved development on-site would require parking to conform with current standards. For this reason, one focus of this summary is on the availability of conforming parking for all Project Build Alternatives. The intent of this analysis is to provide an “apples to apples” comparison that can clearly show how existing parking for coastal access and recreation would be affected by the Proposed Project and how it would vary by alternative. Understanding how the type of parking would change throughout the Project area, regardless of the ownership of individual parking spaces, is important for the visiting public. The public tends to utilize the closest and/or most affordable parking to the areas they are most interested in visiting, regardless of ownership. Note that these estimates are provided to evaluate potential disruptions for each alternative; however, final parking numbers are expected to change during the final evolution of the preferred alternative design.

A total of 390 parking spaces currently exists in the Project area. Of these, only 213 are conforming. Although there would be a decrease in available parking from a total of 390 existing spaces (213 conforming) to 314 (Alternative 2) to 343 (Alternative 4) conforming spaces, this decrease is attributable to the significant decrease (104) in Concession Exclusive parking. The availability of public day-use parking (both Public Fee and Public Free) would increase from 226 existing spaces (115 conforming) to 287–308 conforming spaces. It should be noted that Public Free parking along PCH would decrease under all Build Alternatives, from 79 nonconforming to 51–53 conforming. Free parking along the shoulders of TCB would remain the same (estimated at 40 nonconforming spaces) but would be unavailable during widening and restriping of TCB to create a new left-turn lane. A total of 15–25 new Motel Exclusive parking spaces would be created and dedicated to users of park facilities associated with the motel.

Motel Exclusive

No public or parks-facility parking currently exists within the fenced-off area of the Topanga Ranch Motel. Potential restoration of a portion of the motel would occur under Alternative 3 or 4 and could provide potential low-cost overnight accommodation or other future unidentified parks use. This would result in 25 new Motel Exclusive parking spaces under Alternative 3, or 15 spaces under Alternative 4, that could be used for motel or other park-specific parking. No Motel Exclusive parking would be provided under Alternative 2, as the motel would be removed under that alternative.

Concession Exclusive

State Parks Concession Exclusive Parking would see a large decrease under every Project Build Alternative, from 124 existing spaces (98 conforming) to 20 conforming. This would occur because concessions on State Parks property would be reduced from six to one to accommodate the area needed for lagoon restoration and to align with the goals of the Topanga State Park General Plan.

Public Day Use (Fee and Free)

Day use parking would change under all Build Alternatives; however, more Fee parking than Free parking would be provided. Public Fee parking would increase under all Build Alternatives, from the existing 147 spaces (115 conforming under Alternative 1) to 201 conforming spaces under Alternative 2, 194 conforming spaces under Alternative 3, and 217 conforming spaces under Alternative 4. Of these, DBH fee spaces would total 87 under Alternative 2, 79 under Alternative 3, and 110 under Alternative 4. State Parks fee spaces would total 114 under Alternative 2, 115 under Alternative 3, and 107 under Alternative 4.

Public Free parking within Caltrans ROW on the PCH road shoulder would decrease from 79 nonconforming existing spaces to 53 conforming spaces under Alternative 2 or 3, versus 51 conforming under Alternative 4. This is because of the requirement that all new parking comply with existing standards, which involves no parking on the longer bridge deck or within certain distances of parking lot entrances, among other Caltrans standards. In addition to the larger amount of public day-use parking, the Build Alternatives would improve the geographic distribution of day-use parking by providing more choices for the visiting public to park closer to the amenities they are most interested in visiting. The existing Public Fee and Free parking is centered within the Project area along PCH and does not provide easy access to the far eastern and western portions of Topanga Beach. New Public Fee parking on the south side of PCH would become available under the Build Alternatives through development of the southwest DBH lot, making portions of the west side of Topanga Beach more easily accessible because of reduced walking distances and increased visibility.

Development of the State Parks Gateway Corner and TCB lots north of PCH at the east end of the Project area not only would create Public Fee parking adjacent to new State Parks visitor facilities located at the Gateway Corner but would also improve access to the east side of Topanga Beach via the improved beach stairway at the intersection with PCH and shortened walking distances. Currently, unmarked shoulder areas along TCB are used for free parking. Adjacent to the proposed development area for the new parking lot, there are approximately 20 free spaces on both the east and west shoulders of TCB.

Existing Parking versus Proposed Coastal Access Parking

Table 2-2 compares existing parking versus proposed coastal access parking under each Project Build Alternative. Further details on existing parking are found in Appendix F. Electric vehicle supply equipment is proposed by Southern California Edison for the DBH beach lot. Access to this equipment would remain accessible during construction as feasible based on staging constraints but would be retained in the final parking plan.

**TABLE 2-2
SUMMARY OF PARKING PER CATEGORY**

Category	Existing			Proposed		
	Conforming	Nonconforming	Subtotal	Conforming		
	Alternative 1			Alternative 2	Alternative 3	Alternative 4
Motel Exclusive (State Parks)	0	0	0	0	25	15
Concessions Exclusive (State Parks)	98	26	124	20	20	20
Public Day Use	–	–	–	–	–	–
Public Fee (State Parks + DBH)	115	32	147	201	194	217
Public Free (Caltrans)	0	119	119	93	93	91
Public Day Use Subtotal	115	141	266	294	287	308
TOTAL	213	177	390	314	332	343

NOTES:

Caltrans = California Department of Transportation; DBH = County of Los Angeles Department of Beaches and Harbors; State Parks = California Department of Parks and Recreation

Excludes 104 spaces currently required for concessions to be removed as part of Alternative 2, Alternative 3, and Alternative 4.

2.7 Project Construction

Construction activities would be conducted in phases (**Table 2-3**), following or concurrent with the installation of additional parking along TCB and the Gateway Corner, which is estimated to take approximately six months. Temporary pedestrian beach access in variable locations would be provided to ensure continuous use of beach areas not under construction. Emergency services for the helipad and lifeguards would be maintained at all times. Non-essential staff parking and ADA parking would be maintained to the greatest extent possible during construction. The initial phase would involve demolishing existing building structures and relocating utilities.

To ensure that the bridge and lagoon restoration portion of the Project would not constrain traffic during construction, a temporary bridge would be constructed on the coastal side of the existing bridge. Once this is completed, the existing bridge would be demolished, a new bridge erected, the fill and 1924 bridge footings embedded in it, and the lagoon re-graded. Work within the wetted areas considered waters of the United States would be limited to removal of the footings and piers of the existing 1933 bridge and placement of materials in the nearshore if approved by the U.S. Army Corps of Engineers. All other work including temporary and new bridge footings would be installed into fill materials outside the wetted area.

Note that if an off-site sewer option is chosen for wastewater management, the process for acquiring ROW, inclusion into the required County sphere of influence for accepting the effluent, and actual construction are not detailed at this time. It is anticipated that it would take an additional two to three years to obtain required permits and funds for this effort, although construction is expected to take approximately one year. This could extend the duration of overall Project construction.

**TABLE 2-3
LAGOON RESTORATION CONSTRUCTION SEQUENCE**

Sequence	Activity
1	Demolish buildings and provide temporary parking. Construct municipal bus stop and beach access stairs. Construct Gateway Corner parking facilities. Potentially initiate AOWTS construction.
2	Initiate relocation of some utilities (includes work by utility owners initiated at this time to facilitate bridge replacement and undergrounding).
3	Construct temporary road/bridge (Stage 1). Install protection of wetted areas as required. Remove concrete embedded in east bank fill from 1920s bridge. Start construction of new parking on the southwest DBH lot.
4	Demolish the NB half of the existing bridge.
5	Construct NB road/bridge (Stage 2).
6	Demolish the SB half of the existing bridge.
7	Construct the SB road/bridge (Stage 3).
8	Demolish temporary bridge. Construct helipad and new DBH parking. Grade for garage, roadway, and lifeguard and public restroom building. Create temporary access for trucks moving excavated fill either for beneficial reuse or to landfills.
9	Begin lagoon grading, starting on the west and moving east. Complete new parking on southwest DBH lot. Construct the lifeguard and public restroom building, then demolish the old building. Construct the AOWTS.
10	Restore beach area.
Total Construction Duration: 60 months	
NOTES:	
AOWTS = advanced on-site wastewater treatment system; DBH = County of Los Angeles Department of Beaches and Harbors; NB = northbound; SB = southbound	
* If sewer is selected, construction could begin during Stage 9 and is anticipated to take an additional 12 months. During that time, some lane closure between Coastline Drive and Topanga Canyon Boulevard is anticipated.	

All four lanes of PCH in the area by the bridge and emergency access would be maintained during bridge construction, with coordinated staging closures when needed that would avoid peak traffic hours. Once the preferred alternative is selected, the construction and emergency traffic control plan would be revised and updated in collaboration with Caltrans, all emergency services, and the City of Malibu to ensure that Project construction would not impair normal access, including for emergency services or evacuation during a wildfire. These plans would also be coordinated with the City of Malibu Emergency Evacuation Plan and the County Emergency Evacuation Plan, as well as the Los Angeles County Fire Department, Sheriff, and California Highway Patrol. A conceptual Draft Construction and Emergency Traffic Control Plan is provided in **Appendix J**.

The temporary bridge would consist of an approximately 180-foot-long by 31-foot-wide temporary bridge made of either precast prestressed concrete or prefabricated steel girders

adjacent to the existing southbound lane of PCH and relocating utilities. Removal of the 1920s concrete bridge abutments embedded in the fill near the location of the temporary bridge would occur and aquadams, portadams, or a cofferdam would prevent any sediment impacts on the main lagoon. The temporary bridge would accommodate two lanes of traffic while the new bridge is under construction. It would take approximately nine to 12 months to construct and would be built to avoid having footings in the lagoon. (Note: It may be possible to develop alternative strategies for maintaining access at all times for all four lanes in the later design development phase once a preferred alternative is selected.)

Once the temporary bridge is completed and traffic diverted, the existing 79-foot-long culvert bridge would be removed in stages to facilitate construction of the new bridge, first northbound and then southbound. Before demolition of the old bridge, up to 0.33 acre within the footprint of the bridge would be dewatered. This would be accomplished by excluding fish and other aquatic organisms from the work area to an appropriate adjacent upstream habitat supervised by a qualified biologist, then utilizing aquadams, portadams, or a cofferdam on either side of the culvert in lieu of driving sheet piles to avoid and mitigate potential acoustic impacts. This control would be set up within a few feet of the culvert bridge to lessen the temporary impact on the waterway. Pumps would be used to keep the work area dry during demolition. Water would be pumped into a staging pond for infiltration and eventual release into the ocean after water quality testing. Formal Endangered Species Act consultations and Section 401 and 404 permits, among others, would be required.

Shoring would be installed directly behind the culvert bridge on both sides to support the soil underneath the active vehicular lane. The existing bridge deck and abutments would be removed with concrete saws and excavators with a hoe-ram attachment to demolish the thick slabs supporting the culvert. Construction debris would be hauled off-site for disposal.

Piles would be cut 3 feet below the finished mudline, or deeper. The latter would depend on the potential scour depth and/or scour impacts on the proposal piles. The second phase would be similar to the first. When completed, the water controls would be removed.

The new PCH bridge would be constructed by building first the northbound lanes, followed by the southbound lanes. The northbound half of the existing culvert bridge would be demolished and removed. The northbound new bridge lanes would then be constructed. Upon completion of the northbound lanes, the southbound section of the existing culvert bridge would be demolished and the southbound lanes of the new bridge completed. The new bridge foundation would be built before the removal of surrounding fill material to minimize impacts on the existing lagoon habitat. There would be no active work in the wetted channel areas.

Approximately 20,000 CY of fill material would be retained if suitable or otherwise imported, and approximately 7,500 CY of concrete would be imported to construct the new bridge for all Build Alternatives. All new paved surfaces would be underlain by at least 2 feet of engineered fill, compacted to at least 95 percent of the maximum dry density. New parking areas would be permeable surfaces to the greatest extent feasible and bioswales would be used to prevent surface runoff pollution.

No retaining walls are proposed under Alternative 2. Under Alternative 3, retaining walls would be needed to support the helipad on top of the garage (92 feet of CMU wall 8–10 feet tall underneath the south side, 72 feet on the north side of the helipad) and a 192-foot-long, 4- to 6-foot-tall wall to shore up the fill material supporting the remaining Topanga Ranch Motel units.

Under Alternative 4, 760 feet of 4- to 12-foot-high retaining walls would be required along the northern shoulder of PCH to accommodate adjacent slopes. A 91-foot-long, 4- to 6-foot-tall CMU retaining wall would be needed on the south side of the bridge to support the slopes on the east side. The retaining walls would be installed during construction of the northbound lanes outside of the wetted area and before excavation of fill materials, but otherwise, the construction sequencing would be the same.

Upon completion of the new PCH bridge and undergrounding of all existing overhead utility lines between TCB and the west end of the Project area, the temporary bridge would be removed and then the relocation of the helipad, east beach access road to the lifeguard and public restroom building, and DBH staff and ADA parking would begin. The sequence would differ slightly depending on which placement of the helipad and hydrant, new garage, ADA and staff parking, and lifeguard and public restroom building is ultimately selected. Temporary ADA parking would be provided during construction. First the area for the new helipad, garage, parking, and site of new lifeguard and public restroom building would be prepared. The new helipad would be completed and the beach access road would be relocated. Beach access to the west side would be limited to the area outside the work zone, but a path to reach the point break and area below the mean high-tide line would be maintained at all times.

Next, a temporary access road for trucks to move fill material from the west side would be designated. As noted in Section 2.6.6, Option 1, trucks would either take material to a landfill for disposal or move east along the beach to transfer fill to the nearshore placement zone, depending on the disposal option selected. The haul route along the beach would be fenced for safety but would provide access points to permit pedestrian and emergency access to the beach at all times. The haul route would avoid the potential grunion nesting area below the mean high-tide line. Because of existing coastal erosion, some temporary fill may be needed on the east cove beach to allow truck movement. Any temporary fill would be removed upon completion of fill removal and grading.

Grubbing (after preconstruction biological clearances) of the preferred alternative lagoon and graded area footprint would be initiated, avoiding wetted areas and employing the use of BMPs outlined in the Biological Assessment Report (**Appendix K**) to avoid impacts when working adjacent to wetted areas, and avoiding the protected root zone of most mature native trees and on-site biological resources. Once grubbing is completed, contour grading would follow with biological, water quality, and cultural monitoring, and revegetation with the use of BMPs to control soil (and in accordance with an approved restoration plan). This would initiate a five-year maintenance and monitoring period to meet permit standards and requirements. The Conceptual Habitat Restoration and Management Plan (**Appendix L**) provides objectives for restoration and metrics for determining Project success.

Once all fill is removed on the west side, the southwest DBH parking area would be completed, revegetation would begin, and full beach access to the west side would be restored. Removal of fill on the east side would be coordinated with maintenance of the helipad functioning at all times, and with ensuring continued access to the beach, ADA parking, and the lifeguard and public restroom building.

Construction of the new lifeguard and public restroom building, and complete grading of the new east access road alignment would then begin. Note that for a short time during road relocation, access to the lifeguard and public restroom building would be from the west side only, which would also restrict ADA and staff parking by the existing building. Pedestrian access to the beach below the mean high-tide line would be maintained at all times from both the east end of the beach near TCB and the westside parking and emergency access areas. The construction window would work around grunion breeding season and the rainy season or any time the lagoon could potentially be connected to the ocean.

Once new emergency facilities are operational, the old lifeguard and public restroom building would be demolished and removed. Excavation of the fill material east and west of the lagoon would occur without affecting the existing wetted area and riparian trees on the banks. Excavation would start from the outer protected zones of retained trees and move away from the wetted area. Buffer zones and barriers would be installed and maintained to prevent any impacts on the wetted areas.

Under all Project Build Alternatives, the area would be graded to create the new lagoon footprint. Mechanical removal using an excavator would start on the west side of the lagoon using haul routes under the outer span of the new PCH bridge, with a buffer of at least 20 feet from the edge of the excavation area to retain native trees on the bank and to avoid potential impacts on the wetted areas. An excavator would remove soil and debris and groom the site contours.

Once the helipad, lifeguard and public restroom building, and beach parking are completed, the final lagoon contouring would occur. The lagoon and graded areas would then be revegetated.

2.7.1 Schedule

Before the start of construction of the new bridge, parking, and visitor access elements described above, the Gateway Corner would be developed to provide continued coastal access parking. Construction and demolition in the Project area is anticipated to begin in 2027 and continue for approximately 60 months. Some activities could occur at any time, but any activities that would affect nesting birds, constrain fish passage, or minimize beach access would be carefully scheduled. Emergency access would be preserved at all times. Construction activities would generally be limited to 7:00 a.m. to 7:00 p.m., Monday through Friday; however, some nighttime work may be required to accommodate certain construction elements and/or construction schedule, and contractors are anticipated to have full access to the Project site at all times. The construction sequence for restoration of the lagoon is depicted in Table 2-3.

Excavation and disposal work would be scheduled to avoid the busy summer months from Memorial Day to Labor Day, and to work around grunion breeding season, storm events, and

times when the lagoon is connected to the ocean, unless construction could continue within the constraints of regulatory permits. Ideally the excavation would be conducted in the fall before the rainy season, as this would both minimize impacts on the beach and facilitate downcoast movement of placed materials with the onset of storms.

Construction would close portions of the beach for five to seven months, but a temporary access-way out to the surf break would be maintained at all times. Excavation and disposal of the lagoon sediment is anticipated to take up to 146 working days (work on weekends outside of the summer season may be needed) and approximately 32,000 truck trips.

2.7.2 Parking and Pedestrian Access during Construction

As noted above, of the 390 vehicle parking spaces currently in the Project area, 266 spaces are “public” parking spaces made of a mix of fee and free parking, and 20 spaces are concession exclusive spaces associated with the single leasee to be retained. It is a Project goal to retain this same level of parking availability during construction activities. The following is summarized from the October 2023 *Topanga Lagoon Restoration Project–Draft Construction Parking Management Plan* prepared by LLG (**Appendix J**).

Temporary parking would move around during the five-year construction period and would utilize areas that are not actively being developed to protect public access to the beach and concessions to the maximum extent feasible. All temporary construction parking areas would be located within previously disturbed or developed locations within the Project area. **Tables 2-4 and 2-5** summarize the estimated parking available to the public per alternative.

The first construction stage would involve demolition and removal of all structures at the State Parks Gateway Corner. A temporary Public Fee parking area would be subsequently constructed within the proposed Gateway Corner and TCB parking lots, with care taken to retain trees present for shade. Free shoulder parking along TCB would be unavailable during widening of TCB to restripe and develop the left-turn lane. During this time, parking would then generally be unavailable on the north side of PCH in the existing State Parks lots to provide adequate space for construction staging. Access to the concession located at the Reel Inn building would be protected during construction under Alternative 2 or 3, including 20 Concession Exclusive parking spaces. Relocation and rebuilding of the concession proposed for Alternative 4 in the proposed location would require closure of this concession during Stages 2–3 of construction because of conflicts with the realignment of the PCH roadway. Potential parking on the south side of PCH within the existing DBH lot would be maintained as feasible, although some areas may require closure for specific construction activities such as temporary bridge construction and bridge replacement (Stages 2–4) or to maintain public safety.

**TABLE 2-4
POTENTIAL PARKING BY AREA DURING PROJECT CONSTRUCTION UNDER ALTERNATIVE 2 OR 3**

Construction Sequence/Activity	Approx. Construction (Months)	PCH Off-Street (State Parks North Side)	PCH Off-Street (DBH South Side)	PCH Caltrans On-Street	TCB Caltrans On-Street	TCB/Gateway Corner State Parks Off-Street	Total
1 - Demo Buildings and Provide Temporary Parking Construct Municipal Bus Stop and Beach Access Stairs Construct Gateway Corner Parking Facilities	1–6	20	97	79	0	115	311
2 - Relocate Utilities (includes work by utility owners)	6–15	20	97	79	40	115	351
3 - Construct Temporary Road/Bridge (Stage 1) Install Protection of Wetted Areas as Required Remove Concrete Embedded in East Bank Fill from 1920s Bridge	15–21	20	0–53	79	40	115	254–307
4 - Demo NB Half of Existing Bridge	22–23	20	53–100	0	40	115	228–275
5 - Construct NB Road/Bridge (Stage 2)	24–36	20	53–100	0	40	115	228–275
6 - Demo SB Half of Existing Bridge	37–38	20	53–70	0	40	115	228–245
7 - Construct SB Road/Bridge (Stage 3)	39–51	20	53–70	0	40	115	228–245
8 - Demo Temporary Bridge (Stage 4) Construct Helipad and New DBH Parking Grade for Garage, Roadway, and Lifeguard and Public Restroom Building Create Temporary Access for Trucks Moving Excavated Fill for Either Beneficial Reuse or to Landfills	52–53	20	53–87	0	40	115	228–262
9 - Lagoon Grading (starts on west and moves east) Construct New Parking on DBH SW Lot Construct Lifeguard and Public Restroom Building, then Demo Old Building	52–58	20	79–87	0	40	115	254–262
10 - Restore Beach Area	59–60	20	79–87	0	40	115	254–262

NOTES: Approx. = approximate; Caltrans = California Department of Transportation; DBH = County of Los Angeles Department of Beaches and Harbors; demo = demolish; NB = northbound; PCH = Pacific Coast Highway; SB = southbound; State Parks = California Department of Parks and Recreation; SW = southwest; TCB = Topanga Canyon Boulevard

SOURCE: Data provided by RCDSMM in 2023

**TABLE 2-5
POTENTIAL PARKING BY AREA DURING PROJECT CONSTRUCTION UNDER ALTERNATIVE 4**

Construction Sequence/Activity	Approx. Construction (Months)	PCH Off-Street (State Parks North Side)	PCH Off-Street (DBH South Side)	PCH Caltrans On-Street	TCB Caltrans On-Street	TCB/Gateway Corner State Parks Off-Street	Total
1 - Demo Buildings and Provide Temporary Parking Construct Municipal Bus Stop and Beach Access Stairs Construct Gateway Corner Parking Facilities	1–6	20	97	79	0	115	311
2 - Relocate Utilities (includes work by utility owners)	6–15	20	97	79	40	115	351
3 - Construct Temporary Road/Bridge (Stage 1) Install Protection of Wetted Areas as Required Remove Concrete Embedded in East Bank Fill from 1920s Bridge	15–21	20	0–53	79	40	115	254–307
4 - Demo NB Half of Existing Bridge	22–23	0	53–70	0	40	115	208–225
5 - Construct NB Road/Bridge (Stage 2)	24–36	0	53–70	0	40	115	208–225
6 - Demo SB Half of Existing Bridge	37–38	0	53–70	0	40	115	208–225
7 - Construct SB Road/Bridge (Stage 3)	39–51	0	53–70	0	40	115	208–225
8 - Demo Temporary Bridge Construct Helipad and New DBH Parking Grade for Garage, Roadway, and Lifeguard and Public Restroom Building Create Temporary Access for Trucks Moving Excavated Fill for Either Beneficial Reuse or to Landfills	52–53	20	53–70	0	40	115	228–245
9 - Lagoon Grading (starts on west and moves east) Construct New Parking on DBH SW Lot Construct Lifeguard and Public Restroom Building, then Demo Old Building	52–58	20	53–110	0	40	115	228–285
10 - Restore Beach Area	59–60	20	53–110	0	40	115	228–285

NOTES: Approx. = approximate; Caltrans = California Department of Transportation; DBH = County of Los Angeles Department of Beaches and Harbors; demo = demolish; NB = northbound; PCH = Pacific Coast Highway; SB = southbound; State Parks = California Department of Parks and Recreation; SW = southwest; TCB = Topanga Canyon Boulevard

SOURCE: Data provided by RCDSMM

The next stages would involve construction of the proposed temporary bridge, and then demolition and construction of the northern and then southern section of the Caltrans PCH bridge. Existing State Parks parking lots northwest and northeast of Topanga Creek would be unavailable, as they would be needed for construction staging during this stage of northbound construction. The 20 Concession Exclusive spaces associated with the State Parks concession would be protected and available during construction under Alternative 2 and Alternative 3 but not Alternative 4. An estimated 225–287 Public Fee and Free parking spaces are anticipated to be available during this phase, although there may be periods when the construction parking goal of 266 could not be maintained. This includes parking within an area located between PCH and the temporary bridge and south of the temporary bridge, in a portion of the existing southeast DBH parking lot; within the boundaries of the future southwest DBH parking lot; and within the State Parks Gateway Corner and TCB parking areas. Additional PCH and TCB Public Free shoulder parking is anticipated to be limited at times because of associated construction activities such as utility relocation and restriping.

Temporary parking would vary by construction stage, shifting around during the 60-month construction period, and would utilize areas that are not actively being developed to protect public access to the beach and concessions to the maximum extent feasible. These spaces would need to conform to Caltrans safety regulations. Tables 2-4 and 2-5 provide a conceptual level of maximum potential spaces per construction phase per alternative. Note, however, that the actual number of spaces available during construction would vary over time because of staging constraints. A more detailed analysis of actual spaces would be completed during the final design process for the identified preferred alternative. The numbers shown are provided for conceptual comparison only.

2.8 Project Operations and Maintenance

A detailed operations and maintenance plan is found in **Appendix M**, which provides roles and responsibilities for each landowner, especially with regard to the restored lagoon area. Each landowner would implement its standard facilities and property management protocols and comply with all regulatory requirements associated with the Proposed Project. It is not anticipated that operations and maintenance activities for facilities would be significantly greater than at present. Management and maintenance of the restored lagoon area and any expanded visitor services could require significantly more operations and maintenance efforts at least for the first five to 10 years post-implementation to comply with all permitting monitoring requirements. If an AOWTS option is selected, an AOWTS operations and maintenance manual would provide details on the requirements for carefully monitoring the AOWTS for water quality compliance.

2.9 Discretionary Approvals Required for the Project

Table 2-6 presents a preliminary list of the agencies and entities that have authority to issue specific permits and other discretionary approvals that may apply to the Proposed Project.

**TABLE 2-6
PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS***

Regulatory Agency	Permit	Reason for Permit or Approval
U.S. Army Corps of Engineers	CWA Section 404/Rivers and Harbors Act Section 10	<ul style="list-style-type: none"> Discharge of dredged or fill material into waters of the United States from Project components within the lagoon associated with bridge demolition and construction. Discharge of dredged material for beneficial reuse in the nearshore.
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 consultation	<ul style="list-style-type: none"> Effects on listed species and critical habitats as defined in the regulations.
National Marine Fisheries Service	Endangered Species Act Section 7 consultation	<ul style="list-style-type: none"> Effects on listed species and critical habitats.
National Marine Fisheries Service	Essential Fish Habitat consultation	<ul style="list-style-type: none"> Adverse effects on essential fish habitat.
State Historic Preservation Officer	National Historic Preservation Act Section 106 Public Resources Code Section 5024	<ul style="list-style-type: none"> Potential to affect historic properties/state-owned historical resources.
California Department of Fish and Wildlife	California Water Code 1602— Streambed or Lake Alteration Agreement	<ul style="list-style-type: none"> Impacts on jurisdictional features such as bed and bank of streams, rivers, lakes and features subject to Fish and Game Code Section 1602 from Project components.
	California Endangered Species Act Section 2081 or 2080.1 consistency determination	<ul style="list-style-type: none"> Impacts on listed and fully protected species, as well as species of special concern.
California Coastal Commission	Coastal development permit	<ul style="list-style-type: none"> Development within the coastal zone.
California Department of Transportation	Encroachment permit	<ul style="list-style-type: none"> Bridge replacement and roadway construction.
California State Lands Commission	Lease	<ul style="list-style-type: none"> Lease for state lands.
Los Angeles Regional Water Quality Control Board	Waste discharge requirements	<ul style="list-style-type: none"> Required if flow to the AOWTS exceeds 10,000 gallons per day (otherwise, eligible for waiver if the County Department of Public Health reviews and approves the AOWTS).
	CWA Section 401 water quality certification	<ul style="list-style-type: none"> Consistency determination with the U.S. Army Corps of Engineers 404 permit for impacts on waters of the United States that are also waters of the state.
	NPDES/waste discharge requirements	<ul style="list-style-type: none"> Deposition of sediment in waters of the United States.
	Statewide stormwater NPDES for construction	<ul style="list-style-type: none"> For runoff from construction activities.
County of Los Angeles	Encroachment permits DPW and LASAN permits	<ul style="list-style-type: none"> Access to public rights-of-way. If public sewer connection is used, would need approvals of plans and permits from DPW and LASAN and a sphere of influence expansion by the Los Angeles County Local Formation Commission. If AOWTS is used, would need approvals of plans and permits from County Department of Public Health. Also, DPW would need to review and approve plans and permits for plumbing and associated structural systems if County building safety permits are to be obtained.

NOTES: AOWTS = advanced on-site wastewater treatment system; County = County of Los Angeles; CWA = Clean Water Act; DPW = County of Los Angeles Department of Public Works; LASAN = Los Angeles County Sanitation Districts; NPDES = National Pollutant Discharge Elimination System

2.10 References

- Caltrans (California Department of Transportation). 2003. *Topanga Lagoon Bridge Replacement and Lagoon Restoration, Project Study Report (Project Development Support)*. 07-LA 1, KP 65.3-663. (PM 40.6-41.2), EA 23930K, HE12. Prepared by Moffatt & Nichol Engineers, Long Beach, CA. December 2003. Submitted by Resource Conservation District of the Santa Monica Mountains; approved by District Director March 16, 2004.
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CHAPTER 3

Affected Environment, Environmental Consequences, and Mitigation Measures

3.0 Introduction to the Analysis of Environmental Consequences

In compliance with California Environmental Quality Act (CEQA) Guidelines Sections 15125 and 15126, Chapter 3 of this draft environmental impact report (Draft EIR) presents an analysis of the potential significant environmental consequences of the Topanga Lagoon Restoration Project (Proposed Project) with respect to existing baseline conditions. The following environmental topics are assessed in detail in this chapter in accordance with CEQA Guidelines Appendix G:

- Visual/Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, Seismicity, Topography, and Paleontology
- Greenhouse Gas Emissions/Climate Change
- Hazards and Hazardous Materials
- Hydrology/Floodplain and Water Quality/Stormwater Runoff
- Land Use and Land Use Planning
- Marine Resources
- Noise and Vibration
- Public Services
- Parks and Recreation
- Transportation and Circulation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

CEQA Guidelines Section 15128 requires that an environmental impact report (EIR) “contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore were not discussed in detail in the EIR.” The following environmental topics from CEQA Guidelines Appendix G are not discussed in detail in this Draft EIR because no significant impacts associated with them would occur as a result of implementation of the Proposed Project:

- Agriculture and Forestry Resources
- Mineral Resources
- Population and Housing

The effects found not to be significant associated with these environmental topics are explained further below in Section 3.0.2, *Effects Found Not to Be Significant*.

3.0.1 Format of the Environmental Consequences

This Draft EIR provides analysis of impacts for those environmental topics where it was determined in the Notice of Preparation (NOP), or through subsequent analysis, that the Proposed Project would result in potentially significant effects. “Significant effect” is defined by CEQA Guidelines Section 15382 as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

Sections 3.1 through 3.18 discuss the environmental impacts that may result with approval and implementation of the proposed project. The format of the environmental analysis for each environmental topic included in Sections 3.1 through 3.18 includes a regulatory setting, affected environment, and environmental consequences discussion and mitigation measures (if required).

Regulatory Setting

Where the Project area and its surroundings fall within the jurisdiction of federal, state, and local regulatory agencies, the Proposed Project would be subject to the laws, rules, regulations, and policies of those agencies. These regulations are intended to guide development, reduce adverse effects on sensitive resources, and/or offer general guidance on the protection of such resources. The regulatory setting summarizes the applicable laws, rules, regulations, and policies for the Proposed Project. These rules may also set the standards, in the form of significance criteria or thresholds of significance as discussed below, by which the potentially significant impacts of the Proposed Project are evaluated.

Affected Environment and Baseline

The assessment of each environmental topic begins with the relevant baseline setting information that is needed to provide context for the impact analysis that follows. Extraneous setting information that does not shed light on the impact analysis is not included in this Draft EIR (CEQA Guidelines Section 15125[a]).

In accordance with CEQA Guidelines Section 15125(a), the affected environment contains a description of the regional and local physical environmental conditions in the Project vicinity at the time of the publication of the NOP. This affected environment constitutes the baseline physical condition against which the implementation of the Proposed Project is assessed to determine whether a significant environmental impact would occur (CEQA Guidelines Section 15126.2[a]).

Environmental Consequences and Mitigation Measures

This section presents the significance criteria against which potential impacts are evaluated. As defined by CEQA Guidelines Section 15064.7(a), thresholds of significance are an identifiable quantitative, qualitative, or performance standard for the assessment of a particular environmental impact. Significance criteria are included for each environmental topic.

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA. The level of significance for each impact examined in this Draft EIR was determined by considering the predicted magnitude of the impact to baseline environmental conditions against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and Appendix G Checklist.

Additionally, this section provides an analysis of the potential environmental impacts that could result from implementation of all four alternatives to the Proposed Project. This Draft EIR addresses the direct, indirect, and cumulative impacts associated with implementation of the Proposed Project alternatives, including short-term and long-term impacts. The impact analysis may include a summary or description of methodologies used.

The level of significance for each environmental impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact in relation to the baseline environmental setting and assuming implementation of applicable regulatory requirements, measured against the significance criterion. Based on the significance criterion, the significance of each potential environmental impact is determined according to the following categories:

- **Significant and Unavoidable:** A significant and unavoidable impact is a substantial adverse effect on the environment that cannot be reduced to below a significance threshold given reasonably available and feasible mitigation measures. A Project with significant and unavoidable impacts could still proceed, but State Parks would be required to prepare a Statement of Overriding Considerations, pursuant to CEQA Guidelines Section 15093, explaining why the agencies would proceed with the Proposed Project in spite of the potential for a significant environmental impact. In addition, CEQA Guidelines Section 15126.6 requires an analysis of Proposed Project alternatives, including a no-project alternative as well as other feasible alternatives, that would avoid or substantially lessen any of the significant effects of the Proposed Project.
- **Less-than-Significant Impact with Mitigation:** A potentially significant impact occurs if the Proposed Project could result in a potentially substantial adverse change in the physical conditions of the environmental topic being evaluated. If such a determination is made, reasonably available and feasible mitigation measures must be considered if they would avoid or substantially reduce the significant impact. An impact that can be reduced to below the significance threshold with such mitigation measures is considered less than significant with mitigation. Such an impact requires findings to be made under Section 15091 of the CEQA Guidelines.
- **Less-than-Significant Impact:** A less-than-significant impact is an impact that may be adverse but does not exceed the significance threshold and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

- **No Impact:** A no impact determination would occur if the Project would not result in a substantive change to the environmental topic that is being evaluated.

Mitigation Measures

Mitigation measures are recommended for any identified potentially significant impacts as a result of the Proposed Project. The significance determination provides the level of significance after the implementation of recommended mitigation measures, if applicable, based on the categories described above.

3.0.2 Effects Found Not to Be Significant

Agriculture and Forestry Resources

The Project would not 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.

According to the California Department of Conservation’s Important Farmland Finder, all of the Project area is located within urban and built-up land, and land designated as “other” (DOC 2016). As a result, implementation of the Proposed Project would not result in the conversion of any farmland to non-agricultural use. No impact would occur.

The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

The Los Angeles County Williamson Act Status Report shows that there are no active Williamson Act contracts within the Project area (DOC 2022a). Therefore, no impacts related to Williamson Act contracts would occur.

The Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]).

The majority of the Project area is located within the Santa Monica Mountains, Topanga State Park area, which is zoned as Open Space and Parks. Three of the four Proposed Project alternatives would require earthwork in this area to expand the Topanga Lagoon. However, this proposed earthwork and/or construction would not conflict with existing zoning or cause rezoning of forest land. Therefore, no impacts would occur.

There is no land designated as Timberland within the Project area; therefore, no impacts regarding zoning or rezoning of timberlands would occur.

The Project would not result in the loss of forest land or conversion of forest land to non-forest use.

As mentioned above and described more in Chapter 2, *Project Description*, of this Draft EIR, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

The Project would not 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.

No farmland is present in the Project area. Implementation of the Proposed Project would not result in any other changes that would result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Mineral Resources

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.

According to the California Geological Survey's CGS Information Warehouse, the Project area is not identified as a known mineral resource area (DOC 1994, 2022b). In addition, according to the California Department of Conservation, Geologic Energy Management Division, no oil wells exist within the Project area (DOC 2022c). Therefore, the Proposed Project would not result in the loss of availability of a known mineral resource, and no impact would occur.

The Project would not 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 County of Los Angeles (County) General Plan does not identify the Project area as a mineral resource zone (County of Los Angeles 2015), nor does the Topanga State Park General Plan (State Parks 2012). Therefore, implementation of the Proposed Project would not result in the loss of a locally important mineral resource recovery site. No impact would occur.

Population and Housing

The Project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Implementation of the Proposed Project would not have a direct growth inducement effect, as it does not propose development of new housing that would attract additional population to the area. The potential extension of wastewater service to the Proposed Project would be limited to servicing the Proposed Project and is also not anticipated to induce growth. Further, implementation of the Proposed Project would not result in substantial permanent employment that could indirectly induce population growth. Although construction activities would create some short-term construction employment opportunities over the duration of construction, the

number of opportunities created would not require persons outside of the Los Angeles County workforce. Further, it is anticipated that up to three new permanent or seasonal employees would be required for Proposed Project operation. These new employees also are anticipated to come from the existing County workforce. As described in Section 5.4 of this Draft EIR, the Proposed Project would not directly induce substantial unplanned population growth; thus, there would be no impact. The impacts of planned growth under existing, adopted land use plans has previously been analyzed in CEQA reviews completed by county and city land-use agencies with jurisdiction over land uses within the Project area.

Please refer to Chapter 5, *Growth Inducement*, of this Draft EIR for a discussion of the potential for the Proposed Project to indirectly induce substantial unplanned population growth.

The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

No residences would be condemned or displaced by the Proposed Project construction or operation activities. Therefore, the Proposed Project would not displace people or housing necessitating the construction of replacement housing elsewhere. There would be no impact.

3.0.3 Cumulative Impact Methodology

As indicated above, in addition to direct and indirect impacts associated with implementation of the Proposed Project, this Draft EIR also includes an assessment of cumulative impacts for each environmental topic evaluated in Chapter 3. The cumulative effects of implementing the Proposed Project in combination with other past, present, and reasonably foreseeable future projects within and around the Project site are considered. The analysis of cumulative impacts considers whether other projects could cause related environmental impacts similar to the environmental impacts anticipated to occur as a result of the Proposed Project.

CEQA Guidelines Section 15130 requires that an EIR shall discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355; see also Public Resources Code Section 21083[b]). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (CEQA Guidelines Section 15130[a][1]). The definition of cumulatively considerable is provided in Section 15065(a)(3):

Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

According to Section 15130(b) of the CEQA Guidelines:

[T]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

For the purposes of this Draft EIR, the Proposed Project would contribute to a cumulatively considerable and, therefore, significant cumulative impact if:

- The cumulative effects of other past, current, and probable future projects without the Proposed Project are not significant and the Proposed Project's incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact.
- The cumulative effects of other past, current, and probable future projects without the Proposed Project are already significant and the Proposed Project would result in a cumulatively considerable contribution to the already significant effect. The standards used to determine whether the contribution is cumulatively considerable include the existing baseline environmental conditions and whether the Proposed Project would cause a substantial increase in impacts or otherwise exceed an established threshold of significance.

Geographic Scope of Cumulative Impacts

The geographic area affected by the Proposed Project and the Proposed Project's potential to contribute to cumulative impacts varies based on the environmental topic being analyzed. Generally, the geographic area associated with the environmental effects of the Proposed Project, as described further in this Chapter 3, informs the boundaries of the area used for compiling the list of past, present, and reasonably foreseeable future related projects considered in the cumulative impact analysis.

Temporal Scope of Cumulative Impacts

The cumulative projects considered in this analysis include those that have recently been completed, are currently under construction, or are reasonably foreseeable (e.g., for which an application has been submitted). A project's schedule is relevant to the consideration of cumulative short-term construction-related impacts and long-term operational impacts. For future cumulative projects, implementation schedules are often broadly estimated and can be subject to change. However, for purposes of evaluating both short-term and long-term cumulative impacts of the Proposed Project, this analysis assumes that future cumulative projects would be implemented concurrently with the Proposed Project.

Method of Analysis

CEQA Guidelines Section 15130 provides that the following approaches can be used to adequately address cumulative impacts:

- **Regional Growth Projections Method**—A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
- **List Method**—A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency.

For this Draft EIR, the list method is used, and, consistent with CEQA, a two-step approach was used to analyze cumulative impacts. The first step was to determine whether the combined effects from the Proposed Project and cumulative projects would be cumulatively significant. This was done by adding the Proposed Project's incremental impact to the anticipated impacts of other probable future projects and/or reasonably foreseeable development. Where the combined effect of the projects and/or projected development was determined to result in a significant cumulative effect, the second step was to evaluate whether the Proposed Project's incremental contribution to the combined significant cumulative impact would be cumulatively considerable, as required by CEQA Guidelines Section 15130(a).

CEQA Guidelines Section 15064(h)(4) states that:

... [t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

Therefore, it is not necessarily true that, even where cumulative impacts are significant, any level of incremental contribution must be deemed cumulatively considerable by the lead agency. In addition, if the Proposed Project's individual impact is less than significant, its contribution to a significant cumulative impact could also be deemed cumulatively considerable, depending on the nature of the impact and the existing environmental setting. If, for example, a project is located in an air basin determined to be in extreme or severe nonattainment for a particular criteria pollutant, a project's relatively small contribution of the same pollutant could be found to be cumulatively considerable. Thus, depending on the circumstances, an impact that would be less than significant when considered individually may still be cumulatively considerable in light of the impact caused by all projects considered in the analysis.

List of Cumulative Projects

Cumulative effects could result when considering the effects of the Proposed Project in combination with the effects of other projects in the area. For this Draft EIR analysis, other past, present, and reasonably foreseeable future projects have been identified. **Table 3-1** lists specific projects that are included in the analysis of cumulative impacts.

**TABLE 3-1
PROJECT LIST FOR ANALYSIS OF CUMULATIVE IMPACTS**

Project No.	Lead Agency	Name	Location	Project Type	Project Description	Status
1	City of Malibu	PCH Signal System Improvements Project	Eight-mile section of PCH, between John Tyler Drive and Topanga Canyon Blvd.	Transportation	Improvements will include new closed-circuit television cameras at each intersection, replacement of existing signal poles with new signal poles, street improvements and ADA upgrades, ATCS sensors, and changeable message signs. Mid-block sensors will enable Caltrans to monitor traffic flow and speed, then remotely adjust signal timing in the moment.	Approved May 2017; Schedule Unknown
2	Los Angeles County Department of Public Works	Malibu–Saddle Peak Road, et al.	Various roadways within the unincorporated community of Malibu.	Transportation	The project would resurface 3.6 miles of residential roads. The project includes parkway improvements; curb ramps upgrades; and roadway resurfacing.	In Development; Schedule Unknown
3	Los Angeles County Department of Public Works	Topanga–Entrada Road, et al.	Various roadways within the unincorporated community of Topanga.	Transportation	The project would preserve 7.6 miles of residential roads (Topanga). The project includes pavement prep-work; and pavement preservation.	In Development – Final Plans Summer 2021
4	Los Angeles County Department of Public Works	Topanga Canyon–Old Topanga Cyn Rd–Valdez Rd to Topanga Cyn Blvd	Near the unincorporated community of Topanga. It begins at 2723' S/O Valdez Road and ends at Topanga Canyon Boulevard. The length of the project is approximately 3.9 miles.	Transportation	The project would install curve advisory signs in accordance with current California Manual on Uniform Traffic Control Devices requirements to enhance safety along Old Topanga Canyon Road. The project will update existing signing along the road including installing advance curve advisory speed signs and arrows for horizontal curves where applicable.	In Development – Final Plans Fall 2023, Start of Construction Spring 2024
5	Los Angeles County Department of Public Works	Marvin Braude Beach Trail Gap Closure	Entirely within the City of Los Angeles, continuing the new pedestrian path in the City of Santa Monica farther north to the Will Rogers State Beach parking lot.	Transportation	The project would construct a 0.6-mile-long path adjacent to the existing bike path to create two separate paths for multiple users. The proposed 14-foot-wide path will be for the bicyclists while the existing bike path will be converted to a pedestrian path to accommodate pedestrians, joggers, and other non-motorized users. A 3-foot-wide buffer is also proposed to separate the two paths.	In Development – Start of Construction Feb 2022, End of Construction Nov 2022

Project No.	Lead Agency	Name	Location	Project Type	Project Description	Status
6	Caltrans	State Route 1 (SR-1) Permanent Slope Restoration	City of Malibu, south of Big Rock Drive.	Transportation	This project will permanently repair the eroded slopes on SR-1 (Pacific Coast Highway/PCH). The permanent slope restoration will replace the existing protection, a shotcrete wall, placed by an Emergency Contract in 2016 with a secant pile wall. The new wall design will utilize one row of cast-in-drilled-holes piles, reducing the size of the holes, and the size of the W-section beams. Reduction of W-section size will allow smaller equipment to build the wall, reducing construction footprint.	Under Construction – May 2022 through July 2023. Utility relocation September 2021 through October 2022
7	Caltrans	Flashing Beacon Replacement	Malibu, north of Carbon Canyon at postmile 45.856.	Transportation	This project would convert the continuous yellow flashing beacon to a pedestrian signal for the existing crosswalk north of Carbon Canyon at postmile 45.856.	In Development – Start of Construction June 2024, End of Construction Jan 2025
8	Caltrans	Proactive Safety Long Lead Project – Las Flores Canyon Road	City of Malibu, on Route 1 Near Las Flores Creek Bridge.	Transportation		
9	Caltrans	Las Flores Canyon Road Protected Left Turn	Malibu, from 0.2-mile South to 0.3 mile north of Las Flores Canyon Road.	Transportation	This project would implement protected left-turn signal phases for south-bound movements, upgrade signal poles, mast arms, and hardware, install a speed feedback device, and upgrade the advance flashing beacon warning system to improve safety along Las Flores Canyon Road. The project will also upgrade facilities in accordance with the Americans with Disabilities (ADA) standards.	Under Construction – July 2022 through March 2024
10	Caltrans	Rehabilitate Pavement, Upgrade Facilities and Guardrails	In and near Malibu, from north of Serra Road to the Ventura County line.	Transportation	This project would rehabilitate the pavement, upgrade facilities to American with Disabilities Act (ADA) standards and upgrade the guardrail along Serra Road. This is a G-13 contingency project.	In Development – Start of Construction Nov 2024, End of Construction Feb 2027
11	Caltrans	Project ID 0717000061	Los Angeles from Jefferson Blvd. to Fiji Way to Culver Blvd. and at Ballona Greek.	Transportation	This project would replace the overcrossing and construct a new bridge.	In Development – Start of Construction Nov 2026, End of Construction May 2028

Project No.	Lead Agency	Name	Location	Project Type	Project Description	Status
12	Caltrans	Project ID 0721000165	In and near the city of Los Angeles, near the neighborhood of Playa Vista, from 83rd Street to Fiji Way.	Transportation	This project would install left turn signals, restripe for left turn storage, implement protected left turn signal phasing, upgrade vehicle and bicycle detection systems, and make pedestrian crossing improvements to reduce collisions in the city of Los Angeles, near the neighborhood of Playa Vista.	In Development – Start of Construction Oct 2024, End of Construction Nov 2025
13	Caltrans	Pavement Rehabilitation	In and near the cities of Santa Monica, Los Angeles, and Malibu, from 0.1 mile north of Colorado Avenue to 0.2 mile south of Cross Creek Road.	Transportation	This project would rehabilitate the pavement, upgrade the guardrail, Transportation Management System (TMS) elements, and culverts, and upgrade facilities to Americans with Disabilities Act (ADA) standards.	In Development – Start of Construction Oct 2026
14	Caltrans	Project ID 0723000167	In the cities of Santa Monica, Los Angeles, and Malibu from Colorado Avenue to Las Flores Canyon Road	Transportation	This project will remove debris from landslides, repair the failed slope drapery protection system, conduct rock scaling, and replace riprap.	Under Construction – April 2023 through Feb 2024
15	Caltrans	Solstice Creek Culvert Replacement	Cities of Los Angeles and Malibu, from south of Temescal Canyon Road to the Ventura County line; also in Ventura County, from the Los Angeles County line to Tonga Street.	Transportation	This project will improve drainage and fish passages in Los Angeles County and Ventura County. The drainage and fish passage improvements will remove and reconstruct bridges and rehabilitate culverts.	Under Construction – September 2023 through July 2029
16	Caltrans	Project ID 0723000090	In Malibu, from Coastline Drive to 0.2 mile south of Route 27 (Topanga Canyon Blvd.)	Transportation	This project will repair storm damage along Coastline Drive in Malibu. The storm damage restoration will include slope reconstruction damaged by high surf, drainage system repair, and pavement repair to restore the Rock Slope Protection (RSP) and roadway.	Under Construction – January 2023 through March 2024
18	Caltrans	Project ID 0717000182	City of Malibu and unincorporated areas of Los Angeles County.	Transportation	This project would improve traffic signals in Malibu. The traffic signal improvements will upgrade the communication system and system integration at the Los Angeles Regional Transportation Management Center (LARTMC) on Route 2, at the East LA Hub building on Route 5, and at the LAX Hub building on Route 105.	

Project No.	Lead Agency	Name	Location	Project Type	Project Description	Status
19	Caltrans	Project ID 0723000202	Los Angeles County on Route 27.	Transportation	This project would install a Middle-Mile Broad Band Network and a Network Hub in Los Angeles County.	In Development – Start of Construction Oct 2024, End of Construction Aug 2025
20	Caltrans	Project ID 0716000059	In Los Angeles County, from Pacific Coast Highway to Devonshire Street	Transportation	This project will improve lane miles along PCH (Route 1). Improvements include grind and overlay asphalt pavement, and upgrade curb ramps to meet American with Disabilities Act (ADA) standards. This is a G-13 contingency project.	Under Construction – November 2023 through September 2027
21	Caltrans	Project ID 0723000150	Near Topanga from 0.2 mile north of Route 1 to 0.2 mile south of Cezanne Ave	Transportation	This project will remove storm debris, perform rock scaling, repair the slope drapery protection system, and clean out drainage systems to repair damages caused by winter storms on LA-27.	

NOTES: ADA = Americans with Disabilities Act; Blvd. = Boulevard; Caltrans = California Department of Transportation; PCH = Pacific Coast Highway

SOURCES: Caltrans 2022; City of Malibu 2022; LADPW 2022a, 2022b, 2022c, 2022d

3.0.4 References

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3.1 Visual/Aesthetics

This section addresses the potential impacts to visual/aesthetic resources associated with implementation of the Proposed Project. This section includes: a summary of applicable regulations related to aesthetic resources; a description of the existing visual/aesthetic resources in the Project area; and an evaluation of the potential impacts of the Proposed Project related to visual/aesthetic resources in and around the Project area, including cumulative impacts.

3.1.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

No federal laws, regulations, or policies pertaining to visual/aesthetic resources would apply to the Proposed Project. The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective to restore wetlands/lagoons and estuaries in the “Actions Common to All Alternatives” section, and it specifically mentions Topanga Creek and Lagoon (National Park Service 2002).

State

California Department of Transportation Scenic Highway Program

The California Scenic Highway Program (Streets and Highways Code Sections 260–263) is maintained by the Caltrans to “protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment” (Caltrans 2022). Caltrans either officially designates state scenic highways or determines them to be eligible for such designation. Factors considered in determining whether a highway is “scenic” include the amount of natural landscape visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes on the motorist’s enjoyment of the view (Caltrans 2022).

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal Programs and development subject to the Coastal Act. Goals potentially relevant to the Project are as follows:

Section 30251 Scenic and visual qualities. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. 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.

Local

County of Los Angeles General Plan

The following goals and policies within the Land Use and Conservation and Natural Resources Elements of the Los Angeles County General Plan potentially relevant to the Project (Los Angeles County 2015):

Goal LU 7: Compatible land uses that complement neighborhood character and the natural environment.

Policy LU 10.2: Design development adjacent to natural features in a sensitive manner to complement the natural environment.

Goal C/NR 13: Protected visual and scenic resources.

Policy C/NR 13.1: Protect scenic resources through land use regulations that mitigate development impacts.

Policy C/NR 13.2: Protect ridgelines from incompatible development that diminishes their scenic value.

Policy C/NR 13.3: Reduce light trespass, light pollution, and other threats to scenic resources.

Policy C/NR 13.4: Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.

Policy C/NR 13.5: Encourage required grading to be compatible with the existing terrain.

Topanga State Park 2012 General Plan

A portion of the Project area is located within the Topanga State Park (Park). The Topanga State Park General Plan (General Plan) was developed by the CDPR and directs the long-range management, development, and operation of the Park by providing broad policy and program guidance including goals, guidelines, and objectives for Park management. The TSP General Plan sets aside a number of management zones including a Lower Topanga and Lagoon Zones, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The TSP General Plan also contains specific proposals to consolidate the Park's trail system through eliminating duplicate trails and relocating trails away from sensitive resources (CDPR, Southern Service Center 2012). The TSP General Plan provides the following Park-wide guidelines potentially relevant to the Project:

Goal: Adhere to the *Guiding Principle for Quality Aesthetic Design at State Parks* which reads: “Design of park facilities should embody the same vigor and spirit that (California State Park) applies to its mission while evoking forward thinking design theories, producing meaningful places and spaces, worthy of preservation by future generations.”

Guideline 1: Develop designs through a collaborative and visual process that is led by a design professional and involves the users, district staff, resource professionals, and the other stakeholders, including the various volunteer and docent groups.

Guideline 2: Make design decisions that are sensitive to the contextual nature of the site, including the region’s cultural and physical environment in which the project is located. Ensure that designs recognize and respect the past but not necessarily mimic a style or era.

Guideline 3: Make certain that design dialogues extend throughout California State Parks and beyond to ensure that meaningful places and spaces are designed and maintained in keeping with the richness and grandeur of the California State Park system.

Guideline 4: Embrace the use of sustainable design, universal accessibility, and new technology and materials. However, a project’s economy and practicality regarding its construction, operations, and maintenance should remain grounded through sound but innovative design decisions.

Goal: Establish (the Lower Topanga and Lagoon Zones) as a “natural” gateway into the Park with minimal built structures.

Guideline 1: Reduce the “visual clutter” by strategically re-locating or removing existing structures, and enhance the proposed scenic corridor along Topanga Canyon Boulevard, of which the Lower Topanga and Lagoon Zones serve as the corridor’s portal.

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains Local Coastal Plan (LCP) consists of the Land Use Plan (LUP) and implementing actions including the Local Implementation Program (LIP), a series of ordinance sections added to the Zoning Ordinance, Title 22 of the County Code, and a zoning consistency program. The LUP, which is a component of the Los Angeles County General Plan replaced the Malibu Land Use Plan that was certified by the California Coastal Commission (CCC) in 1986. The LUP includes some of the policies of the 1986 Malibu Land Use Plan, new policies, and many policies from the Santa Monica Mountains North Area Plan (Los Angeles County Department of Regional Planning 2022).

The LIP is the primary implementation mechanism for the LUP and a part of the County’s Zoning Ordinance. The LIP establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone’s unique resources. The zoning consistency program is also necessary to implement the LUP. Zoning changes, which include a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LCP. These changes were mandated by State law to eliminate potential conflicts between the LCP and zoning designations. Since the Santa Monica Mountains LCP is certified by the Coastal Commission, the County has the authority to issue coastal development permits (Los Angeles County Department of Regional Planning 2022). The LUP provides the following goals and policies potentially relevant to the Project:

Goal CO-5: Retain the scenic beauty of the plan area by considering and protecting its scenic and visual qualities as a resource of public importance.

Policy CO-124: The Santa Monica Mountains contain scenic resources of regional and national importance. The scenic and visual qualities of these resources shall be protected and, where feasible, enhanced.

Policy CO-125: Protect public views within Scenic Areas and throughout the Coastal Zone. Places on, along, within, or visible from Scenic Routes, public parklands, public trails, beaches, and state waters that offer scenic vistas of the mountains, canyons, coastline, beaches, and other unique natural features are considered Scenic Resource Areas. Scenic Resource Areas do not include areas that are largely developed such as existing, predominantly built-out residential subdivisions. Scenic Resource Areas also include the scenic resources identified on Map 3 and consist of Scenic Elements, Significant Ridgelines, and Scenic Routes. In addition to the resources identified on Map 3, the public parkland and recreation areas identified on Map 4 are also considered Scenic Resource Areas.

Policy CO-126: Maintain and enhance the quality of vistas along identified Scenic Routes. The PCH and TCB are considered Scenic Routes in the Project area.

Policy CO-127: Protect public views of designated Scenic Elements and Significant Ridgelines, the ocean, and beaches. The viewshed and line-of-sight to these scenic resources shall also be preserved and protected.

Policy CO-128: New development shall be subordinate to the character of its setting.

Policy CO-129: Development shall not encroach into regionally- or locally significant skylines and significant ridgelines.

Policy CO-130: Preserve large areas of natural open space of high scenic value by siting development in existing developed areas.

Policy CO-131: Site and design new development to minimize adverse impacts on scenic resources to the maximum extent feasible. If there is no feasible building site location on the proposed project site where development would not be visible, then the development shall be sited and designed to minimize impacts on scenic areas through measures that may include, but not be limited to, siting development in the least visible portion of the site, breaking up the mass of new structures, designing structures to blend into the natural hillside setting, restricting the building maximum size, reducing maximum height, clustering development, minimizing grading, incorporating landscape and building material screening elements, and where appropriate, berming.

Policy CO-132: Avoidance of impacts to scenic resources through site selection and design alternatives is the preferred method over landscape or building material screening. Landscape or building material screening shall not substitute for project alternatives including re-siting or reducing the height or bulk of structures.

Policy CO-135: Preserve topographic features of high scenic value in their natural state, including canyon walls, geological formations, creeks, ridgelines, and waterfalls.

Policy CO-137: Preserve and, where feasible, restore and enhance individual native trees and native tree communities in areas containing suitable native tree habitat – especially oak, walnut, and sycamore woodlands and savannas – as important elements of the area’s scenic character.

Policy CO-142: Maintain dark skies in the Coastal Zone by reducing light pollution and requiring best available Dark Skies technology in all permitted lighting and compliance with Dark Skies principals and best practices to the maximum extent feasible. Only very limited night lighting for equestrian facilities shall be allowed and must be consistent

with Policy CO103. Night lighting for sport courts or other private recreational facilities shall be prohibited.

Policy CO-147: Limit the height of structures above existing grade to minimize impacts to visual resources. Within scenic areas, the maximum allowable height shall be 18 feet above existing or finished grade, whichever is lower. Chimneys, rooftop solar equipment and non-visually obstructing rooftop antennas may be permitted to extend above the allowable height of the structure but shall not extend more than six feet above the maximum allowable height.

Policy CO-151: Limit height of retaining walls by using stepped or terraced retaining walls, with plantings in-between. Where feasible, long continuous walls shall be broken into sections or shall include undulations to provide visual relief.

Policy CO-153: Public works projects along scenic routes that include hardscape elements such as retaining walls, cut-off walls, abutments, bridges, and culverts shall incorporate veneers, texturing, and colors that blend with the surrounding landscape. The design of new bridges on scenic routes shall be compatible with the rural character of the Santa Monica Mountains and designed to protect scenic views.

3.1.2 Affected Environment

Regional Setting

The Proposed Project would be located in the southwestern portion of Los Angeles County within the Santa Monica Mountains Coastal Zone (Los Angeles County Department of Regional Planning 2018). Los Angeles County is a vast and visually diverse area that is composed of both the built and natural environments, as well as the interface between the two. The varied topography of the county allows for an assortment of long-range views from the Los Angeles Basin to the foothills and mountains, as well as long-range views from the foothills and mountains to the Los Angeles Basin and the coast (Los Angeles County 2021). A small portion of the western edge of the Proposed Project overlaps the City of Malibu (City) boundary. Ground disturbing and development activities are anticipated to be limited to Caltrans Right of Way (ROW).

Visual Project Area

Visual resources consist of natural landscapes and scenic views, including landforms, vegetation, and water features, as well as unique elements of the built environment. The Proposed Project area ranges from relatively steep in the western portion to relatively flat in the southern portion. Topanga State Park is located in the Santa Monica Mountains of Los Angeles County, California within the Santa Monica Mountains National Recreation Area, a large area of open space and parklands. Along with vegetation, the bold open ridges, deep canyons, rolling hills, and interior valleys of the Santa Monica Mountains provide the foundation for the area's natural beauty (Los Angeles County Department of Regional Planning 2018). Within Topanga State Park, key visual resources include viewsheds and vantage points such as Vista Marquez; historic sites and structures such as Trippet Ranch; rock features such as Eagle Rock; canyons and creeks such as Santa Ynez, Temescal, and Topanga; trails such as the Backbone Trail; and significant cultural

areas such as CA-LAN-1, the first site recorded in the State Trinomial System within Los Angeles County (California State Parks, Southern Service Center 2012).

The Project area is surrounded by the Santa Monica Mountains to the north; Topanga Canyon Road, commercial uses, Pacific Coast Highway (PCH), and the Pacific Ocean to the south; and single-family residences, PCH, and a retail use to the west.

A large portion of the Project area consists of undeveloped land. The Project area also includes the Topanga Lagoon; a portion of the Topanga Creek; a portion of PCH, including a bridge over the Topanga Lagoon; a two-story lifeguard and public restroom structure; a single-story parking kiosk; paved and unpaved parking areas; 25 deteriorating structures associated with the defunct Topanga Ranch Motel; five (5) businesses that are concessions of State Parks; and wooden-pole-mounted electrical lines and transformers. Businesses on-site include an animal feed store and furniture store (Malibu Feed Bin and Oasis), wine bar (Rosenthal), bait and tackle store (Wylie's), and two restaurants (Cholada and Reel Inn). All motel structures and on-site businesses are one-story with the exception of the feed store, which includes a small structure on the second level.

Scenic Vistas and Viewsheds

Scenic views or vistas include panoramic public views of natural features, including views of the ocean, striking or unusual natural terrain, or unique urban or historic features. According to the Conservation and Natural Resources Element of the Los Angeles County General Plan, scenic views or vistas can include views of ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms (Los Angeles County 2015). Public access to these views is from park lands, publicly owned sites, and public rights-of-way.

Long-range scenic views of the Santa Monica Mountains are visible from various public vantage points within the Project area, including Topanga Beach and PCH, which bisects the Project area, and long-range scenic views of the Pacific Ocean are visible from various public vantage points within the Project area, including PCH and the Santa Monica Mountains. These natural features provide aesthetic, environmental, and recreational benefits to residents in Los Angeles County.

Scenic Highways

Through the California Scenic Highway Mapping Program, Caltrans designates routes that are eligible to become state or Los Angeles County scenic highways. These determinations are based on the scenic value of the lands surrounding these roadways, and on how readily visible these resources are to those driving on the roadway (Los Angeles County 2021). According to state guidelines, a highway may be designated scenic depending on the amount of the natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view (Caltrans 2022).

According to the California Scenic Highway Mapping Program, the PCH is designated as an eligible Scenic Highway (Caltrans 2019). Mile post 1 to mile post 3.5 of SR 27 (TCB), adjacent to the Project area and within Topanga State Park, is designated as a State Scenic Highway, and

the remainder of SR 27 is eligible. Additionally, the Santa Monica Mountains Local Coastal Program protects not only designated Scenic Highways, but also other mapped scenic routes and features considered to be scenic resources.

Visual Character

Visual character is a general description of the visual attributes of a particular land use setting as defined by local municipalities and other land use agencies. The purpose of defining the visual character of an area is to provide the context within which the visual quality of a particular site or locale is most likely to be perceived by the viewing public. For urban areas, visual character is typically described on the neighborhood level or in terms of areas with common land use, intensity of development, socioeconomic conditions, and/or landscaping and urban design features. For natural and open space settings, visual character is most commonly described in terms of areas with common landscape attributes (such as landform, vegetation, water features, etc.).

As described previously, the Project area ranges from relatively steep in the western portion to relatively flat in the southern portion and is surrounded by the Santa Monica Mountains to the north and the Pacific Ocean to the south. These natural features dominate and contribute to the character of this area. Public views of the Project area are available to motorists traveling along PCH and Topanga Canyon Boulevard. The area west of the Project is largely undeveloped, with commercial uses and residences along the PCH, while the area east of the Project is more urbanized and is developed with residential neighborhoods north of PCH.

Visual Quality and Sensitivity

Visual Quality is defined as the overall visual impression or attractiveness of a site or locale as determined by its aesthetic qualities (such as color, variety, vividness, coherence, uniqueness, harmony, and pattern). For the aesthetic analysis, the visual quality of a site or locale is defined according to three levels:

- **Low.** The location is lacking in natural or cultural visual resource amenities typical of the region. A site with low visual quality will have aesthetic elements that are perceptibly uncharacteristic of the surrounding area.
- **Moderate.** The location is typical or characteristic of the region's natural or cultural visual amenities. A site with moderate visual quality maintains the visual character of the surrounding area, with aesthetic elements that do not stand out as either contributing to or detracting from the visual character of an area.
- **High.** The location has visual resources that are unique or exemplary of the region's natural or cultural scenic amenities. A site with high visual quality is likely to stand out as particularly appealing and makes a notable positive contribution to the visual character of an area. The identification of public viewer types describes the type of potentially affected viewers within the visual study area (defined below). Land uses that derive value from the quality of their settings are potentially sensitive to changes in visual conditions.

Impacts to visual quality in non-urbanized areas such as the Proposed Project area are generally assessed by estimating the amount of visual change introduced by Project components, the

degree to which visual changes may be visible to surrounding viewer groups, and the general sensitivity of viewer groups to landscape alterations. Visual changes are usually measured by three factors: (1) the amount of visual contrast that Project components create (changes to form, line, color, texture, and scale in the landscape), (2) the amount of view obstruction that occurs (loss of view, duration/timing), and (3) the degradation of specific natural resources (e.g., removal of scenic trees):

- (1) Visual contrast could be significant if Project activities involve regraded landforms, alteration or elimination of ridgelines, and changes introduced by the Project that result in landscape colors, textures, and scale of visual components that are inconsistent with a Project site's surroundings.
- (2) View obstruction could be considered significant if the Project would obstruct foreground (0 to 0.25 mile) or middleground (0.25 to 3 miles) views of the viewed area seen from sensitive public viewpoints. View obstruction is contextualized in the temporal framework, for instance how long the view of the water storage tank would be visible by motorists, pedestrians and bicyclists traveling on the surrounding public roadways.
- (3) The Project's impacts could be considered significant if the Project severely alters or displaces specific natural resources composed of striking landform features, aesthetic water bodies, mature stands of native/cultural trees (e.g., historic hedgerows), or historic structures.

Visual impacts would be considered significant overall if any one of the three measures of significance is identified. These criteria were used to assist in estimating the extent and scale of landscape alterations due to Project implementation.

The overall visual sensitivity of the Project Site from public views is described in terms of its visual quality, potentially affected viewers, and exposure conditions (i.e., landscape visibility, viewing angle, extent of visibility, and duration of view). **Table 3.1-1** summarizes these attributes.

Viewer Exposure addresses the variables that affect the viewing conditions of a site. Viewer exposure considers some or all of the following factors: landscape visibility (the ability to see the landscape); viewing distance (i.e., the proximity of viewers to the Project); viewing angle (whether the Project would be viewed from a superior, inferior, or level line of sight); extent of visibility (whether the line of sight is open and panoramic to the Project area or restricted by terrain, vegetation, and/or structures); and duration of view.

Visual Sensitivity is the overall measure of a site's susceptibility to adverse visual changes. Visual sensitivity is rated as high, moderate, or low and is determined based on the combined factors of visual quality, viewer types, how many viewers, and viewer exposure to the Project. Higher visual sensitivity is associated with sites with a higher visual quality and with a greater potential for changes to degrade or detract from the visual character of a public view.

**TABLE 3.1-1
SUMMARY OF VISUAL QUALITY AND SENSITIVITY FINDINGS**

Viewing Location and Representative Photos	Visual Quality	Affected Viewers and Viewer Exposure Conditions	Visual Sensitivity
Viewpoint 1	Moderate	Viewpoint 1 is taken on Topanga Beach overlooking Topanga Lagoon. Public views of the Project site are provided to visitors and surfers to Topanga Beach. Existing topography obstructs views of Topanga Lagoon and the Pacific Ocean from this viewpoint. Given that the view of the site is obstructed by existing topography, Viewpoint 1 is considered to have low viewer exposure.	Low
Viewpoint 2	Moderate	Viewpoint 2 is taken on PCH west of the existing PCH Bridge looking east towards Topanga Canyon Boulevard. Public views of the Project site are provided to motorists, bicyclists, and pedestrians traveling along PCH and to visitors accessing existing on-site businesses. Existing vegetation and trees, development, and utilities obstruct some views of the Project Site. Direct unobstructed views of the Project site would be available for brief periods of time when a motorist, bicyclist, or pedestrian passes through the site via PCH. Given that some views of the Site from this viewpoint are obstructed, the viewer exposure is considered moderate.	Moderate
Viewpoint 3	Moderate	Viewpoint 3 is taken on the Gateway Corner east of Topanga Canyon Boulevard looking southwest towards PCH. Public views of the Project site are provided to motorists, bicyclists, and pedestrians traveling south along Topanga Canyon Boulevard. Views of the Pacific Ocean and Santa Monica Mountains are partially obstructed by existing trees and utilities. Given that some views of the site from this viewpoint are partially obstructed, the viewer exposure is considered moderate.	Moderate

Visual Simulations

To support the analysis, visual simulations have been prepared to compare the existing conditions with the Proposed Project. **Figures 3.1-1 through 3.1-10** provide visual simulations from the following viewpoints. The simulations are for visual analysis only, and the bridge elements, railing, grey concrete structure, and bike lane do not reflect a final design. Viewpoint 1 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and relocation of the existing beach facilities under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 2 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and new bridge under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 3 was selected to provide a visual representation of the potential impacts of the proposed visitor service facilities under each Project Alternative on the Project area's existing visual character and public views.

For Viewpoint 1, visual simulations were only created for Alternative 2 and Alternative 4 because Alternative 3 would be visually similar to Alternative 4 as they both would include less lagoon restoration south of PCH and would relocate the existing beach facilities in similar locations compared to Alternative 2. In addition, only one visual simulation was created for Viewpoint 3 as development of the Gateway Corner area very similar for each Project Alternative and would be screened by proposed trees and landscaping outside of Caltrans ROW.



SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-1
Viewpoint Map





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-2
View 1: Existing Conditions





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-3
View 1: Alternative 2





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-4
View 1: Alternative 4





SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-5
View 2: Existing Condition



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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-6
View 2: Alternative 2





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-7
View 2: Alternative 3





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-8
View 2: Alternative 4





SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-9
View 3: Existing Condition





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SOURCE: Resource Conservation District, 2022

Topanga Lagoon Restoration Project

Figure 3.1-10
View 3: Alternative 2



Viewpoint 1

Viewpoint 1 is on Topanga Beach overlooking Topanga Lagoon to the east. The foreground view includes fill material and vegetation. Scenic views of the Pacific Ocean are experienced in the distant background looking east. Views of distant hillsides can also be experienced from this viewpoint.

Visual Quality. The visual quality of the area is typical of a coastal area in Los Angeles County's Santa Monica Mountains Planning Area (Los Angeles County 2014). The area contains fill material and vegetation, which blocks views of Topanga Lagoon. While scenic views of the Pacific Ocean are seen in the distant background from this viewpoint, the extent of visibility is limited by existing topography. Because the viewpoint is characteristic of typical coastal areas, the existing visual quality is considered moderate (i.e., it is not lacking visual amenities but is not unique compared with the intended visual character of the area).

Affected Viewers and Exposure Conditions. Public views of the Project site are provided to visitors and surfers to Topanga Beach. Topanga Beach receives approximately 750,000 visitors each year and is popular with surfers due to the orientation of the beach. Existing topography obstructs views of Topanga Lagoon and the Pacific Ocean from this viewpoint. Given that the view of the site is obstructed by existing topography, Viewpoint 1 is considered to have low viewer exposure.

Visual Sensitivity Conclusion. Because the view of the site from this area has moderate visual quality and low exposure, it is considered to have low visual sensitivity.

Viewpoint 2

Viewpoint 2 is on the north side of the PCH, west of the existing PCH Bridge, and looking east towards Topanga Canyon Boulevard. The foreground view includes the existing bait and tackle store, wine bar, associated parking, and PCH. Views of the Santa Monica Mountains are experienced in the distant background looking northwest. Views of distant development and hillsides can also be experienced from this viewpoint.

Visual Quality. The visual quality of the area is typical of a coastal area in Los Angeles County's Santa Monica Mountains Planning Area (Los Angeles County 2014). The area contains existing businesses and trees, which block views of Topanga Lagoon. While views of the Santa Monica Mountains are seen in the distant background from this viewpoint, the extent of visibility is limited by existing trees and development. Because the viewpoint is characteristic of typical coastal areas, the existing visual quality is considered moderate (i.e., it is not lacking visual amenities but is not unique compared with the intended visual character of the area).

Affected Viewers and Exposure Conditions. Public views of the Project site are provided to motorists traveling along PCH and to visitors accessing existing on-site businesses. PCH is heavily traveled, with approximately 44,500 vehicles per day, and provides access to Topanga Beach, trails, and several businesses and residences. Existing vegetation and trees, development,

and utilities obstruct some views of the Project site. Direct unobstructed views of the Project site would be available for brief periods of time when a motorist, bicyclist, or pedestrian passes through the Project area via PCH. Given that some views of the area from this viewpoint are obstructed, the viewer exposure is considered moderate.

Visual Sensitivity Conclusion. Because the view of the site from this area has moderate visual quality and moderate exposure, it is considered to have moderate visual sensitivity.

Viewpoint 3

Viewpoint 3 is on the Gateway Corner (intersection of Topanga Canyon Boulevard and PCH) east of Topanga Canyon Boulevard looking southwest towards PCH. The foreground view includes Topanga Canyon Boulevard and the existing animal feed store and associated parking. Views of the Pacific Ocean are experienced in the distant background looking northwest but are obscured by existing utilities and trees. Views of distant hillsides can also be experienced from this viewpoint.

Visual Quality. The visual quality of the area is typical of a coastal area in Los Angeles County's Santa Monica Mountains Planning Area (Los Angeles County 2014). The area contains an existing business, trees, and utilities. While views of the Pacific Ocean are seen in the distant background from this viewpoint, the extent of visibility is limited by existing trees and utilities. Because the viewpoint is characteristic of typical coastal areas, the existing visual quality is considered moderate (i.e., it is not lacking visual amenities but is not unique compared with the intended visual character of the area).

Affected Viewers and Exposure Conditions. Public views of the Project site are provided to motorists traveling south along TCB. The TCB is moderately traveled, with approximately 13,700 vehicles per day, and provides access to PCH. Views of the Pacific Ocean and Santa Monica Mountains are partially obstructed by existing trees and utilities. Given that some views of the site from this viewpoint are partially obstructed, the viewer exposure is considered moderate.

Visual Sensitivity Conclusion. Given the view of the site from this area has moderate visual quality and moderate exposure to public views, it is considered to have moderate visual sensitivity.

Light and Glare

There are two primary anthropogenic sources of light: light emanating from building interiors passing through windows, and light originating from exterior sources (e.g., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Anthropogenic sources of light can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled, can cause disturbances for motorists traveling in the area. Land uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbances by bright light sources.

Light that falls beyond the intended area is referred to as light trespass. Types of light trespass include spill light and glare. Nighttime lighting is necessary to provide and maintain safe, secure,

and attractive environments; however, these lights have the potential to produce spill light and glare, and if designed incorrectly, could be considered unattractive. Spill light can adversely affect light sensitive uses at nighttime, especially residences. Light dissipates with increased distance from the source.

Glare is caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces or vehicle headlights. Perceived glare is the unwanted and potentially objectionable sensation observed by a person as they look directly into the light source of a luminaire. Daytime glare generation in urban areas is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources, such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, and transportation corridors. Potentially affected viewers in the local viewshed include motorists, residents, and recreational visitors.

The Project area and surroundings are characterized by a mix of commercial and residential land uses that are sources of nighttime lighting and daytime glare. Current sources of ambient nighttime lighting in the vicinity of the Project area include streetlights along PCH and along the streets in the neighboring residential area to the east and west. Lighting from vehicle headlights and from inside the neighboring residences to the west as well as from commercial uses on site and in the Project vicinity add to ambient nighttime lighting in the area. Additionally, security lights from facilities at Topanga Beach are visible in the vicinity of the Project area.

Sources of daytime glare include reflected sunlight from Topanga Beach and the Pacific Ocean, along with streets, sidewalks, vehicles, and buildings in the area.

3.1.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to visual/aesthetic resources. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Have a substantial adverse effect on a scenic vista (Refer to Impact AES 3.2-1)
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (Refer to Impact AES 3.2-2)
- Substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality (Refer to Impact AES 3.2-3)
- Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area (Refer to Impact AES 3.2-4)
- Result in cumulatively considerable impacts to aesthetics (Refer to Impact AES 3.2-5).

Scenic Vistas

AES 3.1-1: The Project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

The Proposed Project would modify the land uses on the site that could affect visual resources including scenic vistas. Visual simulations and renderings have been prepared to evaluate the effects of the Proposed Project on the site and compare existing conditions with the proposed Project. Figure 3.1-1 through 3.1-10 provide views of the site with and without the Project. Viewpoint 1 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and relocation of the existing beach facilities under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 2 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and new bridge under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 3 was selected to provide a visual representation of the potential impacts of the proposed visitor service facilities under each Project Alternative on the Project area's existing visual character and public views.

For Viewpoint 1, visual simulations were only created for Alternative 2 and Alternative 4 because Alternative 3 would be visually similar to Alternative 2. Alternative 4 shows a relocated PCH with beach facilities shifted the furthest inland. Alternatives 2 and 3 modify the location of the PCH and have more limited movement of facilities inland, which are visually similar.

Only one visual simulation was created for Viewpoint 3 as each Project Alternative similarly develops the Gateway Corner with only minor difference that would be screened by proposed trees and landscaping outside of Caltrans ROW.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no change to the existing visitor services; the existing lagoon footprint or habitat quality; the existing bridge; or the existing lifeguard and public restroom building. The currently dilapidated Topanga Ranch Motel structures would continue to deteriorate without restoration, and damage to the existing lifeguard building due to coastal erosion would continue to occur.

All Project Alternatives (Build Options 2, 3, and 4)

Construction

Project construction would occur over several years and would require temporary ground disturbance within the Project area. The presence of construction equipment and materials would be visible from public vantage points such as the beach, sidewalks, and roadways, but would not permanently affect designated scenic views of the Santa Monica Mountains or Pacific Ocean. In addition, the stretch of PCH that would be under construction is limited to the bridge and bridge approaches therefore any obstruction to scenic vistas during construction would be brief. Construction along TCB would occur on the west side within Park boundaries and would not

obstruct views of the ocean and mountains for motorists passing through the Project area. Given the temporary presence of construction equipment and materials as well as direct unobstructed views adjacent to the Project area, impacts to scenic vistas during construction under all Project Build Alternatives would be less than significant.

Operation

Expansion of Topanga Lagoon would not include any aboveground components that could obstruct views of the Santa Monica Mountains or Pacific Ocean during operation. No impact would occur as a result of expanding the lagoon. The new bridge would not obstruct views of the Santa Monica Mountains or Pacific Ocean during operation. Upon completion of the Project, it is anticipated that scenic views of the restored Topanga Lagoon would be improved over existing conditions and views from the new bridge of the ocean and mountains would be similar or improved over existing conditions. The new bridge would be designed to have similar aesthetic features as the Trancas Creek Bridge, a replacement project currently under construction, 15 miles north of the Project area. As a result, no impact to the scenic views would occur as a result of operation of the new bridge.

A large fill area west of Topanga Lagoon that obstructs views along the beach would be removed under all Proposed Project Alternatives improving beach viewsheds for visitors. The relocated beach facilities, including the lifeguard and public restroom building, helipad, and new two-car garage, would create permanent aboveground facilities within the Project area. The lifeguard and public restroom building would be relocated directly upslope of their current location, and along the edge of the beach access road, with the helipad and two-car garage adjacent on the west. The proposed beach facilities would include building footprints similar to the existing facilities and therefore, would be similar in scale and size to existing facilities. In addition, the proposed beach facilities would improve the visual quality of Topanga Beach over existing conditions by providing modern designs compared to the existing beach facilities. Therefore, the proposed beach facilities would not have the scale or massing to obstruct views of the Pacific Ocean. Impacts to scenic views would be less than significant.

Wastewater Management Options

Improvements to any CDPR visitor services will require upgrading the wastewater management system to meet current standards. Under Alternatives 2 - 4, re-development of the site would require either onsite OWTS via subsurface drip irrigation (SDI, Option 1), seepage pits (Option 2) or a sewer connection (Option 3). SDI would only support wastewater levels associated with Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the project alternatives.

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the project boundary on CDPR property. All construction and operation activities would occur within CDPR property or within Caltrans ROW. Limited lane closure to install a pipeline across Topanga Canyon Boulevard would occur.

Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Upgrades to existing wastewater facilities would not involve features above ground that would obstruct scenic views and they would additionally be screened via vegetation. Therefore, impacts on scenic vistas would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

The new visitor services development at the Gateway Corner as well as the potential concession at the current location of the Reel Inn restaurant would place permanent aboveground facilities within the Project area. All new development at the Gateway Corner would be limited to roughly 5,500 square feet of one-story structures not to exceed 18 ft as per Los Angeles County regulations, as well as a small outdoor interpretive pavilion/restroom and small picnic area to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. Views of the Santa Monica Mountains and Pacific Ocean would not be obstructed from public viewpoints along TCB and PCH. The Project is designed to improve the scenic views at the Gateway Corner of TCB and PCH. Therefore, impacts on scenic vistas would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Scenic Highway

AES 3.1-2: The Project could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Impacts would be less than significant.

The PCH is an eligible Scenic Highway. As a result, although it is not currently a designated Scenic Highway, it could be designated in the future. Potential impacts to visual resources in the area are considered in this analysis as affecting a roadway that is currently designated Scenic Highway. The closest designated Scenic Highway is a portion along TCB from mile post 1 to mile post 3.5. and the remainder of SR 27 is eligible. The Santa Monica Mountains Local Coastal Program protects

not only designated Scenic Highways, but also other mapped scenic routes and features considered to be scenic resources

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no change to the existing visitor services; the existing lagoon footprint or habitat quality; the existing bridge; or the existing lifeguard and public restroom building. The Topanga Ranch Motel structures would continue to deteriorate without restoration, no new bridge would be constructed, and damage to the existing lifeguard and public restroom building due to coastal erosion would continue to occur. If no restoration efforts are made to the built environment in the Project area, visual quality of historic buildings within an eligible state Scenic Highway would deteriorate as structures decay.

All Project Alternatives (Build Options 2, 3, and 4)

Construction

The closest designated Scenic Highway is a portion along TCB from mile post 1 to mile post 3.5. Project construction would occur over several years and would require temporary ground disturbance within the Project area. The presence of construction equipment and materials would be visible from PCH. In addition, views of the construction area would be visible by motorists, bicyclists, and pedestrians for brief periods of time as they pass the site to coastal areas to the east and west. Given the temporary presence of construction equipment and materials, impacts to Scenic Highways under all Project Build Alternatives during construction activities would be less than significant.

Operation

Expansion of Topanga Lagoon would increase the natural open space character of the Project area by removing existing businesses, non-native trees, and vegetation north of PCH. In addition, existing fill materials on Topanga Beach would be removed, resulting in unobstructed, improved views of the lagoon as well as the ocean. The relocated beach facilities, including the lifeguard and public restroom building helipad, and new two-car garage, would create permanent aboveground facilities within the Project area. The lifeguard and public restroom building would be relocated directly upslope of their current location, and along the edge of the beach access road, with the helipad and two-car garage adjacent on the west. The proposed beach facilities would include building footprints similar to the existing facilities and therefore, would be similar in scale and size to existing facilities. Views of the Pacific Ocean from PCH would not be obstructed. Motorists, bicyclists, or pedestrians would only experience temporary view obstruction for brief moments of time while passing by the relocated beach facilities. Furthermore, the new structures would be similar to existing conditions as the existing beach facilities.

The Topanga Ranch Motel and other aging structures on-site would be removed either partially or totally as part of each action Alternative. Views of the Motel in general are extremely limited along the PCH and Topanga Canyon Boulevard and the Motel is currently off limits to the public due to safety.

As part of Alternative 2, the Topanga Ranch Motel would be removed entirely. The new visitor services development at the Gateway Corner as well as the potential concession at the current location of the Reel Inn restaurant would be replaced. A portion of the Topanga Ranch Motel would be retained and restored under Alternatives 3 and 4 and made more visually appealing. Under Alternatives 2-4, new development at the Gateway Corner would be limited to roughly 5,500 square feet of one-story structures that would not exceed 18 ft as per Los Angeles County regulations. The area would also include a small outdoor interpretive pavilion/restroom and small picnic area to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park.

Wastewater Management Options

Improvements to any CDPR visitor services will require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: onsite subsurface drip irrigation (SDI, Option 1), onsite seepage pits (Option 2) or an offsite sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Proposed Project Alternatives (2-4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the project boundary on CDPR property along TCB. All construction and operation activities would occur within CDPR property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. (insert statement relevant to specific EIR section impacts for SDI or seepage pits)

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH, and onsite pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Upgrades to existing facilities would not involve features above ground that would significantly obstruct scenic views and vegetation would be used to screen them. Therefore, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Project Alternatives 3 and 4, 15 to 20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as ranger housing, a maintenance facility, park offices, and storage. These facilities would be restored on site to meet building code requirements. As described above, the Proposed Project

is not located within a designated scenic highway, and although it is located within an eligible scenic corridor along PCH and Topanga Canyon Boulevard, upgrades to existing facilities would not involve features that would obstruct scenic views. Vegetation would additionally be used to screen and beautify structures. Therefore, impacts would be less than significant.

Mitigation Measures

None

Significance Determination

Less than Significant

Visual Character or Quality

AES 3.1-3: The Project could substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality. *Impacts would be less than significant.*

The Proposed Project would modify the land uses on the site that could affect visual character or quality of public views. Visual simulations and renderings have been prepared to evaluate the effects of the proposed Project on the site and compare existing conditions with the proposed Project. Figures 3.1-1 through 3.1-10 provide views of the site with and without the Project. Viewpoint 1 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and relocation of the existing beach facilities under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 2 was selected to provide a visual representation of the potential impacts of the proposed lagoon expansion and new bridge under each Project Alternative on the Project area's existing visual character and public views. Viewpoint 3 was selected to provide a visual representation of the potential impacts of the proposed visitor service facilities under each Project Alternative on the Project area's existing visual character and public views.

For Viewpoint 1, visual simulations were only created for Alternative 2 and Alternative 4 because Alternative 3 would be visually similar to Alternative 2. Alternative 4 shows a relocated PCH with beach facilities shifted the furthest inland. Alternatives 2 and 3 modify the location of the PCH and have more limited movement of facilities inland, which are visually similar.

Only one visual simulation was created for Viewpoint 3 as each Project Alternative similarly develops the Gateway Corner with only minor difference that would be screened by proposed trees and landscaping outside of the Caltrans ROW.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no change to the existing visitor services; the existing lagoon footprint or habitat quality; the existing bridge; or the existing

lifeguard and public restroom building. The Topanga Ranch Motel structures would continue to deteriorate without restoration, no new bridge would be constructed, and damage to the existing lifeguard and public restroom building due to coastal erosion would continue to occur.

Alternative 1 would not alter existing public views and would not conflict with applicable zoning and other regulations governing scenic quality. Impacts to scenic character and quality would be less than significant.

All Project Alternatives (Build Options 2, 3, and 4)

Construction

Construction activities associated with the Project would result in temporary impacts to the visual character and quality of the Project area. Construction activities would require the use of construction equipment and storage of materials within the Project area for Project components. Excavated areas, stockpiled soils and other materials generated during construction could present negative aesthetic elements to the existing visual landscape. However, these effects would be temporary and would not permanently affect the existing visual character and quality of the surrounding area and would not conflict with zoning or other regulations. All impacts from construction-related activities under all Project Build Alternatives would be less than significant and no mitigation measures would be required.

Alternative 2

For Viewpoint 1, the existing visual sensitivity under Alternative 2 is considered low. Following construction, the existing lifeguard and public restroom building would be relocated directly upslope of their current location, and along the edge of the beach access road, with the helipad and two-car garage adjacent on the west. The proposed beach facilities would include similar building footprints and materials as the existing facilities and therefore, would have similar visual character and quality. View obstructions would be less than existing conditions due to relocation further back from the ocean, as the existing beach facilities cause temporary obstruction of scenic ocean views for motorists, bicyclists, or pedestrians traveling on PCH. As such, impacts to established visual character and quality would be less than significant.

The western side of the existing lagoon would include restoration of more natural side channels based on historic topography as well as expanded floodplain and potential channel areas on the east side. Removal of existing businesses, non-native trees, and vegetation north of PCH; removal of fill material on Topanga Beach and beneath the Topanga Ranch Motel; and businesses west of Topanga Creek and revegetation of the lagoon area would enhance and improve the overall visual character and quality of the Project area by providing fully unobstructed views of the distant Santa Monica Mountains and Pacific Ocean as well as additional natural open space. In addition, expansion and revegetation of the lagoon would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP. Therefore, impacts to established visual character and quality would be less than significant.

For Viewpoint 2 under Alternative 2, the existing visual sensitivity is considered moderate looking towards PCH. Following construction, the new bridge would be lengthened to 460 feet.

Construction of the new bridge would not include any aboveground components that could obstruct views of the Santa Monica Mountains or Pacific Ocean during operation. The new bridge would occur in the same location as the existing PCH bridge and would not result in substantial visual changes as compared to existing conditions. In addition, the new bridge would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP. Therefore, no permanent impacts to the existing visual character or quality of the Project area would occur.

For Viewpoint 2 under Alternative 2, the existing visual sensitivity is considered low looking northeast. As noted for Viewpoint 1, the western side of the existing lagoon would include restoration of more natural side channels based on historic topography as well as expanded floodplain and potential channel areas on the east side. Removal of existing concessions, non-native trees, and vegetation north of PCH; removal of fill material on Topanga Beach and beneath the Topanga Ranch Motel; and revegetation of the lagoon area under Alternative 2 would enhance and improve the overall visual character and quality of the Project area by providing fully unobstructed views of the distant Santa Monica Mountains and Pacific Ocean as well as additional natural open space. In addition, expansion and revegetation of the lagoon would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP. Therefore, impacts to established visual character and quality would be less than significant.

For Viewpoint 3, the existing visual sensitivity is considered moderate. Construction of new visitor services development at the Gateway Corner as well as the potential concession at the current location of the Reel Inn restaurant would create permanent aboveground facilities within the Project area. For all alternatives, new development at the Gateway Corner would be limited to roughly 5,500 square feet of one-story structures as well as a small outdoor interpretive pavilion/restroom and small picnic area to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. The Project would add landscaping and preserve trees along Topanga Canyon Boulevard to screen viewers from the proposed development and parking lot, which would improve and enhance the visual character and quality of the Project area by creating more open space compared to existing conditions.

Alternative 3

For Viewpoint 1, the existing visual sensitivity is considered low for Alternative 3 looking north. Following construction, the Topanga Lagoon would include an expanded area of 9.8 acres, including 7.1 wetted acres. Limited habitat expansion would be possible on the east side of the lagoon. Removal of existing businesses, non-native trees, and vegetation north of PCH; removal of fill material on Topanga Beach; and revegetation of the lagoon area under Alternative 3 would enhance and improve the overall visual character and quality of the Project area by providing improved views of the distant Santa Monica Mountains and Pacific Ocean as well as additional natural open space, however retention of the fill on the east side under the Topanga Ranch Motel will continue to obstruct views in that direction. In addition, expansion and revegetation of the lagoon would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP. Therefore, impacts to established visual character and quality would be less than significant.

For Viewpoint 1, the existing visual sensitivity is considered low for Alternative 3 looking east. Following construction, the existing lifeguard and public restroom building would be relocated directly upslope and to the east of their current location, the helipad would be relocated to the western edge of the parking lot, and the two-car parking garage would be located under the helipad at the beach access road level. The proposed beach facilities would include similar building footprints and materials as the existing facilities and therefore, would have similar visual character and quality. As discussed above under Impact AES 3.1-1, temporary view obstructions would be similar to existing conditions as the existing beach facilities cause temporary obstruction of scenic ocean views for motorists, bicyclists, or pedestrians traveling on PCH.

For Viewpoint 2 under Alternative 3 looking south towards PCH, the existing visual sensitivity is considered moderate. Following construction, the new bridge would be lengthened to 460 feet. Construction of the new bridge would not include any aboveground components that could obstruct views of the Santa Monica Mountains or Pacific Ocean during operation. The new bridge would occur in the same location as the existing PCH bridge and would not result in substantial visual changes as compared to existing conditions. In addition, the new bridge design would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP. Therefore, no permanent impacts to the existing visual character quality of the Project area would occur.

For Viewpoints 2 looking northeast and Viewpoint 3, the existing visual sensitivity is considered moderate for Alternative 3. Retention and restoration of approximately 20 structures of the Topanga Ranch Motel as well as the potential concession at the current location of the Reel Inn restaurant and potential outdoor interpretive pavilion/restroom, maintenance facility, small picnic area, and day use parking at the Gateway Corner would create permanent aboveground facilities within the Project area. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. The Project would add landscaping and preserve trees along TCB to screen viewers from the proposed development and parking lot, which would improve and enhance the visual character and quality of the Project area by creating additional open space compared to existing conditions. The restored motel structures would enhance and improve the overall visual character and quality of the Project area as the existing motel structures are deteriorating.

Alternative 4

For Viewpoint 1, the existing visual sensitivity is considered moderate looking north in Alternative. Following construction, the Topanga Lagoon would include an expanded area of 10.8 acres, including 7.1 wetted acres. Limited habitat expansion would be possible on the east side of the lagoon. Removal of existing businesses, non-native trees, and vegetation north of PCH; removal of fill material on Topanga Beach; and revegetation of the lagoon and beach area under Alternative 4 would enhance and improve the overall visual character and quality of the Project area by providing fully unobstructed views of the distant Santa Monica Mountains and Pacific Ocean as well as additional natural open space. In addition, expansion and revegetation of the lagoon would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP.

For Viewpoint 1, the existing visual sensitivity is considered low for Alternative 4 looking east along the beach. Following construction, the existing lifeguard and public restroom building would be relocated directly upslope and to the east of their current location, the helipad and two-car parking garage would be relocated to the western edge of the parking lot, at the beach access road level. The proposed beach facilities would include similar building footprints and materials as the existing facilities and therefore, would have similar visual character and quality. As discussed above under Impact AES 3.1-1, temporary view obstructions would be similar to existing conditions as the existing beach facilities cause temporary obstruction of scenic ocean views for motorists, bicyclists, or pedestrians traveling on PCH.

For Viewpoint 2, looking towards PCH in Alternative 4 the existing visual sensitivity is considered moderate. Following construction, the new bridge would be lengthened to 460 feet. Construction of the new bridge would not include any aboveground components that could obstruct views of the Santa Monica Mountains or Pacific Ocean during operation. Although the alignment of the new bridge would move north, the new bridge would not result in substantial visual changes as compared to existing conditions. In addition, the new bridge would be consistent with the goals and policies listed in the LUP of the Santa Monica Mountains LCP.

For Viewpoints 2 looking northeast, and Viewpoint 3, the existing visual sensitivity is considered moderate for Alternative 4. Retention and restoration of approximately 15 structures of the Topanga Ranch Motel as well as the potential concession at the current location of the Reel Inn restaurant and potential outdoor interpretive pavilion/restroom, maintenance facility, small picnic area, and day use parking at the Gateway Corner would create permanent aboveground facilities within the Project area. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. The Project would add landscaping and preserve trees along TCB to screen viewers from the proposed development and parking lot, which would improve and enhance the visual character and quality of the Project area by creating additional open space compared to existing conditions. The restored motel structures would enhance and improve the overall visual character and quality of the Project area as the existing motel structures are deteriorating. Therefore, impacts to established visual character and quality would be less than significant.

Wastewater Management Options

Improvements to any CDPR visitor services will require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: onsite subsurface drip irrigation (SDI, Option 1), onsite seepage pits (Option 2) or an offsite sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Proposed Project Alternatives (2-4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the project boundary on CDPR property along TCB. All construction and operation activities would occur within CDPR property or within Caltrans

ROW. Limited lane closures to install a pipeline across TCB would occur. (insert statement relevant to specific EIR section impacts for SDI or seepage pits)

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH, and onsite pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. As described above, upgrades to existing facilities would not involve features above ground that would significantly obstruct scenic views and vegetation would be used to screen them. Therefore, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Project Alternatives 3 and 4, 15-20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as ranger housing, a maintenance facility, park offices, and storage. Construction activities associated with the proposed structures would result in temporary impacts to the visual character and quality of the Project area as excavated areas, stockpiled soils and other materials generated during construction could present negative aesthetic elements to the existing visual landscape. However, these effects would be temporary and would not permanently affect the existing visual character and quality of the surrounding area.

For Viewpoints 2 and 3 as explained in Table 3.1-1, the existing visual sensitivity is considered moderate. Retention and restoration of 15-20 Topanga Ranch Motel structures under Project Alternatives 3 and 4 would retain and restore permanent aboveground facilities within the Project area. New construction associated with ~ 5,500 sf of cohesively designed structured within the Gateway Corner would also be developed. All new development would be limited in size and scale to protect the rural/urban interface. The restored Motel structures would enhance and improve the overall visual character and quality of the Project area as the existing motel structures are deteriorating. Therefore, impacts would be less than significant.

Mitigation Measures

None

Significance Determination

Less than Significant

Light and Glare

AES 3.1-4: The Project could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no change to the existing visitor services; the existing lagoon footprint or habitat quality; the existing bridge; or the existing lifeguard and public restroom building. The currently dilapidated Topanga Ranch Motel structures would continue to deteriorate without restoration, no new bridge would be constructed, and damage to the existing lifeguard and public restroom building due to coastal erosion would continue to occur. No new sources of lighting or glare would occur, however existing sources of light and glare would continue to adversely affect nighttime views and be out of compliance with existing Dark Sky and other light trespass codes.

All Project Alternatives (Build Options 2, 3, and 4)

Construction

Under Project Alternatives 2, 3, and 4, expansion of the lagoon would not require lighting for daytime construction activities; therefore, construction activities would not introduce new sources of substantial light or glare in the Project area. To the greatest extent possible, construction activities will be based on Caltrans standards but generally will occur between 6:00 a.m. to 6:00 p.m., Monday through Friday; however, some nighttime work may be required to accommodate certain construction elements and/or construction schedule. In addition, during fall and winter months when darkness occurs before 6:00 p.m., there would be a potential for construction to require nighttime lighting that could introduce a new source of light or glare into the area.

Mitigation Measure AES-1 would require all daytime or nighttime construction lighting to be shielded and pointed away from surrounding light-sensitive land uses. Therefore, light and glare construction impacts associated with the lagoon expansion would be reduced to a less than significant level.

Operation

The lagoon expansion would include excavation of fill material to expand the lagoon and revegetation, which would not create a new source of light and glare. No operational impacts would occur.

Operation of the new bridge would not result in new light sources and would not have an effect on the daytime or nighttime scenic environment. The Project would include the demolition of the existing bridge and construction of a new bridge and roadway, which would be longer and meet Caltrans' current design standards and would continue to provide illumination for travelers along PCH at night. As such, no overall increase in lighting associated with the new bridge is expected. Therefore, impacts associated with light and glare from the proposed bridge would be less than significant.

The proposed beach facilities could require new exterior daytime and nighttime lighting for operational and security purposes. These facilities could also create glare depending on the kinds of paint and coating, windows, or other features used for the buildings. This lighting and reflective surfacing could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. Implementation of **Mitigation Measure AES-2** would require any permanent exterior lighting on buildings/structures to be shielded and directed downward to avoid light intrusion onto surrounding land uses. **Mitigation Measure AES-3** would ensure that the proposed beach facilities would be designed to minimize glare or reflection. As a result, impacts associated with light and glare during operation of proposed beach facilities would be reduced to a less than significant level.

The proposed visitor service facilities could require new exterior daytime and nighttime lighting for operational and security purposes. These facilities could also create glare depending on the kinds of paint and coating, windows, or other features used for the buildings. This lighting and reflective surfacing could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. Implementation of Mitigation Measure AES- 2 would require any permanent exterior lighting on buildings/structures to be shielded and directed downward to avoid light intrusion onto surrounding land uses. Mitigation Measure AES-3 would ensure that the visitor service facilities would be designed to minimize glare or reflection. As a result, impacts associated with light and glare during operation of proposed visitor services would be reduced to a less than significant level.

Wastewater Management Options

Improvements to any CDPR visitor services will require upgrading the wastewater management system to meet current standards. Under Alternatives 2 - 4, re-development of the site would require either onsite OWTS via subsurface drip irrigation (SDI, Option 1), seepage pits (Option 2) or a sewer connection (Option 3). SDI would only support wastewater levels associated with Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the project alternatives.

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the project boundary on CDPR property. All construction and operation activities would occur within CDPR property or within Caltrans ROW. Limited lane closure to install a pipeline across Topanga Canyon Boulevard would occur.

Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH and is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. As described above, implementation of Mitigation Measures AES-1 through AES-2 would impacts from light and glare to less than significant.

Mitigation Measures

AES-1: Lighting used during daytime or nighttime construction shall be shielded and pointed away from surrounding light-sensitive land uses when feasible and shall use Los Angeles County LIP Section 22.44.1270 as guidance and incorporate light spectrums that are wildfire friendly.

AES-2: All new permanent exterior lighting associated with Proposed Project components shall be shielded and directed downward to avoid any light spill onto neighboring lands or into nighttime skies when feasible and shall use Los Angeles County LIP Section 22.44.1270 as guidance and incorporate light spectrums that are wildfire friendly.

AES-3: All proposed aboveground facilities shall be designed to include non-glare exterior materials and coatings to minimize glare or reflection when feasible shall use Los Angeles County LIP standard 22.44.1320. as guidance and incorporate light spectrums that are wildfire friendly.

Significance Determination

Less than Significant Impact with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Project Alternatives 3 and 4, 15-20 structures associated with the historic Topanga Ranch Motel would be retained and restored.. Approximately 5,500 sf of new structures would be developed at the Gateway Corner. These buildings would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as ranger housing, a maintenance facility, park offices, and storage. Construction equipment and building materials associated with future visitor services redevelopment could introduce new, temporary sources of glare during daytime hours. In addition, certain tasks could require nighttime construction, which would introduce a new light source at night. However, the existing businesses and parking lots on site are illuminated at night for security purposes. Additionally, Mitigation Measure AES-2 would require all daytime or nighttime construction lighting to be shielded and pointed away from surrounding light-sensitive land uses. Therefore, light and glare construction impacts associated with the future visitor services development would be reduced to a less than significant level.

Operation of the future visitor services redevelopment could require new exterior daytime and nighttime lighting for operational and security purposes. These facilities could also create glare depending on the kinds of paint and coating, windows, or other features used for the buildings. This lighting and reflective surfacing could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. Implementation of Mitigation Measure AES-2 would require any permanent exterior lighting on buildings/structures to be shielded and directed downward to avoid light intrusion onto surrounding land uses. Mitigation Measure MAR-2.1 further limits lighting on beach areas. Mitigation Measure AES-3 would ensure that these facilities would be designed to minimize glare or reflection. As a result, impacts associated with light and glare during operation would be reduced to a less than significant level.

Future development would be subject to discretionary review and approval at the project-level, which would include review of project-level construction and operational impacts related to light

and glare. However, at the programmatic level, the development of visitor services within Topanga State Park could potentially have significant impacts related to light and glare. However, implementation of Mitigation Measure AES-2, Mitigation Measure AES-3 would reduce potential impacts to a less than significant level.

Mitigation Measures

Implement Mitigation Measures AES-2 and AES-3.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

AES 3.1-5: The Project could result in cumulatively considerable impacts to aesthetics. Impacts would be less than significant with mitigation incorporated.

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative visual/aesthetic impacts is the same as the area for Project impacts to visual/aesthetic resources described above as well as areas immediately adjacent to the Project area.

Significant cumulative impacts related to visual/aesthetic resources could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more cumulative projects would cause substantial adverse effects to scenic vistas, substantially damage scenic resources, conflict with scenic quality of the area, or create new sources of substantial light or glare. As described in **Chapter 3**, there are multiple transportation improvement projects being constructed near the Project area, however each of the Project Alternatives would result in less than significant impacts to visual/aesthetic resources with implementation of the Mitigation Measures AES-1, AES-2, and AES-3. Implementation of these mitigation measures would ensure no significant and unavoidable environmental impacts would occur as a result of construction of the Proposed Project. Furthermore, all of the Build Alternatives would include varying levels of lagoon restoration; bridge construction; relocation of beach facilities; and restoration, relocation, and construction of visitor service facilities; which would enhance and improve the overall visual character and quality of the Project area as well as provide additional scenic views of the Santa Monica Mountains and Pacific Ocean compared to existing conditions. Other cumulative projects in the area may also serve to enhance the visual character and quality within the area.

On a cumulative basis, individual future discretionary projects, including project-level development applications for visitor services uses analyzed at the program-level herein, may have the potential to directly impact visual/aesthetic resources through construction activities and structure design. The Proposed Project, including the proposed future visitor serving development, would implement mitigation measures to reduce potential construction operational impacts related to lighting and glare.

As discussed above, the Proposed Project would ultimately enhance and improve the visual character and quality of the Project area by creating additional open space areas as well as new or restored structures. Therefore, the Proposed Project would not make a cumulatively considerable contribution to significant cumulative visual/aesthetic impacts.

Mitigation Measure

Implement Mitigation Measures AES-1, AES-2, and AES-3

Significance Determination

Less than Significant with Mitigation Incorporated

3.1.4 Summary of Impacts

**TABLE 3.1-2
 SUMMARY OF PROPOSED PROJECT IMPACTS TO AESTHETICS**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
AES 3.1 -1: Scenic Vistas	All Project Alternatives (Build Options 2, 3, and 4)	None Required	LTS
	Future Topanga State Park Visitor Services	None Required	LTS
AES 3.1-2: Scenic Resources within a Scenic Highway	All Project Alternatives (Build Options 2, 3, and 4)	None	LTS
	Future Topanga State Park Visitor Services	None	LTS
AES 3.1 -3: Visual Character/Quality	All Project Alternatives (Build Options 2, 3, and 4)	Implement Mitigation Measures AES-1.	LTSM
	Future Topanga State Park Visitor Services	Implement Mitigation Measures AES-1.	LTSM
AES 3.1 -4: Light or Glare	All Project Alternatives (Build Options 2, 3, and 4)	Implement Mitigation Measures AES-2 and AES-3.	LTSM
	Future Topanga State Park Visitor Services	Implement Mitigation Measures AES-2 and AES-3.	LTSM
AES 3.1 -5: Cumulative Impacts	All Project Alternatives (Build Options 2, 3, and 4) and Future Topanga State Park Visitor Services	Implement Mitigation Measures AES-1, AES-2, and AES-3.	LTSM

NOTES

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less than Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.1.5 References

- California Department of Transportation (Caltrans), 2019. California State Scenic Highway System Map via the web. Available online at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed July 11, 2022.
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3.2 Air Quality

This section addresses the air quality impacts associated with construction and operation of the Proposed Project. This section summarizes applicable regulations related to air quality, describes air quality conditions in the Project area, and evaluates the potential air quality impacts of the Proposed Project, including cumulative impacts, in the Project area and the surrounding area.

3.2.1 Regulatory Setting

Federal

Clean Air Act

The federal Clean Air Act (CAA) was enacted in 1955 and has been amended numerous times in subsequent years, most recently in 1990 (United States Code Title 42, Section 7401 et seq.). The CAA is the comprehensive federal law that regulates air pollutant emissions to protect public health and welfare (USEPA 2022a). The U.S. Environmental Protection Agency (USEPA) implements and enforces the CAA, which establishes the national ambient air quality standards (NAAQS), specifies future dates for achieving compliance, and requires USEPA to designate areas as attainment, nonattainment, or maintenance. The criteria air pollutants for which federal standards have been promulgated via the NAAQS are ozone, carbon monoxide (CO); nitrogen dioxide (NO₂), a form of oxides of nitrogen (NO_x); sulfur dioxide (SO₂), a form of oxides of sulfur, or SO_x; lead; and particulate matter (PM) emissions, which are regulated in two size classes: particulates up to 10 micrometers in diameter (PM₁₀) and particulates up to 2.5 micrometers in diameter (PM_{2.5}).

The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to the Proposed Project are Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions) (USEPA 2022a).¹

Title I requirements are implemented to attain the NAAQS for criteria air pollutants. The NAAQS were amended in July 1997 to include an eight-hour standard for ozone and adopt an NAAQS for PM_{2.5}. The NAAQS were also amended in September 2006 to include an established methodology for calculating PM_{2.5}, as well as to revoke the annual PM₁₀ threshold.

The NAAQS and the California ambient air quality standards (CAAQS) for the California criteria air pollutants (discussed below) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a

¹ *Mobile sources* include on-road vehicles (e.g., cars, buses, motorcycles) and non-road vehicles (e.g., aircraft, trains, construction equipment). *Stationary sources* consist of both point and area sources. *Point sources* are stationary facilities that emit a large amount of pollutants (e.g., municipal waste incinerators, power plants). *Area sources* are smaller stationary sources that alone are not large emitters, but combined can account for large amounts of pollutants (e.g., consumer products, residential heating, dry cleaners).

margin of safety; and to protect public welfare from concerns such as decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA 2022b). A region is given the status of *attainment* or *unclassified* if the NAAQS have not been exceeded. A status of *nonattainment* for particular criteria pollutants is assigned if the NAAQS have been exceeded. Once a region has been designated as nonattainment, attainment status may be achieved after three years of data showing non-exceedance of the standard. When an area is reclassified from nonattainment to attainment, it is designated as a *maintenance area*, indicating the requirement to establish and enforce a plan to maintain attainment of the standard. **Table 3.2-1** lists the NAAQS and CAAQS currently in effect for each criteria pollutant. **Table 3.2-2** shows the federal and state attainment status designations for the South Coast Air Basin (Air Basin).

In addition to regulating emissions of criteria pollutants, Title I of the CAA includes air toxics provisions that require USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants known to be hazardous to human health. In accordance with Section 112, USEPA has established the National Emission Standards for Hazardous Air Pollutants. The list of hazardous air pollutants (HAPs), or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

CAA Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms USEPA uses to regulate mobile sources of air pollutant emissions. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_x emissions have been tightened substantially, and the specification requirements for cleaner burning gasoline are more stringent.

General Conformity Analysis

The Proposed Project is subject to the requirements of the federal General Conformity regulation. *Conformity* is defined in the CAA as conformity to an air quality implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS, exacerbation of existing violations, or interference with timely attainment or required interim emission reductions toward attainment. Section 176(c) of the CAA requires USEPA to develop criteria and procedures for determining the conformity with the applicable air quality plan of transportation and non-transportation (general) projects that require approval or funding by a federal agency. For projects that have a federal component, a general conformity analysis is required for each criteria pollutant or precursor for which the total of its direct and indirect emissions in a nonattainment or maintenance area, caused by the federal action, would equal or exceed conformity determination thresholds (Code of Federal Regulations Title 40, Chapter 1, Subchapter C, Part 93, Subpart B).

The Air Basin is in extreme nonattainment for ozone (volatile organic compounds [VOCs] or NO_x); serious nonattainment for PM_{2.5}; maintenance for PM₁₀, NO₂, SO₂, and CO; and nonattainment for lead (Table 3.2-2). Estimates of lead emissions were not calculated.

**TABLE 3.2-1
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards ^a		National Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Ozone ^h	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hours	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
NO ₂ ⁱ	1 Hours	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	None	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		53 ppb (100 µg/m ³)	Same as Primary Standard	
CO	1 Hour	20 ppm (23 mg/m ³)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m ³)	None	Non-dispersive Infrared Photometry
	8 Hours	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)		
	8 Hours (Lake Tahoe)	6 ppm (7 mg/m ³)		—		
SO ₂ ^j	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hours	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hours	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ^j	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ^j	—	
PM ₁₀ ^k	24 Hours	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
PM _{2.5} ^k	24 Hours	No Separate State Standard	Gravimetric or Beta Attenuation	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³		12.0 µg/m ³ ^k	15 µg/m ³	
Lead ^{l,m}	30-Day Average	1.5 µg/m ³	Atomic Absorption	—	Same as Primary Standard	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ^m		
	Rolling 3-Month Average ^m	—		0.15 µg/m ³		

Pollutant	Averaging Time	California Standards ^a		National Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Visibility-Reducing Particles ⁿ	8 Hours	Extinction coefficient of 0.23 per km—visibility of 10 miles or more due to particles when relative humidity is less than 70%.	Beta Attenuation and Transmittance through Filter Tape		No Federal Standards	
Sulfates (SO ₄)	24 Hours	25 µg/m ³	Ion Chromatography		No Federal Standards	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence		No Federal Standards	
Vinyl Chloride ^l	24 Hours	0.01 ppm (26 µg/m ³)	Gas Chromatography		No Federal Standards	

NOTES: µg/m³ = micrograms per cubic meter; km = kilometer; mg/m³ = milligrams per cubic meter; ppm = parts per million

^a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, 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.

^b 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 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^d Any equivalent procedure that can be shown to the satisfaction of the California Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

^e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

^f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^g Reference method as described by the U.S. Environmental Protection Agency (USEPA). An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by USEPA.

^h On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

ⁱ 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).

^j On June 2, 2010, a new 1-hour SO₂ 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 SO₂ national standards (24-hour and annual) remain in effect until 1 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.

^k On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³.

^l The California Air Resources Board (CARB) 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.

^m The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 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.

ⁿ In 1989, CARB 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.

SOURCE: CARB 2016

**TABLE 3.2-2
NAAQS AND CAAQS ATTAINMENT DESIGNATION FOR THE SOUTH COAST AIR BASIN**

Pollutant	National Standards (NAAQS)	California Standards (CAAQS)
Ozone (1-hour standard)	N/A ^a	Nonattainment
Ozone (8-hour standard)	Nonattainment—Extreme	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment—Serious	Nonattainment
Lead	Nonattainment (Partial) ^b	Attainment
Visibility-Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride ^c	N/A	N/A

NOTES: CAAQS = California ambient air quality standards; CO = carbon monoxide; N/A = not applicable; NAAQS = national ambient air quality standards; NO₂ = nitrogen dioxide; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SO₂ = sulfur dioxide

^a The NAAQS for 1-hour ozone was revoked on June 15, 2005, for all areas except Early Action Compact areas.

^b Partial Nonattainment designation—Los Angeles County portion of the South Coast Air Basin only for near-source monitors.

^c In 1990, the California Air Resources Board identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the California Air Resources Board does not monitor or make status designations for this pollutant.

SOURCES: USEPA 2022c; CARB 2022a

Federal

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective to improve air quality by encouraging the use of alternative forms of transportation to the Park (National Park Service 2002).

State

California Clean Air Act and California Air Resources Board

The CCAA, signed into law in 1988, requires that all areas of the state achieve and maintain the CAAQS by the earliest practical date. The CAAQS are established to protect the health of the most sensitive groups and apply to the same criteria pollutants as the federal CAA; they also include state-identified criteria pollutants, which are sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride (CARB 2022b).

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency, has primary responsibility for ensuring implementation of the CCAA (Chapter 1568, Statutes of 1988), responding to the federal CAA planning requirements applicable to the state, and regulating emissions from motor vehicles and consumer products in the state. CARB is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission

inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

CARB has primary responsibility for the development of California's SIP, for which it works closely with the federal government and the local air districts. The SIP is required for the state to take over implementation of the federal CAA from USEPA.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table 3.2-2, above, summarizes the attainment status of the Los Angeles County portion of the Air Basin with respect to the state standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles. The Air Basin is currently in nonattainment for ozone, PM₁₀, and PM_{2.5} under the CAAQS. Because vinyl chloride is a carcinogenic toxic air contaminant (TAC), CARB does not classify attainment status for this pollutant.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. The following policy is relevant to the Proposed Project:

Section 30253 Minimization of adverse impacts. New development shall do all of the following: ... (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development and (4) Minimize energy consumption and vehicle miles traveled.

California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended, or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air pollutant emissions. Specifically, idling by diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction is limited to five minutes at any location (13 CCR Section 2485). In addition, operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards (17 CCR Section 93115).

Mobile-Source Regulations

Mobile sources are a significant contributor to air pollution in California. CARB has established exhaust emission standards for automobiles, which are more stringent than the federal emissions standards. Through its Mobile Sources Program, CARB has developed programs and policies to reduce emissions from on-road heavy-duty diesel vehicles. Specifically, the Truck and Bus Regulation requires that diesel trucks and buses operating in the state reduce NO_x, PM₁₀, and

PM_{2.5} emissions (13 CCR Section 2025). By January 1, 2023, nearly all vehicles were required to have engines certified to 2010 model year engines or equivalent.

The Innovative Clean Transit Program sets emissions reduction standards for new public transit vehicles and requires major transit agencies to purchase only zero-emission buses after 2029 (Chapter 1568, Statutes of 1988) (CARB 2022c). The Solid Waste Collection Vehicle Regulation requires that solid waste collection vehicles and heavy diesel-fueled, on-road single-engine cranes be upgraded (CARB 2022d). The Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets requires that fleets install emission control devices on vehicles, or purchase vehicles that run on alternative fuels or use advanced technologies, to achieve emissions requirements by specified implementation dates (CARB 2022e). CARB also established an In-Use Off-Road Diesel-Fueled Fleets Regulation to impose limits on idling and require fleets to retrofit or replace older engines (CARB 2022f).

On-Road and Off-Road Heavy-Duty Vehicle Rules

In 2004, CARB adopted an Airborne Toxic Control Measure to limit idling by heavy-duty diesel motor vehicles to reduce public exposure to diesel PM (DPM) and other TACs (13 CCR Section 2485). The measure applies to diesel-fueled commercial vehicles with a gross vehicle weight rating (GVWR) greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure prohibits diesel-fueled commercial vehicles from idling for more than five minutes at any given time.

In 2008 CARB approved the Truck and Bus Regulation to reduce NO_x, PM₁₀, and PM_{2.5} emissions from existing diesel vehicles operating in California (13 CCR Section 2025). The requirements were amended to apply to nearly all diesel-fueled trucks and buses with a GVWR greater than 14,000 pounds. The largest trucks in the fleet—those with a GVWR greater than 26,000 pounds—were required to be equipped with diesel particulate filters from 2014 and onward and to have 2010 model year engines by January 1, 2023. For trucks and buses with a GVWR of 14,001–26,000 pounds, engines from model years 14–20 years or older were required to be replaced with 2010 model year engines in accordance with the schedule specified in the regulation.

In addition to limiting exhaust from idling trucks, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (e.g., bulldozers, loaders, backhoes, and forklifts), and for many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007, reduces emissions by requiring the installation of diesel soot filters and the retirement, replacement, or repowering of older, dirtier engines with newer emission-controlled models (13 CCR Section 2449). Implementation of the regulation was staggered based on fleet size (the total of all off-road horsepower under common ownership or control): The largest fleets were to begin compliance in 2014, medium fleets in 2017, and small fleets in 2019.

Each fleet must demonstrate compliance with this regulation through one of two methods. The first option is to calculate and maintain fleet-average emissions targets, which encourages

operators to retire or repower older equipment and rewards their introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies on a certain percentage of the total fleet horsepower. The compliance schedule requires that BACT turnovers or retrofits (installation of Verified Diesel Emission Control Strategies) be fully implemented by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

In June 2020, CARB approved the Advanced Clean Trucks Regulation, which mandates zero-emission-vehicle sales requirements for truck manufacturers and a one-time reporting requirement for large entities and fleets (CARB 2022g). The regulation is designed to accelerate widespread adoption of zero-emission vehicles in the medium- and heavy-duty truck sector to reduce on-road mobile-source emissions on the path to carbon neutrality by 2045 (Executive Order B-55-18). Starting in 2024, zero-emission powertrain certification will be required.

Vehicle classes separate vehicles by their GVWR and maximum weight, and classes range from 1 to 8. However, in the context of the Advanced Clean Trucks Regulation, the Class 2b–3 group includes on-road vehicles with a GVWR of 8,501–14,000 pounds; the Class 4–8 group includes on-road vehicles with a GVWR of 14,001 pounds and above, including “yard tractors”; and the Class 7–8 group includes on-road vehicles that have a GVWR of 26,001 pounds and above, including vehicles defined as “tractors” (CARB 2019).

The Advanced Clean Trucks Regulation has different truck sales requirements for the different vehicle groups. Manufacturers will need to increase their percentage of zero-emission vehicles to achieve 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 Vocational straight truck sales, and 40 percent of Class 7–8 Tractor sales by 2035. Currently, more than 70 different models of zero-emission vans, trucks, and buses are commercially available (CARB 2022g).

Most recently, in September 2020, Governor Gavin Newsom announced Executive Order N-79-20, which stated that 100 percent of new passenger cars and 100 percent of operations for drayage trucks and off-road vehicles and equipment shall be zero emission by 2035. By 2045, 100 percent of operations of medium- and heavy-duty vehicles shall be zero emission (JD Supra 2020).

Toxic Air Contaminants

The California Air Toxics Program was established in 1983, when the California Legislature enacted Assembly Bill (AB) 1807, which created a two-step process for identifying and managing risks to address the potential health effects of exposure to toxic substances in the air.

In the *risk identification* step, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine whether a substance should be formally identified, or “listed,” as a TAC in California. Several such substances have been listed since the program’s inception. In 1993, the California Legislature amended the program to identify the 189 federal HAPs as TACs.

In the *risk management* step, CARB reviews the sources of emissions of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on the results of that review,

CARB has promulgated a number of Airborne Toxic Control Measures, for both mobile and stationary sources (see *On-Road and Off-Road Heavy-Duty Vehicle Rules*, above).

The greatest potential for TAC emissions during construction of the Proposed Project would be from DPM emissions by heavy-duty equipment during demolition, excavation, and grading activities. Project construction activities would be sporadic, transitory, and short term. The California Air Toxics Program (AB 1807) is supplemented by the Air Toxics “Hot Spots” Program, which was established through AB 2588 in 1987. This program requires facilities to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, AB 2588 was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk by implementing a risk management plan.

The OEHHA develops and revises guidelines for performing health risk assessments under the Air Toxics “Hot Spots” Program’s Risk Assessment Regulation. In March 2015, the OEHHA adopted revised guidelines that incorporated advances in risk assessment with consideration of infants and children, using age-sensitivity factors (OEHHA 2015).

The analysis of the Proposed Project’s potential construction-related TAC impacts considers the OEHHA’s revised guidelines as well as the duration of construction, the level of construction activity, the scale of the Proposed Project, and compliance with regulations that would minimize construction-related TAC emissions.

Regional and Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is primarily responsible for planning, implementing, and enforcing air quality standards for the Air Basin, which includes Los Angeles County (excluding the Antelope Valley portion); Orange County; the western, non-desert portion of San Bernardino County; and the western Coachella Valley and San Gorgonio Pass portions of Riverside County. The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Air Basin is a subregion within the western portion of SCAQMD’s jurisdiction.

Air Quality Management Plan

SCAQMD has adopted air quality management plans (AQMPs) to meet the NAAQS and CAAQS. Most recently, SCAQMD initiated the development of the 2022 AQMP to address the attainment of the 2015 eight-hour ozone standard (70 parts per billion) for the Air Basin and the Coachella Valley. The Air Basin is classified as an “extreme” nonattainment area and the Coachella Valley is a “severe-15” nonattainment area for the 2015 ozone NAAQS.

In 2021, SCAQMD and CARB established the Mobile Source Working Groups to support the development of mobile-source strategies. SCAQMD also established the Residential and Commercial Buildings Working Groups to support the development of control measures.

The SCAQMD Governing Board adopted the 2022 AQMP on December 2, 2022 (SCAQMD 2022a). On January 26, 2023, CARB adopted Resolution 23-4, which directs CARB's Executive Officer to submit the 2022 AQMP to USEPA for inclusion in the California SIP. The 2022 AQMP will be effective, for purposes of federal law, after notice is posted and a public hearing conducted as required by Section 110(l) of the CAA and Code of Federal Regulations Title 40, Section 51.102, and the plan has been approved by USEPA. USEPA approval has not yet occurred.

The 2022 AQMP builds upon measures already in place in previous AQMPs. It also includes strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero-emissions technologies when cost-effective and feasible, and low-NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 eight-hour ozone standard.

The 2022 AQMP incorporates the transportation strategy and transportation control measures from *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (2045 RTP/SCS)*, also known as Connect SoCal 2020 (SCAG 2020). SCAG is legally required to ensure that transportation activities conform to, and are supportive of, the goals of state and regional air quality plans to attain the NAAQS. The 2045 RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are also contained in the AQMP.

The 2022 AQMP forecasts future emissions inventories with growth based on SCAG's 2045 RTP/SCS. According to the 2022 AQMP, the SCAQMD region is projected to see growth rates of 12 percent in population, 17 percent in housing units, 11 percent in employment, and 8 percent in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily because of the effects of federal, state, and local air quality control programs (SCAQMD 2022a).

Noteworthy control strategies for mobile sources in the 2022 AQMP that may be applicable to reducing short-term emissions from Proposed Project construction activities are listed in the AQMP as MOB-06, MOB-11, and MOB-15. These measures, described below, are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment (SCAQMD 2022a).

- **MOB-06—Accelerated Retirement of Older On-Road Heavy-Duty Vehicles** seeks additional emission reductions from existing heavy-duty vehicles with a GVWR greater than 8,500 pounds through an accelerated vehicle replacement program with zero- or low-NO_x-emission vehicles.

- **MOB-11—Emission Reductions from Incentive Programs** seeks to quantify and take credit for the emission reductions achieved through the implementation of SCAQMD-administered incentive programs for SIP purposes. SCAQMD has been implementing incentive programs such as the Carl Moyer Memorial Air Quality Standards Attainment Program, Proposition 1B, Lower Emission School Bus, Community Air Protection Program, and Volkswagen Environmental Mitigation Trust. Examples of projects funded by these programs include replacements of heavy-duty vehicles and equipment, installation of retrofit units, and engine repowers. These incentive programs result in substantial emission reductions that are typically not eligible for credit in plans to attain ozone standards because they are not required by regulation. However, actual emission reductions that are realized and quantified may qualify for credit.
- **MOB-15—Zero Emission Infrastructure for Mobile Sources** is intended to support and accelerate the deployment of zero-emission infrastructure needed for the widespread adoption of zero-emission vehicles and equipment. AB 2127 estimated that California will need 157,000 electric vehicle charging stations for medium- and heavy-duty vehicles by 2030. AB 8 assessed fueling needs for hydrogen fuel cell vehicles and found that 1,700 hydrogen stations will be needed to support 1.8 million fuel cell electric vehicles statewide by 2035. The proposed measure seeks to address these concerns and identify the unique challenges and opportunities for zero-emission infrastructure development in the Air Basin, particularly as it relates to deployments of zero-emission medium- and heavy-duty vehicles.

SCAQMD Air Quality Guidance Documents

SCAQMD's CEQA guidelines are voluntary initiatives recommended for consideration by local planning agencies. The *CEQA Air Quality Handbook* published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts (SCAQMD 1993). SCAQMD is currently updating some of the information and methods in the *CEQA Air Quality Handbook*, such as the screening tables for determining the air quality significance of a project and the on-road mobile-source emission factors. While this process is underway, SCAQMD recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod) (SCAQMD 2022b):

SCAQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* considers impacts on air quality sensitive receptors from TAC-emitting facilities (SCAQMD 2005). SCAQMD's siting distance recommendations are the same as those provided by CARB: for example, a 500-foot siting distance for air quality sensitive receptors proposed near freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities.

SCAQMD's *Final Localized Significance Threshold Methodology* and *Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds* provide guidance for CEQA evaluations of the localized effects of emissions (SCAQMD 2006, 2008). These guidance documents were promulgated by the SCAQMD Governing Board as a tool to assist lead agencies in analyzing localized impacts of proposed projects. The guidance documents establish mass emission rate "lookup tables" as significance thresholds for projects in areas of 5 acres or less.

SCAQMD Rules and Regulations

SCAQMD has adopted many rules and regulations to regulate sources of air pollution in the Air Basin and to help achieve air quality standards. The Proposed Project may be subject to the SCAQMD rules and regulations listed below.

Regulation IV–Prohibitions sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events. The following rules may apply to the Proposed Project:

- **Rule 401–Visible Emissions** states that “a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.”
- **Rule 402–Nuisance** states that “a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”
- **Rule 403–Fugitive Dust** requires projects to prevent, reduce, or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts net PM₁₀ emissions to less than 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, a contingency plan may be required if so determined by USEPA.

Regulation XI–Source Specific Standards sets emissions standards for specific sources. The following rules may apply to the Proposed Project:

- **Rule 1113–Architectural Coatings** requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1121–Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters** specifies NO_x emission limits for natural gas–fired water heaters, with heat input rates less than 75,000 British thermal units per hour.
- **Rule 1186–PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations** applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM₁₀ emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIV–Toxics and Other Non-Criteria Pollutants sets requirements for new permit units, relocations, or modifications to existing permit units that emit TACs or other non-criteria pollutants. The following is a list of rules which may apply to the Project:

- **Rule 1401–New Source Review of Toxic Air Contaminants and Rule 1402–Control of Toxic Air Contaminants from Existing Sources** were adopted to limit cancer and non-cancer health risks from facilities located within SCAQMD jurisdiction. Rule 1401 regulates new or modified facilities and Rule 1402 regulates facilities that are already operating. Rule 1402 incorporates the requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.
- **Rule 1403–Asbestos Emissions from Demolition/Renovation Activities** requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- **Rule 1470–Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines** applies to stationary compression ignition engines greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.
- **Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants:** This rule sets requirements to minimize the amount of fugitive dust containing toxic air contaminants that is emitted during earth-moving activities, including, excavating, grading, handling, treating, stockpiling, transferring, and removing soil that contains applicable TACs. Rule 1466 is applicable to the transportation of soils with applicable TACs and applicable requirements include covering the truck loads for soil that contains applicable TACs.

Southern California Association of Governments

As described above, SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties, and as such addresses regional issues related to transportation, the economy, community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization for the majority of Southern California and is the largest Metropolitan Planning Organization in the nation.

Pursuant to Section 40460 of the Health and Safety Code, SCAG is responsible for preparing and approving the portions of the AQMP related to regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies (SCAQMD 2022a). On September 3, 2020, SCAG’s Regional Council formally adopted the 2045 RTP/SCS, also known as Connect SoCal, which is an update to the previous 2016–2040 RTP/SCS (SCAG 2020). Using growth forecasts and economic trends, the 2045 RTP/SCS provides a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, and identifies regional transportation strategies to address mobility needs. Additionally, the 2045 RTP/SCS describes how the region could attain the

greenhouse gas (GHG) emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and a 19 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level on a per capita basis (SCAG 2020). Compliance with and implementation of the 2045 RTP/SCS policies and strategies would have the co-benefits of reducing per capita criteria air pollutant emissions (e.g., NO₂, CO) associated with reduced per capita VMT.

SCAG's 2045 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation, and cultures and a full range of shopping, entertainment, and services, all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads, and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative-fueled vehicles (SCAG 2020).

In addition, the 2045 RTP/SCS includes strategies to promote active transportation, support local planning and projects that serve short trips, and promote transportation investments, investments in active transportation, and more walkable and bikeable communities. These efforts will result in improved air quality and public health and reduced GHG emissions, and support building physical infrastructure, regional greenways, and first-last mile connections to transit, including to light rail and bus stations. The 2045 RTP/SCS aligns active transportation investments with land use and transportation strategies, increases the competitiveness of local agencies for federal and state funding, and expands the potential for all people to use active transportation. CARB has accepted SCAG's GHG quantification determinations in the 2045 RTP/SCS as it demonstrates achievement of the GHG emission reduction targets established by CARB (SCAG 2020; CARB 2020).

Although CARB has set GHG emission reduction targets for passenger vehicles for 2045, the GHG emission reduction trajectory in the 2045 RTP/SCS shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1 percent reduction in GHG emissions from transportation-related sources in the 10 years between 2035 and 2045, the 2045 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals (SCAG 2020).

Los Angeles County General Plan 2035

Adopted in 2015, the Air Quality Element of the *Los Angeles County General Plan 2035* (County of Los Angeles 2015) summarizes air quality issues and outlines goals and policies that will improve air quality in unincorporated county areas. This includes protection from exposure to harmful air pollutants and reduction of air pollution and mobile-source emissions through

coordinated transportation and air quality planning. The following goals and policies related to air quality are relevant to the Proposed Project:

Goal AQ 1: Protection from exposure to harmful air pollutants.

Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

Policy AQ 1.2: Encourage the use of low or no volatile organic compound (VOC) emitting materials.

Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

Goal AQ 2: The reduction of air pollution and mobile source emissions through coordinated land use, transportation, and air quality planning.

Policy AQ 2.2: Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.

Policy AQ 2.3: Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.

Policy AQ 2.4: Coordinate with different agencies to minimize fugitive dust from different sources, activities, and uses.

Topanga State Park General Plan

The Proposed Project falls under the Topanga State Park General Plan (State Parks 2012), which addresses air quality concerns. However, the environmental analysis for the general plan found that it would not have a significant effect on air quality because State Parks proposed relatively little new development for Topanga State Park, which is spread across a relatively large area. The land use development proposed in the Topanga State Park General Plan would result in a less-than-significant impact on air quality; therefore, no avoidance, minimization, or mitigation measures for air quality were proposed in the plan.

Additionally, air quality is addressed in the Fire Hazard section, where the use of prescribed fire as a vegetation management tool has the potential for impacts on regional air quality and may, in the event of an escape, place the public in danger. Therefore, the Topanga State Park General Plan proposes the following avoidance, minimization, mitigation measure:

FH 4: The restoration of the role of fire in natural ecological processes will include a prescribed fire management plan. This plan will include provisions for coordinating with regional air quality control boards to avoid emissions of smoke during sensitive time periods. It will also provide for public notification and exclusion areas prior to and during prescribed burning operations. In the event of an escape, the wildfire management plan will be invoked, which provides for public evacuation and appropriate suppression activities.

Santa Monica Mountains Local Coastal Program

The Project area is located within the California coastal zone, and all developments are subject to regulations of the Santa Monica Mountains Local Coastal Program (LCP). It was certified by the California Coastal Commission in 2014 and grants the County authority to review and approve coastal development permits at the local level. The County's LCP includes a land use plan (LA County Planning 2018) to regulate land use and a local implementation plan for zoning. Development within a coastal zone may not commence until a coastal development permit has been issued by the California Coastal Commission or a local government that has a California Coastal Commission–certified LCP. The Land Use Plan (LA County Planning 2018) identifies the following goal and policy pertaining to air quality:

Goal CO-1: Maintain and restore biological productivity and coastal water quality appropriate to maintain optimum populations of marine and freshwater organisms and to protect human health.

CO-9 Manage the temporary storage of construction materials for public projects or landslide material on road shoulders using the most current Best Management Practices to eliminate erosion into adjacent drainage courses, to protect air and water quality, and to minimize the spread of invasive plant species. Ensure that landslide material is deposited in permitted landfills or sites with valid permits to accept fill.

3.2.2 Affected Environment

Air Quality Background

Criteria Pollutants

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment, either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the endeavor to prevent further deterioration and facilitate improvement in air quality. The pollutants described below are regulated by USEPA and are subject to emissions control requirements adopted by federal, state, and local regulatory agencies. These pollutants are referred to as *criteria air pollutants* because of the specific standards, or criteria, that have been adopted for them. The health effects of these criteria air pollutants are described below.

Ozone

Ozone is a secondary pollutant formed by the chemical reaction of VOCs and NO_x in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable.

Ozone can cause the muscles in the airways to constrict, potentially leading to wheezing and shortness of breath (USEPA 2022d). Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases, such as asthma, emphysema, and chronic bronchitis; increase the frequency of asthma attacks; make the lungs

more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease (USEPA 2022d).

Long-term exposure to ozone is linked to aggravation of asthma and is likely one of many causes of asthma development; long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children (USEPA 2022d). Inhalation of ozone causes inflammation and irritation of the tissues that line the human airways, causing and worsening a variety of symptoms, and exposure to ozone can reduce the volume of air that the lungs breathe in and can cause shortness of breath (CARB 2022h).

The people most at risk from breathing air that contains ozone are people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers (USEPA 2022d). Children are at greatest risk from exposure to ozone because their lungs are still developing, and they are more likely to be active outdoors when ozone levels are high, which increases their exposure (CARB 2022d). According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults.

Volatile Organic Compounds

VOCs are organic chemical compounds of carbon and are not “criteria” pollutants themselves; however, they contribute with NO_x to form ozone and are regulated to prevent the formation of ozone (USEPA 2022e). Some VOCs are highly reactive and play a critical role in the formation of ozone; other VOCs have adverse health effects, and in some cases, VOCs can be both highly reactive and have adverse health effects (CARB 2005). VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings) (CARB 2005).

Nitrogen Dioxide and Nitrogen Oxides

NO_x is a term that refers to a group of compounds containing nitrogen and oxygen. The primary compounds of air quality concern are NO_2 and nitric oxide (NO). Ambient air quality standards have been promulgated for NO_2 , which is a reddish-brown, reactive gas. The principal form of NO_x produced by combustion is NO, but NO reacts quickly in the atmosphere to form NO_2 , creating the mixture of NO and NO_2 referred to as NO_x (CARB 2022i).

Major sources of NO_x include emissions from cars, trucks and buses, power plants, and off-road equipment (USEPA 2022f). The terms NO_x and NO_2 are sometimes used interchangeably. However, NO_x is typically used when discussing emissions, usually from combustion-related activities, and NO_2 is typically used when discussing ambient air quality standards. Where NO_x

emissions are discussed in the context of the thresholds of significance or impact analyses, the discussions are based on the conservative assumption that all NO_x emissions would oxidize in the atmosphere to form NO₂.

Short-term exposures to NO₂ can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms; longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections (USEPA 2022f). Controlled human-exposure studies show that NO₂ exposure can intensify responses to allergens in allergic asthmatics (CARB 2022i). In addition, several epidemiological studies have demonstrated associations between NO₂ exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.

Infants and children are particularly at risk from exposure to NO₂ because they have disproportionately higher exposure to NO₂ than adults given their greater breathing rate for their body weight and their typically greater outdoor exposure duration. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease. CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO₂ and there is only limited information for NO and NO_x, as well as large uncertainty in relating health effects to NO or NO_x exposure (CARB 2022i).

Carbon Monoxide

CO is emitted primarily from combustion processes and motor vehicles, from the incomplete combustion of fuel such as natural gas, gasoline, or wood, with most outdoor CO emissions generated by mobile sources (CARB 2022j).

Breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the bloodstream to critical organs like the heart and brain, and at very high levels—which are possible indoors or in other enclosed environments—CO can cause dizziness, confusion, unconsciousness, and death (USEPA 2022g). Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease because these people already have a reduced ability to get oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress (USEPA 2022g). In these situations, short-term exposure to elevated CO levels may result in reduced oxygen to the heart, accompanied by chest pain, also known as angina (USEPA 2022g).

According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness caused by inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce the body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies,

infants, elderly people, and people with anemia or a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2022j).

Sulfur Dioxide

The largest source of SO₂ emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities, while smaller sources of SO₂ emissions include industrial processes, such as extraction of metal from ore; natural sources, such as volcanoes; and locomotives, ships, and other vehicles and heavy equipment that burn fuel with a high sulfur content (USEPA 2022h). California phased in the ultra-low-sulfur diesel regulation, which limited vehicle diesel fuel to a sulfur content not exceeding 15 parts per million (ppm), down from the previous requirement of 500 ppm, thus substantially reducing emissions of sulfur from diesel combustion (CARB 2004).

Short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult (USEPA 2022h). Health effects at levels near the state one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation, such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Exposure at elevated levels of SO₂ (above 1 ppm) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality (CARB 2022k). Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO₂ (CARB 2022k; USEPA 2022h).

Particulate Matter

Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air (USEPA 2022i). Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye, while other particles are so small that they can only be detected using an electron microscope. Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally 10 micrometers and smaller (PM₁₀) and fine inhalable particles with diameters that are generally 2.5 micrometers and smaller (PM_{2.5}) (USEPA 2022i). Thus, PM_{2.5} composes a portion or a subset of PM₁₀.

Sources of PM₁₀ emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and windblown dust from open lands (CARB 2022i). Sources of PM_{2.5} emissions include combustion of gasoline, oil, diesel fuel, or wood. PM₁₀ and PM_{2.5} may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles), such as SO₂, NO_x, and certain organic compounds.

According to CARB, both PM₁₀ and PM_{2.5} can be inhaled, with some depositing throughout the airways; PM₁₀ is more likely to deposit on the surfaces of the larger airways of the upper region of the lung, while PM_{2.5} is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage, and lung inflammation. Short-term (up to 24 hours

duration) exposure to PM₁₀ has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency room visits (CARB 2022l).

The effects of long-term (months- or years-long) exposure to PM₁₀ are less clear, although studies suggest a link between long-term PM₁₀ exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer. Short-term exposure to PM_{2.5} has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted-activity days. Long-term exposure to PM_{2.5} has been linked to premature death, particularly in people who have chronic heart or lung disease, and reduced lung function growth in children.

According to CARB, the populations most likely to experience adverse health effects with exposure to PM₁₀ and PM_{2.5} are older adults with chronic heart or lung disease, children, and asthmatics. Children and infants are more susceptible to harm from inhaling pollutants such as PM₁₀ and PM_{2.5} than healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems (CARB 2022l).

Lead

Major sources of lead emissions include ore and metals processing, piston-engine aircraft operating on leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers (USEPA 2022j). In the past, leaded gasoline was a major source of lead emissions; however, the removal of lead from gasoline resulted in a decrease of lead in the air by 98 percent between 1980 and 2014. Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system, and affects the oxygen-carrying capacity of the blood (USEPA 2022j). The lead effects most encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage (CARB 2022m). Excessive lead exposure in adults can cause reproductive problems, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain (CARB 2022m).

Other Criteria Pollutants (California Only)

The CAAQS regulate the same criteria pollutants as the NAAQS but also regulate state-identified criteria pollutants: sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride (CARB 2022b). The health effects of the state-identified criteria air pollutants relevant to the Proposed Project are described below. Because the Proposed Project would not generate emissions of hydrogen sulfide or vinyl chloride, they are not discussed.

Sulfates

Sulfates (SO₄²⁻) occur in the environment because of the conversion of SO₂ (sulfur dioxide) to SO₄²⁻ compounds in the atmosphere where sulfur is first oxidized to SO₂ during the combustion process of sulfur-containing, petroleum-derived fuels (e.g., gasoline and diesel fuel) (CARB

2022n). Exposure to SO_4^{2-} , which are part of $\text{PM}_{2.5}$, results in health effects like those from exposure to $\text{PM}_{2.5}$: reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency room visits, hospitalizations, and death in people who have chronic heart or lung disease (CARB 2022n). Population groups with higher risks of experiencing adverse health effects with exposure to SO_4^{2-} include children, asthmatics, and older adults who have chronic heart or lung disease (CARB 2022n).

Visibility-Reducing Particles

Visibility-reducing particles come from a variety of natural and human-made sources and can vary greatly in shape, size, and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles, such as windblown dust and soot, are directly emitted to the air; others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles), which are the major constituents of particulate matter. As the number of visibility-reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range (CARB 2022o). Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to those of PM_{10} and $\text{PM}_{2.5}$ as discussed above (CARB 2022o).

Air Toxics

Toxic Air Contaminants

Toxic air contaminants, or HAPs as defined by USEPA, are those contaminants that are known or suspected to cause serious health problems, but that do not have a corresponding ambient air quality standard (USEPA 2022k). For consistency in this document, these contaminants will be referred to as TACs.

TACs are also defined as air pollutants that may increase a person's risk of developing cancer and/or other serious health effects. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. TACs may exist as PM_{10} and $\text{PM}_{2.5}$ or as vapors (gases) (USEPA 2022i). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources.

The emission of a TAC does not automatically create a health hazard. Other factors, such as the amount of the TAC, its toxicity, the way in which it is released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health.

Nonetheless, emissions of TACs into the air can be damaging to human health and the environment. Human exposure to TACs at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. TACs deposited onto soil or into lakes and streams affect ecological systems, and eventually human health through consumption of contaminated food. The

carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer (USEPA 2022i).

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a state law that requires facilities to report emissions of TACs to air districts (CARB 2022p). The program is designated to quantify the amounts of potentially TACs released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks. The State Air Toxics Program (AB 2588) identified more than 200 TACs, including the 188 TACs identified in the CAA (CARB 2022q).

USEPA has assessed this expansive list and identified 21 TACs as Mobile Source Air Toxics (USEPA 2004). *Mobile Source Air Toxics* are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. USEPA also extracted a subset of these 21 compounds that it now labels as the priority Mobile Source Air Toxics: 1,3-butadiene, acetaldehyde, acrolein, benzene, DPM/diesel exhaust organic gases, ethylbenzene, naphthalene, and polycyclic organic matter. Although these Mobile Source Air Toxics are considered the priority transportation toxics, USEPA stresses that the lists are subject to change and may be adjusted in future rules (FHWA 2018).

Diesel Exhaust

According to the *California Almanac of Emissions and Air Quality*, most of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines, i.e., DPM (CARB 2013). DPM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

Diesel exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines: the on-road diesel engines of trucks, buses, and cars and the off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and the presence or absence of an emission control system.

The most common exposure to DPM is from breathing air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to $PM_{2.5}$), which means that they can avoid many of the human respiratory system's defense mechanisms and enter deeply into the lung. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from long-term chronic exposures. The type and severity of health effects depend upon several factors, including the amount and duration of chemical exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to only DPM, but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes chronic health effects as well as having cancer-causing potential.

Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death, hospitalizations, and emergency room visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems (CARB 2022r).

Gasoline Exhaust

Like diesel exhaust, gasoline exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase of gasoline exhaust is composed of the same TACs as in diesel exhaust, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Gasoline exhaust is emitted primarily by light-duty passenger vehicles. The compounds in the gas and particle phases can cause health effects from both short- and long-term exposures.

Regional Air Quality

Los Angeles County spans two air basins: the South Coast Air Basin (referred to herein as the "Air Basin") in the metropolitan portion of the county and the Mojave Desert Air Basin in the northeast desert portion of the county. The Project area is in the South Coast Air Basin.

The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Air Basin consists of Los Angeles County (excluding the Antelope Valley portion), Orange County, and the western, non-desert portions of San Bernardino and Riverside counties, in addition to the San Geronio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Air Basin, as it is a coastal plain with broad

valleys and low hills. The Air Basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The usually mild climatological pattern is interrupted by periods of hot weather, winter storms, or Santa Ana winds.

The Project area is directly adjacent to the eastern boundary of the city of Malibu, and the climate and weather patterns on-site mirror those of Malibu as a whole. Malibu's climate is classified as dry summer subtropical or Mediterranean, which means the area has hot, dry summers with relatively cool, moist winters. The regional climate is controlled almost entirely by the semi-permanent high-pressure zone and the coldwater California current (City of Malibu 1995). The summer climate is strongly influenced by stable air flowing out of the semi-permanent high-pressure zone to the west and the winter climate occurs when the semi-permanent high-pressure zone migrates south, putting Malibu on the fringe of the influence of a low-pressure cell (City of Malibu 1995). The combined effect of these meteorologic and oceanographic systems is a tempering of local weather such that extremes of wind, temperature, and precipitation are relatively uncommon.

Skies are mostly clear from mid-summer through autumn. Heavy cloud cover and fog occur primarily during spring and early summer, when stratus clouds associated with the marine layer move in from the west. Malibu has summer temperatures in the upper 60s to low 70s and winter temperatures range between the upper 50s and the low 60s.

Criteria Air Pollutants

The extent and severity of pollutant concentrations in the Air Basin are a function of the area's natural physical characteristics (weather and topography) and human influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential.

The Air Basin's meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone, a secondary pollutant that forms through photochemical reactions in the atmosphere. Thus, the worst air pollution conditions throughout the Air Basin typically occur from June through September. These conditions are generally attributed to the seasonally light winds and shallow vertical atmospheric mixing, which reduce the potential for the dispersal of air pollutant emissions, thereby causing elevated air pollutant levels.

Pollutant concentrations in the Air Basin vary with location, season, and time of day. Concentrations of ozone, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert (SCAQMD 2022a). Table 3.2-2, above, shows the attainment status of the Air Basin for each criteria pollutant.

As shown in Table 3.2-2, the Air Basin is designated under the NAAQS or CAAQS as nonattainment for ozone, PM₁₀, and PM_{2.5}. The Los Angeles County portion of the Air Basin is

designated as nonattainment for the federal lead standard; however, this is attributable to localized emissions from two lead-acid battery recycling facilities in the city of Vernon and City of Industry that are no longer operating (SCAQMD 2012).

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point and area stationary sources and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources (SCAQMD 2022a). *Point sources* are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries, emergency generator exhaust stacks). *Area sources* consist of many small emission sources (e.g., residential water heaters, architectural coatings, consumer products, restaurant charbroilers, and permitted sources such as large boilers) that are distributed across the region. *Mobile sources* consist of two main subcategories: on-road sources (such as cars and trucks) and off-road sources (such as heavy construction equipment).

Toxic Air Contaminants

In addition to criteria pollutants, SCAQMD periodically assesses levels of TACs in the Air Basin, as detailed above in Section 3.2.1, *Regulatory Setting*. The greatest potential for TAC emissions during construction is related to DPM emissions from heavy-duty equipment. During long-term operations, sources of DPM emissions may include heavy-duty diesel-fueled delivery trucks and stationary emergency generators.

Local Area Conditions

Existing Ambient Air Quality

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The monitoring station most representative of the Project area is the West Los Angeles monitoring station, located at Wilshire Boulevard and Sawtelle Boulevard. Criteria pollutants monitored at this station include CO, ozone, and NO₂.

Additional monitoring stations were used to complete **Table 3.2-3**; specifically, the LAX Hastings monitoring station at 7201 West Westchester Parkway was referenced for SO₂, PM₁₀, and lead data. Lastly, the Central Los Angeles County monitoring station at 1630 North Main Street was referenced for PM_{2.5} data. The most recent data available from SCAQMD for this monitoring station are from 2018–2020 (SCAQMD 2022c).

As shown in Table 3.2-3, the NAAQS and CAAQS were not exceeded in the Project site vicinity for most pollutants between 2018 and 2020, except for ozone, PM₁₀, and PM_{2.5}. The eight-hour ozone NAAQS was exceeded for two days in 2018, one day in 2019, and eight days in 2020. The CAAQS were exceeded for measurements in ozone one-hour for two days in 2019 and for ozone eight-hour for two days in 2018, one day in 2019, and eight days in 2020. The CAAQS were exceeded for PM₁₀ for two days in 2019. The PM_{2.5} CAAQS were exceeded in 2018 for three days, in 2019 for one day, and in 2020 for two days.

**TABLE 3.2-3
AMBIENT AIR QUALITY IN THE PROJECT VICINITY**

Pollutant/Standard	2018	2019	2020
Ozone (1-hour)			
Maximum Concentration (ppm)	0.094	0.086	0.134
Days > CAAQS (0.09 ppm)	0	0	6
Ozone (8-hour)			
Maximum Concentration (ppm)	0.073	0.075	0.092
Fourth Highest 8-hour Concentration (ppm)	0.068	0.064	0.078
Days > CAAQS (0.070 ppm)	2	1	8
Days > NAAQS (0.070 ppm)	2	1	8
Nitrogen Dioxide, NO₂ (1-hour)			
Maximum Concentration (ppm)	0.065	0.049	0.077
Days > CAAQS (0.18 ppm)	0	0	0
98th-Percentile Concentration (ppm)	0.046	0.043	0.044
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO₂ (annual)			
Annual Arithmetic Mean (0.030 ppm)	0.013	0.010	0.011
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	1.6	1.9	2.0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	1.3	1.2	1.2
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO₂ (1-hour)			
Maximum Concentration (ppm)	0.012	0.008	0.006
Days > CAAQS (0.25 ppm)	0	0	0
99th-Percentile Concentration (ppm)	0.005	0.004	0.003
Days > NAAQS (0.075 ppm)	0	0	0
Respirable Particulate Matter, PM₁₀ (24-hour)			
Maximum Concentration (µg/m ³)	45	62	43
Samples > CAAQS (50 µg/m ³)	0	2 (3%)	0
Samples > NAAQS (150 µg/m ³)	0	0	0
Respirable Particulate Matter, PM₁₀ (annual)			
Annual Arithmetic Mean (20 µg/m ³)	20.5	19.2	22.5
Fine Particulate Matter, PM_{2.5} (24-hour)			
Maximum Concentration (µg/m ³)	43.8	43.5	47.30
98th-Percentile Concentration (µg/m ³)	30.50	28.3	28.00
Samples > NAAQS (35 µg/m ³)	3 (0.9%)	1 (0.3%)	2 (1%)
Fine Particulate Matter, PM_{2.5} (annual)			
Annual Arithmetic Mean (12 µg/m ³)	12.58	10.85	12.31
Lead			
Maximum 30-Day Average (µg/m ³)	0.005	0.004	0.008
Samples > CAAQS (1.5 µg/m ³)	0	0	0
Maximum 3-Month Rolling Average (µg/m ³)	0.004	0.004	0.008
Days > NAAQS (0.15 µg/m ³)	0	0	0

NOTES:

µg/m³ = micrograms per cubic meter; CAAQS = California ambient air quality standard; NAAQS = national ambient air quality standard; ppm = parts per million

SOURCE: SCAQMD 2022c

Existing Area Health Risk

In August 2021, SCAQMD released the Final Multiple Air Toxics Exposure Study V (MATES V) (SCAQMD 2021a). MATES V includes a fixed-site monitoring program with 10 stations, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the Air Basin. The purpose of the fixed-site monitoring is to characterize long-term regional air toxics levels in the Air Basin. As part of MATES V, SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancer cases per million people associated with a lifetime of breathing air toxins (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the Project area is estimated at 184 in a million (compared to an overall Basin Average Air Toxics Cancer Risk in MATES V of 455 in a million) (SCAQMD 2022d).

The key takeaways from MATES V are as follows (SCAQMD 2021b)²:

- Based on modeling data, the air toxics cancer risk has decreased by about 50 percent since MATES IV.
- According to MATES V, the average multi-pathway air toxics cancer risk for the Air Basin is 455 in one million. The highest risk locations are Los Angeles International Airport, downtown, and the ports areas.
- DPM is the main risk driver for air toxics cancer risks.
- Goods movement and transportation corridors have the highest air toxics cancer risks.
- The chronic non-cancer risk was estimated for the first time, with a chronic hazard index of approximately 5–9 across all 10 fixed stations.

Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

Existing Site Emissions

The Project area includes Topanga Creek and Lagoon, an aging Pacific Coast Highway (PCH) bridge, and visitor services such as parking, overnight accommodations, and/or leases. Everyday operational activities at these businesses emit air pollutants associated with vehicle trips, landscaping equipment, on-site combustion of natural gas for heating and cooking, and fugitive emissions of VOCs from the use of aerosol products and coatings and landscaping. However, to provide a conservative assessment, existing emissions estimates were not modeled.

² Chronic non-cancer index is calculated by multiplying the annual average concentrations for each pollutant by the molecular weight adjustment factor and multi-pathway adjustment factor, and then dividing by the applicable chronic reference exposure level to determine a hazard quotient. The hazard quotients are then summed for each target organ for all applicable toxic substances, and the maximum hazard quotient from all the target organ is reported as the hazard index. A hazard index of less than 1 indicates that the levels of that pollutant (or group of pollutants) are unlikely to cause chronic non-cancer risk health effects for any of the target organs. A hazard index greater than 1 does not mean that adverse health effects will occur, but rather that the risk of chronic non-cancer health effects increases with increasing levels of the pollutant (SCAQMD 2021b).

Sensitive Receptors and Locations

Certain population groups, such as children, elderly people, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals, and schools, are air quality–sensitive land uses. Within the Project area lies the lifeguard and public restroom building, beach parking, Topanga Ranch Motel (generally abandoned), Cholada Thai Beach Cuisine, Wylie’s Bait and Tackle, Rosenthal Wine Bar and Patio, Reel Inn Malibu, and The Malibu Feed Bin/Oasis, which would all be either demolished or, for one concession located on the site of the Reel Inn, would be renovated. Additionally, all portions of the Topanga Ranch Motel would be removed under Alternative 2, while restoration of 15–20 structures could occur under Alternative 3 or 4. A business and residences are located immediately adjacent to the Project site on the southwest. Southeast of the Project site lies a gas station at the corner of PCH and Topanga Canyon Boulevard (TCB), as well as a commercial business approximately 82 feet from the Project boundary (Mastro’s restaurant). Approximately 70 feet east of the Project site lies a TCB Utility Improvement Project site (LA County Water District 27). The nearest residences on the east side of the Project site are approximately 200 feet away. The Project site also would encompass part of PCH as far east as Coastline Drive if wastewater Option 3 (sewer) is selected, and lies adjacent to TCB. All other air quality–sensitive uses are located at greater distances from the Project area than the residences southwest and east of the Project site and would experience lower air pollutant impacts from potential sources of pollutants from the Project site because of atmospheric dispersion effects.

3.2.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to air quality. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan. (Refer to Impact AIR 3.2-1.)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. (Refer to Impact AIR 3.2-2.)
- Expose sensitive receptors to substantial pollutant concentrations. (Refer to Impact AIR 3.2-3.)
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Refer to Impact AIR 3.2-4.)
- Result in cumulatively considerable impacts to air quality. (Refer to Impact AIR 3.2-5.)

Pursuant to the CEQA Guidelines (Section 15064.7), a lead agency may consider using, when available, significance thresholds established by the applicable air quality management district or air pollution control district when making determinations of significance. For purposes of this analysis, State Parks has determined to assess the potential air quality impacts of the Proposed

Project in accordance with the most recent thresholds adopted by SCAQMD in connection with its *CEQA Air Quality Handbook*, *Air Quality Analysis Guidance Handbook*, and subsequent SCAQMD guidance, as discussed below, and this assessment satisfies the considerations raised in the *Thresholds Guide*.³

Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

The threshold used for determining whether the Project would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether the Project is consistent with the assumed growth, applicable control measures, and air pollutant emission reduction policies in the AQMP. Therefore, the Project would have a significant impact if it would:

- Conflict with or obstruct implementation of the AQMP or any other adopted regional and local plans adopted for reducing air quality impacts.

Cumulatively Considerable Net Increase in Criteria Pollutants

Construction

Because construction impacts of projects are temporary and limited to the construction phase, SCAQMD has established numerical thresholds of significance for construction air pollutant emissions specific to construction activity (**Table 3.2-4**). These numerical thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health (SCAQMD 1993). A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state nonattainment pollutant. The Air Basin is currently in nonattainment for ozone, PM₁₀, and PM_{2.5}. SCAQMD methodology recommends using significance thresholds to determine potential cumulative impacts on regional air quality along with a project's consistency with the current AQMP.

TABLE 3.2-4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT REGIONAL EMISSIONS THRESHOLDS
(POUNDS PER DAY)

Activity	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55

NOTES: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compound

SOURCE: SCAQMD 2023.

³ Although the SCAQMD *CEQA Air Quality Handbook* contains significance thresholds for lead, Proposed Project construction and operation would not include sources of lead emissions; unleaded fuel and unleaded paints have virtually eliminated lead emissions from land use projects such as the Proposed Project. The Proposed Project would not exceed the significance thresholds for lead. As a result, lead emissions are not evaluated further in this Draft EIR.

As discussed below under *Methodology*, if aerially deposited lead (ADL)–contaminated soil is present, these soils would be disposed of at a hazardous materials landfill. The analysis assumes that these soils would be taken to the Kettleman Hills Hazardous Waste Facility in the San Joaquin Valley Air Pollution Control District (SJVAPCD) area. As such, criteria pollution emissions from trucks hauling the waste through the SJVAPCD area were calculated and compared to the SJVAPCD significance thresholds (**Table 3.2-5**).

**TABLE 3.2-5
 SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT REGIONAL EMISSIONS THRESHOLDS
 (TONS PER YEAR)**

Activity	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction	10	10	100	27	15	15

NOTES: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compound
 SOURCE: SJVAPCD 2015

Operational

SCAQMD has established numerical thresholds of significance for operational air pollutant emissions. However, as discussed in more detail below, the Proposed Project’s operational emissions would not represent a substantial change from existing criteria pollutant emissions. Therefore, impacts from operations were determined based on a qualitative analysis.

Localized Emission Impacts on Sensitive Receptors

SCAQMD published its *Final Localized Significance Threshold Methodology* and *Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds*, recommending that air quality analyses include a localized assessment of both construction and operational impacts of projects on nearby sensitive receptors (SCAQMD 2006, 2008). Localized significance thresholds are applicable only to the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}. Localized significance thresholds represent the maximum emissions from an individual project site that are not expected to result in an exceedance of the NAAQS or CAAQS. Such thresholds are based on the ambient concentrations of that pollutant within the source receptor area where a project is located and the distance to the nearest sensitive receptor. The Project area is in SCAQMD’s Northwest Coastal LA County Source Receptor Area 2.

In the case of CO and NO₂, if ambient levels are below the air standards for these pollutants, a project is considered to have a significant impact if project emissions would result in an exceedance of one or more of these standards. If ambient levels already exceed a federal or state standard, then the impact of project emissions is considered significant if such emissions would increase ambient concentrations by a measurable amount. For the Proposed Project, this would apply to PM₁₀ and PM_{2.5}, both of which are nonattainment pollutants in the Air Basin. For these latter two pollutants, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 µg/m³ applies to construction

emissions (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of $2.5 \mu\text{g}/\text{m}^3$ applies to non-aggregate handling operational activities.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As discussed previously, sensitive receptors are located adjacent to the Project site and have the potential to be exposed to localized construction emissions.

SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds, and therefore would not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without project-specific dispersion modeling. This analysis uses the screening criteria to evaluate impacts from localized emissions. If the Proposed Project would result in an exceedance of the following screening criteria localized significance thresholds for the above-listed pollutants, this would constitute a significant impact, unless dispersion modeling demonstrates no exceedance of the concentration-based standards.

- **Construction** (5-acre site within 25 meters of sensitive receptors in Source Receptor Area 2)⁴ (SCAQMD 2009):
 - **NO_x**: 221 pounds per day
 - **CO**: 1,531 pounds per day
 - **PM₁₀**: 13 pounds per day
 - **PM_{2.5}**: 6 pounds per day
- **Operational**: SCAQMD has established numerical thresholds of significance for localized operational air pollutant emissions. However, all Build Alternatives would remove Topanga Ranch Motel structures: Alternative 2 would remove all 25 buildings, Alternative 3 would retain and restore 20 buildings, and Alternative 4 would retain and restore 15 buildings. All Build Alternatives would replace the existing lifeguard and public restroom building with new buildings of the same size, improving building energy efficiency. All Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). Project operational emissions under all Build Alternatives would be reduced compared to existing criteria pollutant emissions, as discussed in more detail below. Therefore, impacts from operations were determined based on a qualitative analysis.

⁴ Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site dependent and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold yields a more stringent analysis.

Carbon Monoxide Hotspots

With respect to the formation of CO hotspots, the Project would have a significant impact if the following condition would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:

- The Project would cause or contribute to an exceedance of the CAAQS one-hour or eight-hour CO standards of 20 or 9.0 ppm, respectively (SCAQMD 2023).

Toxic Air Contaminants

Based on the criteria set forth by SCAQMD, the Project would expose sensitive receptors to substantial concentrations of toxic air contaminants if the following would occur (SCAQMD 2023):

- The Project would emit carcinogenic materials or TACs that exceed the maximum incremental cancer risk of 10 in one million or a cancer burden greater than 0.5 excess cancer case (in areas greater than or equal to one in one million) or an acute or chronic hazard index of 1.0.

Other Emissions

With respect to other emissions such as those leading to odors, the threshold is qualitative. The Project's impact would be considered significant if:

- The Project would create an odor nuisance pursuant to SCAQMD Rule 402.
- The Project would exceed the significance thresholds for regional emissions shown above for attainment, maintenance, or unclassified pollutant emissions.

NEPA

General Conformity

State Parks is the lead agency and approval agency for the Project for the purposes of CEQA. This Draft EIR has been prepared in accordance with USEPA's CEQA-Plus requirements to fulfill the requirement of potential federal funding partners to comply with the National Environmental Policy Act (NEPA). The general conformity requirements apply only to federal actions proposed in nonattainment areas⁵ and in maintenance areas.⁶ As shown in Table 3.2-2, above, the Air Basin is currently in extreme nonattainment for ozone (VOCs or NO_x). Few to no quantifiable and foreseeable lead emissions would be generated by the federal actions. Thus, for purposes of the general conformity requirements, this evaluation addresses NO₂, ozone (VOC and NO_x), CO, PM₁₀, and PM_{2.5}.

The general conformity requirements apply to a federal action for each pollutant for which the total of direct and indirect emissions caused by the federal action would equal or exceed the applicability rates shown in **Table 3.2-6**. These emission rates are expressed in units of tons per year and are compared to the total of direct and indirect emissions caused by federal actions for the

⁵ Areas where one or more NAAQS are not being achieved at the time of the proposed action and SIP provisions are required to demonstrate how attainment will be achieved.
⁶ Areas recently reclassified from nonattainment to attainment and requiring SIP provisions pursuant to CAA Section 175A to demonstrate how attainment will be maintained.

calendar year during which the net emissions are expected to be the greatest. It should be noted that, because ozone is a secondary pollutant (i.e., it is not emitted directly into the atmosphere but is formed in the atmosphere from the photochemical reactions of VOC and NO_x in the presence of sunlight), its applicability rate is based on primary emissions of its precursor pollutants—VOC and NO_x. If the net emissions of either VOC or NO_x would equal or exceed the applicability rate for ozone, then the federal actions are subject to a general conformity evaluation for ozone.

TABLE 3.2-6
GENERAL CONFORMITY *DE MINIMIS* THRESHOLDS

Criteria Pollutant	Tons/Year
Ozone (VOCs)	10
CO	100
NO ₂	10
PM ₁₀	100
PM _{2.5}	70
Lead	25

NOTES: CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; ROG = reactive organic gases; VOC = volatile organic compound

SOURCE: Code of Federal Regulations Title 40, Sections 93.153(b)(1) and 93.153(b)(2).

If these thresholds are exceeded, General Conformity Rule compliance can be demonstrated in one of the following ways:

1. Reduce emissions to below the General Conformity *de minimis* thresholds.
2. Show that emissions are included in the area's emission budget for the SIP.
3. Demonstrate that the state will include the emissions in the area's SIP emissions budget and the budget will not be exceeded.
4. Implement project emission offsets for each year the General Conformity *de minimis* thresholds are exceeded.
5. Conduct air quality modeling to demonstrate that the project would not cause or exacerbate a violation or exceedance of an NAAQS.

Compliance with the General Conformity Rule must be demonstrated before the start of construction activities.

Methodology

The methodology for evaluating potential impacts of construction and long-term operation of the Proposed Project on regional and local air quality is discussed below.

Consistency with Air Quality Management Plan

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Air Basin is in nonattainment of the NAAQS (e.g., ozone and PM_{2.5}).⁷ SCAQMD's 2022 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS for these pollutants, including transportation control strategies from SCAG's 2045 RTP/SCS designed to reduce VMT (SCAQMD 2022a). The 2022 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG (SCAQMD 2022a).

For this reason, projects whose growth is consistent with the assumptions used in the 2022 AQMP are consistent with the 2022 AQMP, because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2022 AQMP. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2022 AQMP would not jeopardize attainment of the air pollutant reduction goals identified in the AQMP even if their emissions would exceed SCAQMD's numeric indicators (SCAQMD 1993).

As noted above, the 2022 AQMP has been adopted by SCAQMD and CARB. Therefore, consistency with the 2022 AQMP was evaluated based on consistency with the plan's applicable growth projections and emission control strategies.

Construction Emissions

Alternative 4 and certain elements of Alternative 2 were chosen for a quantitative construction analysis because they would utilize the most equipment that would operate simultaneously and would have the most overlapping construction phases. As shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 has the greatest amount of Topanga Lagoon grading acreage and Topanga Beach expansion acreage and the largest total number of parking spaces, and would relocate PCH slightly to the north. As shown in Table 6-1, Alternative 2 has the greatest amount of Topanga Lagoon fill removal volume and debris volume, from the proposed removal of all 25 Topanga Ranch Motel structures. Therefore, Alternative 4 and the Alternative 2 elements discussed above were combined to identify a worst-case scenario. Alternative 3 has considerably less fill removal volume than either Alternative 2 or Alternative 4.

As discussed in Chapter 2, *Project Description*, removal of the existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the three Build Alternatives (Alternatives 2, 3, and 4). Thus, the analysis of the Build Alternatives accounts for the beneficial reuse options.

As discussed in Chapter 2, *Project Description*, the Build Alternatives (Alternatives 2, 3, and 4) include options for supporting wastewater needs. Once a final preferred alternative is selected,

⁷ The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this is attributable to localized emissions from two lead-acid battery recycling facilities in the city of Vernon and the City of Industry that are no longer operating (SCAQMD 2012).

only one of the wastewater options would be carried forward to final design. For the purposes of this analysis, wastewater management Option 1 (subsurface drip irrigation [SDI]) is accounted for in the impact analysis for the Build Alternatives. Option 2 (seepage pits) and Option 3 (sewer) were also analyzed to determine whether selecting either of these options would result in air quality impacts.

Regional Emissions

For the analysis, as discussed above and shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 and certain elements of Alternative 2 were modeled as a combined worst-case scenario and to represent the maximum impacts of the Build Alternatives, as they would involve the greatest level of on-site construction activity and provide the greatest amount of haul truck VMT from transporting the greatest amount of material.

As discussed in Chapter 2, *Project Description*, of this Draft EIR, Alternative 4 would increase the lagoon restoration area to 7.6 wetted acres, and would increase the beach from 4.18 acres to 4.56 acres. This alternative would move the alignment of PCH north, would increase the bridge to 460 feet, and would include 760 feet of 4- to 12-foot-high retaining walls along the northern shoulder of PCH. The existing lifeguard and public restroom building would be relocated upslope of its current location and north of the existing access road. The helipad and new parking garage would be relocated adjacent to it on the west. The Topanga Beach parking lot would be modified to reduce spaces in the existing paved lot on the west end, expand spaces on the east end, and slightly shift the orientation of the lot shape to accommodate a new access road to the beach lifeguard and public restroom building and garage, Americans with Disabilities Act parking, and helipad. Additional spaces would be added on the west edge of the Project area where there are no spaces currently. The total graded area would be 14.4 acres. Additionally, a 91-foot-long, 4- to 6-foot-tall concrete masonry unit (CMU) retaining wall would be needed on the south side of the PCH bridge to support the slopes on the east side.

Under Alternative 2, approximately 256,000 cubic yards (CY) of soil would be removed from the existing fill areas to contour the new lagoon. All existing 25 structures of the Topanga Ranch Motel and all other buildings on State Parks property except for one business lease would be fully removed, generating an estimated 10,810 CY of debris that would need to be trucked away. Assuming the potential for asbestos, the air quality analysis used Alternative 2's greater fill removal volume and debris removal volume for this worst-case scenario with additional metrics from Alternative 4 to analyze the total emissions.

Aerially deposited lead, or ADL, may be present in shallow soil along the shoulders of the roads, given their historical use as automotive thoroughfares. For analysis purposes, it was assumed that the top 3 feet of soil below the pavement approaches to the PCH bridge is ADL-contaminated soil. If present, these soils would be disposed of at a hazardous materials landfill. Soils removed below a depth of 3 feet in the roadway excavation are assumed to be clean, based on soil characterization studies, and would not require any special handling. The analysis assumes that these soils would be taken to the Kettleman Hills Hazardous Waste Facility in the San Joaquin

Valley. The assumed volumes of ADL-contaminated material to be removed and transported to the Kettleman Hills Hazardous Waste Facility are 23,000 CY for Alternatives 2 and 3 and 26,000 CY for Alternative 4. This analysis uses Alternative 4's higher ADL volume.

The future visitor services would be located at the "Gateway Corner" (at the intersection of TCB and PCH). The one exception is that a maximum 2,400-square-foot (sf) concession could continue to exist at the current location of the Reel Inn restaurant just southeast of the historic motel. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. A small picnic area, trailhead, and day-use parking would also be included. Additional day-use parking would be developed to the north on a 500-foot-long section along the western shoulder of TCB. This area was previously developed and would be located on existing fill.

As discussed in Chapter 2, *Project Description*, to ensure that the bridge and lagoon restoration portion of the Proposed Project would not constrain traffic during construction, a temporary bridge would be constructed on the coastal side of the existing PCH bridge. The temporary bridge would accommodate two lanes of traffic while the new bridge is under construction. (Note: It may be possible to develop alternative strategies for maintaining access at all times for all four lanes in the later design development phase once a preferred alternative is selected.)

In summary, the sources of criteria pollutant emissions during construction of the Proposed Project would include the following:

- Fill removal at the lagoon.
- Expansion of the PCH bridge.
- Expansion of the beach area.
- Demolition and disposal of construction debris from the roadway and temporary bridge.
- Restoration of buildings at the Topanga Ranch Motel for future visitor services.
- Demolition and relocation of the lifeguard and public restroom building, helipad, and parking lots.
- Construction of a new two-car garage, concession building at the site of the current Reel Inn, outdoor interpretive pavilion/restroom, maintenance facility, small picnic area, and small staff parking garage.

Construction would start in 2027 and last for up to five years. Construction activities would be based on Caltrans standards but generally will occur between 6: a.m. to 6:00 p.m., Monday through Friday; however, some nighttime work may be required to accommodate certain construction elements and/or the construction schedule, and contractors are anticipated to have full access to the Project site at all times. The emissions of criteria air pollutants associated with construction of the Proposed Project were calculated for each construction phase by year. Construction emissions were forecasted by assuming a conservative estimate of construction activities (i.e., that all construction would occur at the earliest feasible date). Project construction is estimated to start in 2027 but may commence later. Should the onset of construction be delayed

to a later date than assumed in the modeling analysis, construction impacts would be similar to or less than those analyzed: A more energy-efficient, cleaner burning construction equipment and vehicle fleet mix would be expected in the future, because state regulations require construction equipment fleet operators to phase in less-polluting heavy-duty equipment and trucks over time. As a result, should the Proposed Project commence construction on a later date than modeled in this air quality impact analysis, air quality impacts would be less than the impacts disclosed herein.

Construction activities associated with wastewater management Option 1 and Option 2 would occur at the same time as construction of any of the Build Alternatives (Alternatives 2, 3, and 4); thus, construction activities would overlap. Option 3 would occur after completion of the Build Alternatives; thus, construction activities would not overlap.

Project construction activities with the potential to create regional air quality impacts include the use of off-road equipment for construction activities; vehicle trips by construction workers, vendor trucks, and haul trucks traveling to and from the Project site; and building activities including the application of paint and other surface coatings. The Proposed Project's daily regional emissions of criteria pollutants during construction were estimated by assuming a conservative scenario for construction activities (i.e., that all construction would occur at the earliest feasible date) and applying the mobile-source and fugitive dust emissions factors.

Construction criteria pollutant emissions for the Proposed Project were estimated using CalEEMod, a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential emissions of criteria pollutants and GHGs from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory) have been provided by the various California air districts to account for local requirements and conditions. The model is an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.⁸

At the time the emissions modeling was conducted, CalEEMod Version 2022.1 (CAPCOA 2022) was the available and approved version. The emissions were estimated using the CalEEMod software and the CARB on-road vehicle emissions factor model (EMFAC2021). CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD) and EMFAC models, which are emissions estimation models developed by CARB that are used to calculate emissions from construction activities, including on- and off-road vehicles. Within CalEEMod, fugitive dust emissions include the application of water as a control measure consistent with SCAQMD Rule 403, which applies to the Proposed Project's construction activities. Fugitive dust control measures are not mitigation under CEQA because they are part of regulatory compliance.

⁸ See <http://www.aqmd.gov/caleemod>.

The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule, based on information provided by the Project's engineering representative. When information was unknown, CalEEMod defaults were used. Emissions from off-road equipment and off-road vehicles were estimated through CalEEMod because CalEEMod is based on outputs from OFFROAD, which, as described above, is the emissions estimation model developed by CARB that is used to calculate emissions from construction activities, including off-road vehicles. Numbers of worker trips were provided by the Project's engineering representative. Similarly, numbers of trips by concrete trucks, vendor trucks, and haul trucks were estimated using quantities and haul truck capacities provided by the Project's engineering representative.

Emissions from trips by workers, haul trucks, concrete trucks, and vendor trucks were estimated using EMFAC2021. Haul truck trip estimates were based on excavation volumes obtained from the Project's engineering representative and 10-CY-capacity haul trucks for the demolition, site preparation, and excavation phases and 10-CY-soil-capacity haul trucks for the lagoon grading/excavation phase. Cement truck trip estimates were based on the Project's engineering representative and 9-CY-concrete-capacity concrete trucks.

Emissions from haul trucks, vendor trucks, and concrete trucks were also estimated outside of CalEEMod using EMFAC2021 emission factors for haul, vendor, and concrete trucks, because CalEEMod assumes that the number of heavy-duty trucks input into the model would occur across the entire length of the applicable construction phases. However, the applicable construction phases would not have the same number of haul trucks, vendor trucks, and concrete trucks on-site every day within each phase. Thus, the emissions calculations performed outside of CalEEMod are able to account for the varying maximum numbers of daily haul truck and concrete truck trips within each of the demolition, site preparation, grading/excavation, trenching, building construction, and paving phases. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate values for criteria pollutant emissions for each construction activity and overlapping construction activities.

For modeling purposes, the Proposed Project was analyzed to export approximately 283,000 CY of soil (combining elements from Alternative 4 and Alternative 2) and approximately 10,810 CY of demolition debris (asphalt, bridge, and general construction debris) from Alternative 2 for off-site disposal. Emissions from these activities were estimated by construction phase. Of the total excavation volume, it is assumed that the Proposed Project would haul approximately 26,000 CY of ADL-contaminated hazardous material and 10,810 CY of demolition debris from the site to a hazardous material disposal site located in Kettleman City, approximately 183 miles from the Project site. Approximately 1,200 CY of the remaining material would be transported to either the Calabasas, Sunshine, or Scholl Canyon Landfill. Of these landfills, the Scholl Canyon Landfill is located the farthest from the Project area, at approximately 36.5 miles away. The remaining 256,000 CY of material would be transported to a nearshore placement site approximately 0.5 mile from the Project site. For the emissions modeling, export trucks for the 256,000 CY of

material were assumed to travel to the Scholl Canyon Landfill, which would result in the greatest truck VMT and associated emissions.

The maximum daily emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources, and do not represent the emissions that would occur every day during Proposed Project construction. The maximum daily overlapping emissions were compared to the SCAQMD daily regional and localized thresholds of significance. The maximum annual emissions were compared to the SJVAPCD regional thresholds of significance and the USEPA *de minimis* thresholds.

Localized Emissions

Project construction activities would have the potential to create local air quality impacts from fugitive dust generated by grading, excavation and demolition, and building activities such as the application of paint and other surface coatings. The localized effects from the on-site portion of the Proposed Project's construction emissions were evaluated at the nearby sensitive receptor locations that could be affected by Project construction in accordance with SCAQMD's *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008) (SCAQMD 2008). The localized significance thresholds address only NO_x, CO, PM₁₀, and PM_{2.5} emissions. SCAQMD has established screening criteria for determining the maximum allowable daily emissions that would satisfy the localized significance thresholds, and that therefore would not cause or contribute to an exceedance of the applicable ambient air quality standards without the need for Project-specific dispersion modeling. The localized analysis for the Proposed Project is based on these SCAQMD screening criteria.

Under Alternative 4, approximately 14.4 acres of the Project site would be graded and most of the site would be left as open space. It was assumed that no more than 5 acres would be disturbed on any given day. The Project site is in SCAQMD's Northwest Coastal LA County Source Receptor Area 2. To provide a conservative assessment of localized construction emissions, the screening criteria used in the analysis were those applicable to a 5-acre site in SCAQMD's Northwest Coastal LA County Source Receptor Area 2 with sensitive receptors located 25 meters away, which accounts for all adjacent off-site sensitive receptors (SCAQMD 2009).^{9,10} The maximum net daily emissions from construction of the Proposed Project were compared to these screening criteria.

In addition, according to the SCAQMD *Final Localized Significance Threshold Methodology*, "projects whose calculated emission budgets for the proposed construction or operational activities are above the localized significance thresholds emission levels found in the localized significance thresholds mass rate look-up tables should not assume that the project would necessarily generate adverse impacts. Detailed air dispersion modeling may demonstrate that

⁹ "Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs [localized significance thresholds] for receptors located at 25 meters."

¹⁰ Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site-dependent and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project site's proposed development area of 14.4 acres yields a more stringent analysis.

pollutant concentrations are below localized significant levels” (SCAQMD 2008). Therefore, for any of the pollutants for which the Proposed Project would exceed the applicable localized significance thresholds, the localized significance of Project air pollutant emissions may be determined by performing dispersion modeling to determine whether the pollutant concentrations would exceed relevant significance thresholds established by SCAQMD.

Operational Emissions

Operation of the Proposed Project would generate criteria pollutant emissions from vehicle trips traveling to the Project site from within the region, energy sources such as natural gas combustion, and area sources such as landscaping equipment. As discussed above, existing operations at the Project site including the lifeguard and public restroom building would be relocated, as would the helipad, and criteria pollutant emissions associated with these uses under the Proposed Project would be comparable to current criteria pollutant emissions. The Proposed Project would also include a new two-car garage, which would not generate significant criteria pollutant emissions. Under all Build Alternatives (Alternatives 2, 3, and 4), four of the five currently operating business leases would be shut down and one concession would be retained at the site of the current Reel Inn.

For all Build Alternatives, the replacement bridge width is proposed at 90 feet to maintain the existing four-lane configuration of PCH with a center turn lane. The four travel lanes and median would all be 12 feet in width and would contain shoulders consistent with Caltrans standards.

Depending on the Build Alternative, for programmatic Topanga State Park visitor services, some or all buildings of the Topanga Ranch Motel would be either demolished, removed, or retained and restored and used for future visitor services, which could include overnight accommodations and park facilities such as employee housing, park offices, maintenance, and a storage facility. Although these facilities are mostly vacant, some of the buildings are still used today for storage and one is used for employee housing. Furthermore, the Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area; they would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details) and associated mobile-source emissions. Therefore, the Proposed Project’s criteria pollutant emissions would be comparable to or likely less than existing criteria pollutant emissions, but they would be slightly greater under Alternative 3 or Alternative 4, which would retain portions of the Topanga Ranch Motel, than under Alternative 2.

The Gateway Corner would also be developed with a restroom/outdoor interpretive pavilion, an employee residence (Alternative 2 only), and a maintenance/office facility (all Build Alternatives). Although these are new facilities, their criteria pollutant emissions would be similar to or less than those from the five currently operating business leases, which would be shut down.

Thus, the Proposed Project's operational emissions of criteria pollutants would be comparable to or likely less than existing criteria pollutant emissions at the Project site. For this reason, the Project's operational criteria pollutant emissions were not quantified.

Carbon Monoxide Hotspots (Construction and Operations)

The pollutant of primary concern when assessing the Proposed Project's impacts at local intersections is CO because an elevated concentration of CO tends to accumulate near areas of heavy traffic congestion and low average vehicle speeds. Tailpipe emissions are of concern when assessing localized impacts of CO along paved roads.

An adverse concentration of CO, known as a *hotspot*, would occur if there were an exceedance of the NAAQS or CAAQS. SCAQMD does not currently have guidance for conducting intersection hotspot analyses. However, Caltrans has guidance for evaluating CO hotspots in its *Transportation Project-Level Carbon Monoxide Protocol (CO Protocol)* (Caltrans 2010). Caltrans' CO Protocol provides detailed guidance regarding which modeling programs to use, calculation of emission rates, receiver placement, calculation of one-hour and eight-hour concentrations, and utilization of background concentrations.

The potential for the Proposed Project to cause or contribute to CO hotspots was evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of its AQMPs and considering existing background CO concentrations.

Toxic Air Contaminants Impacts (Construction and Operations)

Construction and operational activities under the Proposed Project have the potential to result in health risk impacts (cancer or other acute or chronic conditions) related to TAC exposure from airborne emissions, specifically DPM emissions. Health risk is a localized impact based on exposure of sensitive receptors to construction and operational activities that emit TACs. Health risk is discussed qualitatively in this analysis based on the potential for TAC emissions to exceed threshold values in the context of development intensity, proximity to sensitive receptors, and compliance with regulatory emissions standards.

General Conformity Analysis

Construction emissions for the general conformity analysis were calculated as described above and criteria pollutant emissions were compared to the *de minimis* thresholds in Table 3.2-6 for each year of construction. As discussed above, operational emissions were assessed qualitatively because they are expected to be relatively the same as existing emissions.

Air Quality Plan Analysis

AIR 3.3-1: The Project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts would be less than significant.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing facilities and generation of air pollutant emissions. Alternative 1 would not involve substantial construction or operation that would increase air pollutant emissions over existing conditions. Alternative 1 would not involve any construction activities or operational changes to the existing PCH bridge, Topanga Lagoon, Topanga Beach, or visitor services. There would be no change to the lagoon footprint or habitat quality, and no new bridge would be constructed. Damage to the lifeguard and public restroom building from coastal erosion would continue to occur; the currently dilapidated Topanga Ranch Motel structures would continue to deteriorate without restoration; and existing non-conforming business leases and septic systems would remain in current operation but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies.

There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel) and the eroding lifeguard and public restroom building, and potential advanced on-site wastewater treatment system (AOWTS) upgrades. These activities would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than under any of the Build Alternatives. No improvements to habitat would occur. Sea level rise and coastal erosion would continue to reduce the available beach area, further damage existing facilities, and reduce available habitat for fish and wildlife. Therefore, Alternative 1 would not generate substantial criteria pollutant emissions, would not result in population or long-term employment growth, and would not conflict with or obstruct implementation of the applicable AQMP. Impacts would be less than significant.

Alternatives 2, 3, and 4 (Build Alternatives)

SCAQMD states that, when determining whether a project is consistent with the applicable AQMP, the lead agency should assess whether the project:

- (1) Would directly obstruct implementation of the plan, by impeding SCAQMD's efforts to achieve attainment for any criteria air pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM₁₀, and PM_{2.5}).
- (2) Is consistent with the demographic and economic assumptions (typically land use-related, such as employment and population/residential units) upon which the plan is based.

SCAQMD numerical significance thresholds for construction emissions are designed for the analysis of individual projects. If emissions would exceed the project-specific thresholds established by SCAQMD, impacts could be significant. SCAQMD guidance indicates that projects whose growth is included in the projections used in the formulation of the AQMP are consistent with the plan and would not interfere with its attainment even if the numerical significance thresholds would be exceeded (SCAQMD 1993).

As discussed above, SCAQMD has adopted a series of AQMPs to lead the Air Basin into compliance with several criteria air pollutant standards and other federal requirements, while considering construction and operational emissions associated with population and economic growth projections provided by SCAG. The 2022 AQMP incorporates population and economic growth projections from SCAG's 2045 RTP/SCS.

CEQA requires that projects be evaluated for consistency with the AQMP. Because the AQMP strategy is based on projections from local general plans, only new or amended general plan elements, specific plans, or individual projects under the general plan need to undergo a consistency review. Projects considered consistent with the local general plan are consistent with the air quality-related regional plan. Indicators of consistency include:

- **Control Strategies:** Whether implementation of a project would increase the frequency or severity of existing air quality violations; would cause or contribute to new violations; or would delay the timely attainment of AAQS or interim emissions reductions within the AQMP.
- **Growth Projections:** Whether implementation of the project would exceed growth assumptions within the AQMP, which in part, bases its strategy on growth forecasts from local general plans.

Construction

Control Strategies

The Air Basin is designated nonattainment for ozone and PM_{2.5} under the NAAQS and CAAQS, nonattainment for lead (Los Angeles County only) under the NAAQS, and nonattainment for PM₁₀ under the CAAQS. The Proposed Project would be primarily the expansion of a lagoon and beach and the replacement of a bridge. Additionally, the Proposed Project could include the creation of a trail system through the Project site and the provision of pedestrian access under PCH on the east and west sides of Topanga Lagoon. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by bus Route 534. The County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between the San Fernando Valley and Topanga Beach (see Section 3.16, *Transportation and Circulation*). As evidenced, the Proposed Project would not be growth inducing.

The Proposed Project would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, as applicable to the type of growth, the Proposed Project would comply with fleet rules to reduce on-road truck emissions. Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

The Project's criteria air pollutant construction emissions were analyzed to (1) ascertain potential effects on localized concentrations and (2) determine whether there is a potential for emissions to

cause or effect a violation of the ambient air quality standards. As shown in **Table 3.2-7**, localized construction emissions of ROG, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} would not exceed the localized significance thresholds at sensitive receptors near the Project site. Therefore, construction of the Proposed Project would be consistent with the AQMP under the first indicator. Alternative 2 would have a slightly bigger lagoon expansion, resulting in more fill material disposal, but it would have fewer truck miles overall because of the potential for nearshore placement (although as noted previously, for the purposes of this analysis, landfill disposal of fill material is evaluated conservatively). Therefore, localized impacts of the Proposed Project under maximum impact assumptions, based on a combination of Alternative 2 and Alternative 4 parameters, would not exceed significance thresholds at sensitive receptors. Alternative 3 would have slightly smaller lagoon and beach areas than the other Build Alternatives. Localized impacts would be similar but slightly lower than the Project at sensitive receptors.

**TABLE 3.2-7
 TOTAL LOCALIZED EMISSIONS SUMMARY—SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Localized Maximums	NO _x	CO	Total PM ₁₀	Total PM _{2.5}
Source	lb/day			
Demo + Parking Provisions – 2027	16	19	2.0	0.8
Unsuitable Material Replacement – 2027 SCAB ^a	15	16	3.4	1.9
Relocate Utilities – 2027	2	3	0.1	<0.1
Construct Temp Bridge – Grading – 2027 ^b	15	16	3.4	1.9
Construct Temp Bridge – BC – 2027	7	7	0.3	0.3
Construct Temp Bridge – Paving – 2027	13	14	0.6	0.5
Visitor Services – Site Preparation – 2027	3	6	0.4	0.2
Visitor Services – Grading – 2027 ^b	11	12	3.3	1.8
Visitor Services – Building Construction – 2027	7	9	0.2	0.2
Visitor Services – Paving – 2027	5	6	0.2	0.2
Visitor Services – Architectural Coating – 2027	1	2	<0.1	<0.1
NB Road/Bridge – Demo – 2028	3	4	0.2	0.1
NB Road/Bridge – Grading – 2028 ^b	14	16	3.4	1.9
NB Road/Bridge – BC – 2028	6	7	0.3	0.3
NB Road/Bridge – Paving – 2028	12	14	0.6	0.5
SB Road/Bridge – Demo – 2029	3	4	0.2	0.1
SB Road/Bridge – Grading – 2029 ^b	13	16	3.3	1.8
SB Road/Bridge – BC – 2029	6	7	0.3	0.3
SB Road/Bridge – Paving – 2029	12	14	0.5	0.5
Demo Temp Bridge – 2030	3	4	0.2	0.1
Construct DBH Facilities – 2030	6	7	0.3	0.2
Lagoon Grading – 2030 ^b	5	8	0.4	0.2
Restore Beach Area – 2030	3	6	0.3	0.1

Overlapping Phases	NO _x	CO	Total PM ₁₀	Total PM _{2.5}
Source	lbs/day			
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + Visitor Services – Site Preparation – 2027	34	40	5.7	2.9
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + Visitor Services – Grading – 2027	42	47	8.6	4.6
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + Visitor Services – Building Construction – 2027	37	44	5.6	3.0
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027	39	47	5.7	3.0
Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027 + 'Visitor Services – Paving – 2027 + Visitor Services – Architectural Coating – 2027	14	20	0.5	0.5
Relocate Utilities – 2027 + Construct Temp Bridge – Grading – 2027	16	19	3.4	2.0
Relocate Utilities – 2027 + Construct Temp Bridge – BC – 2027	9	10	0.4	0.4
Project Daily Localized Maximum Emissions	42	47	8.6	4.6
SCAQMD Localized Significance Thresholds^c	221	1,531	13	6
Exceeds Thresholds?	No	No	No	No
Wastewater Option 2 – 2030	3	5	0.4	0.2
Wastewater Option 3 – 2031	12	16	3.3	1.8
Project Daily Localized Maximum Emissions (Max of Option 2 or Option 3)	46	52	9.0	4.7
SCAQMD Localized Significance Thresholds^c	221	1,531	13	6
Exceeds Thresholds?	No	No	No	No

NOTES:

BC = Building Construction; CO = carbon monoxide; DBH = County of Los Angeles Department of Beaches and Harbors; Demo = demolition; lb/day = pounds per day; Max = maximum; NB = northbound; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; ROG = reactive organic gases; SB = southbound; SCAB = South Coast Air Basin; SCAQMD = South Coast Air Quality Management District; SO₂ = sulfur dioxide; Temp = temporary; VOC = volatile organic compound

^a Demolition of existing structures and associated unsuitable material replacement assumes that any hazardous material would be hauled to a disposal site in Kettleman City, with 77 miles of the trip occurring inside the South Coast Air Basin and 106 miles occurring in the San Joaquin Valley Air Basin.

^b Exported non-hazardous material is assumed to travel to the Scholl Canyon Landfill, approximately 36.5 miles from the Project site.

^c Localized Significance Thresholds are based on a 5-acre site within 25 meters of a sensitive receptor and located in Source Receptor Area 2

SOURCE: Data compiled by Environmental Science Associates in 2022 and 2023 (see the emissions calculations provided in Appendix P of this Draft EIR).

Growth Projections

The Proposed Project would result in an increase in short-term employment compared to existing conditions during construction. Although the construction anticipated to occur under the Proposed Project would generate construction workers, it would not necessarily create new construction jobs; construction-related jobs generated by the Proposed Project would likely be filled by employees within the construction industry within the greater Los Angeles County region.

Construction industry jobs generally have no regular place of business, as construction workers

commute to jobsites throughout the region, which may change several times a year. Moreover, these jobs would be temporary. Therefore, the construction jobs generated by the Proposed Project would not conflict with the long-term employment or population projections upon which the AQMPs are based.

Operation

Control Strategies

The Proposed Project would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and to the extent applicable, the growth projections in the 2045 RTP/SCS, which are incorporated into the 2022 AQMP. The AQMP includes land use and transportation strategies from the 2045 RTP/SCS that are intended to reduce VMT and resulting regional mobile-source emissions. The applicable land use strategies include planning for growth around livable corridors; providing a sustainable “green” region where the built and natural environments coexist; urban greening; providing vehicle charging stations; and supporting local sustainability planning.

The location, design, and land uses of the Proposed Project would implement land use and transportation strategies related to reducing vehicle trips for visitors. A few transit agencies provide local and regional transit service within the Project area, including Metro and the County Department of Public Works. Additionally, the Proposed Project could create a trail system through the Project site that would connect to the California Coastal Trail and provide pedestrian access under PCH on the east and west sides of Topanga Lagoon. All Build Alternatives would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). The Proposed Project outlines strategies for increasing and protecting natural and working lands, increasing active transportation, providing wildlife habitat and increased biodiversity, and expanding recreation opportunities and beautification consistent with core visions in the 2045 RTP/SCS. Therefore, the Proposed Project would not conflict with AQMP land use and transportation strategies that are intended to reduce VMT and resulting regional mobile-source emissions and would result in a less-than-significant impact on air quality. The Proposed Project would be consistent with the AQMP under the first indicator.

Growth Projections

The 2022 AQMP was prepared to accommodate growth, reduce pollutant levels in areas under SCAQMD jurisdiction, return clean air to the region, and minimize impacts on the economy. The Proposed Project is primarily the expansion of a lagoon and beach and the replacement of a bridge. Additionally, the Proposed Project could include the creation of a trail system through the Project site that would connect to the California Coastal Trail and provision of pedestrian access under PCH on the east and west sides of Topanga Lagoon. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by bus Route 534. The County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between the San Fernando Valley and Topanga Beach.

The Proposed Project would not be growth inducing, so it would not conflict with the long-term employment or population projections upon which the 2022 AQMP is based. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. Thus, the Proposed Project's design and land uses render it consistent with the 2022 AQMP, and impacts would be less than significant.

Wastewater Management Options

Wastewater Option 1 (SDI) and Option 2 (seepage pits) would both require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Connection to the public sewer (Option 3) would involve the construction of an extension of the Los Angeles County Sanitation Districts (LACSD) public sewer from existing facilities and would take an additional year to construct.

As described above, the Proposed Project's design and land uses render it consistent with the 2022 AQMP, and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction

Control Strategies

Under Alternative 2, all 25 structures associated with the Topanga Ranch Motel would be removed. Assuming the worst-case scenario, this would involve hauling an estimated 10,810 CY to the Kettleman Hills Hazardous Waste Facility. Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be present. All other existing on-site business leases and structures would be removed.

The Air Basin is designated nonattainment for ozone and PM_{2.5} under the NAAQS and CAAQS, nonattainment for lead (Los Angeles County only) under the NAAQS, and nonattainment for PM₁₀ under the CAAQS. The Proposed Project would be primarily the expansion of a lagoon and beach and the replacement of a bridge. Depending on the Build Alternative selected, some or all buildings of the Topanga Ranch Motel would be either demolished or removed or retained and restored. If retained and restored, the buildings would be used for the future visitor services including overnight accommodations and park facilities such as employee housing, park offices, maintenance, and a storage facility. Under the future visitor services, the Proposed Project plans to develop Gateway Corner, which would be limited in size to protect the rural/urban interface

and create an inviting entrance to lower Topanga State Park. Gateway Corner could include park facilities (such as park office/employee house/maintenance storage), a small outdoor interpretive pavilion/restroom, and a small picnic area. Additionally, the Proposed Project could include the creation of a trail system through the Project site and the provision of pedestrian access under PCH on the east and west sides of Topanga Lagoon. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by bus Route 534. The County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between the San Fernando Valley and Topanga Beach. As evidenced, the future visitor services would not be growth inducing.

Future visitor services would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, as applicable to the type of growth, the Proposed Project would comply with fleet rules to reduce on-road truck emissions. Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

The Project's criteria air pollutant construction emissions were analyzed to (1) ascertain potential effects on localized concentrations and (2) determine whether there is a potential for emissions to cause or effect a violation of the ambient air quality standards. As shown in Table 3.2-7, localized construction emissions of ROG, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} would not exceed the localized significance thresholds at sensitive receptors near the Project site. Therefore, construction of future visitor services would be consistent with the AQMP under the first indicator. Alternative 2 would demolish all 25 structures at the Topanga Ranch Motel, while Alternative 3 would retain 20 buildings and Alternative 4 would retain 15 buildings. Therefore, localized impacts would be similar but slightly higher for Alternative 2 because demolition of all buildings would require more trucks to remove debris than under Alternatives 3 and 4.

Growth Projections

Construction of future visitor services would result in an increase in short-term employment compared to existing conditions. Although construction work for future visitor services would generate construction workers, it would not necessarily create new construction jobs; construction-related jobs generated by future visitor services would likely be filled by employees in the construction industry within the greater Los Angeles County region. Construction industry jobs generally have no regular place of business, as construction workers commute to jobsites throughout the region, which may change several times a year. Moreover, these jobs would be temporary. Therefore, the construction jobs generated by future visitor services would not conflict with the long-term employment or population projections upon which the AQMPs are based.

Operation

Control Strategies

Future visitor services would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and to the extent applicable, the growth projections in the 2045 RTP/SCS, which are incorporated into the 2022 AQMP. The AQMP includes land use and transportation strategies from the 2045 RTP/SCS that are intended to reduce VMT and resulting regional mobile-source emissions. The applicable land use strategies include planning for growth around livable corridors; providing sustainable “green” region where the built and natural environments coexist; urban greening; providing vehicle charging stations; and supporting local sustainability planning.

Through their locations, designs, and land uses, future visitor services would implement land use and transportation strategies related to reducing vehicle trips for Los Angeles County residents and employees by increasing commercial and recreational development around transit areas. A few transit agencies provide local and regional transit service within the Project area, including Metro and the County of Public Works. Additionally, the Proposed Project could create a trail system through the Project site that would connect to the California Coastal Trail and provide pedestrian access under PCH on the east and west sides of Topanga Lagoon. The Proposed Project outlines strategies for increasing and protecting natural and working lands, increasing active transportation, providing wildlife habitat and increased biodiversity, and expanding recreation opportunities and beautification consistent with core visions in the 2045 RTP/SCS. Therefore, future visitor services would not conflict with AQMP land use and transportation strategies intended to reduce VMT and resulting regional mobile-source emissions, and thus would result in a less-than-significant impact on air quality.

Growth Projections

The 2022 AQMP was prepared to accommodate growth, reduce pollutant levels in areas under SCAQMD jurisdiction, return clean air to the region, and minimize impacts on the economy. The Proposed Project would be primarily the expansion of a lagoon and beach and the replacement of a bridge. Additionally, under the future visitor services, the Proposed Project plans to develop Gateway Corner, which would be limited in size to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. Gateway Corner could include a concession, park facilities (such as park office/employee house/maintenance storage), a small outdoor interpretive pavilion/restroom, and a small picnic area. Alternative 2, for the future visitor services, proposes to demolish the 25 abandoned and deteriorating structures associated with the Topanga Ranch Motel and redevelop the area with park facilities, concessions, and parking. Under Build Alternatives 3 and 4, approximately 15–20 structures of the Topanga Ranch Motel would be retained for future visitor services, which could include a mix of overnight accommodations and park facilities. Additionally, the Proposed Project could include the creation of a trail system through the Project site and the provision of pedestrian access under PCH on the east and west sides of Topanga Lagoon. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by bus Route 534. The County Department of Public Works also provides the Topanga

Beach Bus, which provides low-cost, daily, year-round service between the San Fernando Valley and Topanga Beach.

The future visitor services would not be growth inducing, so they would not conflict with the long-term employment or population projections upon which the 2022 AQMP is based. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Air Quality Standard Violation

AIR 3.3-2: The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing facilities and generation of criteria pollutant emissions. Alternative 1 would not involve construction or operations that would generate new pollutant emissions exceeding SCAQMD significance thresholds or USEPA *de minimis* emission levels. Alternative 1 would not involve any construction activities or operational changes to the existing PCH bridge, Topanga Lagoon, Topanga Beach, or visitor services. As such, there would be no change to the lagoon footprint or habitat quality, and no new bridge would be constructed. Damage to the lifeguard and public restroom building from coastal erosion would continue to occur; the currently dilapidated Topanga Ranch Motel structures would continue to deteriorate without restoration; and existing non-conforming business leases and septic systems would remain in current operation but may be subject to future restriction or cessation of use with the enforcement of recent statewide wastewater policies. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel) and the eroding lifeguard and public restroom building, and potential on-site AOWTS upgrades. These activities would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than under any of the Build Alternatives. No improvements to habitat would occur. Sea level rise and coastal erosion would continue to reduce the available beach area, further damage existing facilities, and reduce available habitat for fish and wildlife. As such, Alternative 1 would have a less-than-significant impact with respect to a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment.

Impacts would be less under Alternative 1 than they would be under the Build Alternatives (Alternatives 2, 3, and 4).

Alternatives 2, 3, and 4 (Build Alternatives)

Ozone, NO₂ and VOC/ROG (as ozone precursors), PM₁₀, and PM_{2.5} are pollutants of concern, as the Air Basin has been designated as a federal nonattainment area for ozone and PM₁₀ and as a state nonattainment area for ozone, PM₁₀, and PM_{2.5}. The Air Basin is currently in attainment for the federal and state CO, SO₂, and NO₂ standards and the federal PM₁₀ standard. SCAQMD has established numerical significance thresholds for regional emissions during construction and operation. The numerical significance thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.

Construction

Construction activities using heavy-duty construction equipment could create regional air quality impacts. Specifically, such impacts could be created by vehicle trips and haul trips initiated by construction workers traveling to and from each specific Project location. Construction activities would also generate fugitive dust emissions. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions could vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Proposed Project construction is anticipated to begin in 2027 and continue for up to approximately five years.

Alternative 2 and Alternative 3 would require grading of a total of 13.6 and 12.8 acres, respectively, as compared to 14.4 acres under Alternative 4. Under all Build Alternatives, Topanga Beach would be expanded from its current 4.18 acres. Alternatives 2 and 3 would expand the beach to 4.39 acres and 4.42 acres, respectively, as compared to 4.56 acres for Alternative 4. All Build Alternatives would expand Topanga Lagoon. Alternative 2 would have the largest expansion of the lagoon wetted area, 9.5 acres, as compared to 7.7 acres for Alternative 3 and 7.6 acres for Alternative 4. As such, Alternative 2 would also require the most fill removal and disposal, and Alternative 3 would require the least. Fill material would be either hauled by truck to the nearest accepting landfill or placed for nearshore disposal pending approval by the U.S. Army Corps of Engineers (USACE). If nearshore deposition is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse. The volume of fill material removed to restore the lagoon would range from 256,000 CY for Alternative 2, 210,000 CY for Alternative 4, to a low of to 166,000 CY for Alternative 3.

Alternatives 2 and 3 would lengthen the bridge to 460 feet and keep the alignment of PCH. Alternative 4 would change the alignment of PCH to the north, lengthen the bridge to 460 feet, and include construction of retaining walls. Under the Build Alternatives, approximately 10,810 CY (Alternative 2), 8,250 CY (Alternative 3), or 8,810 CY (Alternative 4) of construction debris from demolition of the bridge and structures including the Topanga Ranch Motel would be hauled

off-site for placement. Removal of ADL-contaminated material to be transported to the Kettleman Hills Hazardous Waste Facility would total 23,000 CY for Alternatives 2 and 3 and 26,000 CY for Alternative 4.

Fill material would be either hauled by truck to the nearest accepting landfill or placed for nearshore disposal pending approval by USACE. If nearshore placement is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse.

Alternatives 2 and 4 would demolish the lifeguard and public restroom building and relocate it directly upslope of its current location. The helipad and new two-car parking garage would be relocated adjacent to the lifeguard and public restroom building on the west. The existing parking lots would be modified. Alternative 3 would relocate the lifeguard and public restroom building directly upslope and to the east of its current location. The helipad would be relocated to the western edge of the parking lot and the new two-car parking garage would be located under the helipad at the beach access road level. Retaining walls would be needed to support the helipad on top of the garage (92 feet of CMU wall 8–10 feet tall underneath the south side, 72 feet on the north side of the helipad) and a 192-foot-long, 4- to 6-foot-high wall to shore up the fill material supporting the remaining Topanga Ranch units. Existing parking lots would be modified.

As discussed above under *Methodology*, Alternative 4 and certain elements of Alternative 2 were chosen for a quantitative construction analysis because they would utilize the most equipment operating simultaneously and would have the most overlapping construction phases. Although Alternative 4 would have less fill removal than Alternative 2, Alternative 2 would require moving more construction debris a longer distance. Alternative 3 would have considerably less fill and debris removal than either Alternative 2 or Alternative 4. Therefore, Alternative 4 combined with the Alternative 2 elements discussed previously were combined to identify a worst-case analysis.

Wastewater Option 2 (seepage pits) was analyzed quantitatively for construction, which would require approximately three to six months and would generate approximately 1,000 CY of excess fill material. All work and staging areas would be located on State Parks property. Wastewater Option 3 (sewer) was analyzed quantitatively for construction, which would require approximately one additional year of construction with the sewer alignment anticipated to run within the PCH median between Coastline Drive and TCB, then cross PCH to shift to the north or south shoulder of PCH to connect to DBH and State Parks facilities. Approximately 1,000 CY of excess excavated material is anticipated.

The Proposed Project's maximum daily regional construction emissions were estimated for each construction phase (**Table 3.2-8**). **Table 3.2-9** identifies the construction emissions from mobile sources that would be generated by trucks transporting hazardous waste to Kettleman Hills Hazardous Waste Facility. Some individual construction phases could potentially overlap; therefore, the estimated maximum daily emissions include these potential overlaps by combining

the relevant construction-phase emissions. The maximum daily regional emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources; they do not represent the emissions that would occur every day during Proposed Project construction, which would be lower on construction days under typical or below-average construction activity conditions. Detailed emissions calculations are provided in **Appendix P** of this Draft EIR.

**TABLE 3.2-8
TOTAL REGIONAL EMISSIONS SUMMARY—SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Regional Maximums	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	lb/day					
Demo + Parking Provisions – 2027 SCAB ^a	2	32	26	0.2	6.4	2.1
Unsuitable Material Replacement – 2027 SCAB ^a	3	58	36	0.4	14.4	5.2
Relocate Utilities – 2027	<1	2	5	<0.1	0.6	0.2
Construct Temp Bridge – Grading – 2027 ^b	2	17	19	0.1	4.5	2.2
Construct Temp Bridge – BC – 2027	1	8	9	<0.1	1.0	0.5
Construct Temp Bridge – Paving – 2027	2	13	15	<0.1	1.1	0.7
Visitor Services – Site Preparation – 2027	<1	3	6	<0.1	0.5	0.2
Visitor Services – Grading – 2027 ^b	1	11	13	<0.1	3.5	1.9
Visitor Services – Building Construction – 2027	1	7	10	<0.1	0.5	0.3
Visitor Services – Paving – 2027	1	5	8	<0.1	0.7	0.3
Visitor Services – Architectural Coating – 2027	9	1	2	<0.1	0.1	<0.1
NB Road/Bridge – Demo – 2028	<1	4	6	<0.1	1.0	0.3
NB Road/Bridge – Grading – 2028 ^b	2	33	28	0.2	8.0	3.3
NB Road/Bridge – BC – 2028	1	7	9	<0.1	1.0	0.5
NB Road/Bridge – Paving – 2028	2	12	15	<0.1	1.1	0.7
SB Road/Bridge – Demo – 2029	<1	4	6	<0.1	1.0	0.3
SB Road/Bridge – Grading – 2029 ^b	2	31	27	0.2	7.9	3.2
SB Road/Bridge – BC – 2029	1	7	9	<0.1	1.0	0.5
SB Road/Bridge – Paving – 2029	2	12	15	<0.1	1.1	0.6
Demo Temp Bridge – 2030	<1	3	5	<0.1	0.7	0.2
Construct DBH Facilities – 2030	1	6	8	<0.1	0.8	0.4
Lagoon Grading – 2030 ^b	3	77	45	0.5	18.8	5.7
Restore Beach Area – 2030	<1	3	7	<0.1	0.9	0.3

3.2. Air Quality

Overlapping Phases	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	lb/day					
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Site Preparation – 2027	5	93	69	0.5	21.3	7.6
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Grading – 2027	6	101	76	0.5	24.3	9.2
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Building Construction – 2027	6	97	72	0.5	21.3	7.7
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027	6	99	77	0.6	21.9	7.9
Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027 + 'Visitor Services – Paving – 2027 + Visitor Services – Architectural Coating – 2027	11	15	24	<0.1	1.8	0.8
Relocate Utilities – 2027 + Construct Temp Bridge – Grading – 2027	2	20	24	0.1	5.1	2.4
Relocate Utilities – 2027 + Construct Temp Bridge – BC – 2027	1	10	14	<0.1	1.6	0.7
Project Daily Maximum Emissions	11	101	77	0.6	24.3	9.2
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No
Wastewater Option 2 – 2030	1	4	7	<0.1	1.1	0.4
Wastewater Option 3 – 2031	2	13	18	<0.1	4.0	2.0
Project Daily Maximum Emissions (Max of Option 2 or Option 3)	11	106	84	0.6	25.4	9.6
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

NOTES:

BC = Building Construction; CO = carbon monoxide; DBH = County of Los Angeles Department of Beaches and Harbors; Demo = demolition; lb/day = pounds per day; Max = maximum; NB = northbound; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; ROG = reactive organic gases; SB = southbound; SCAB = South Coast Air Basin; SCAQMD = South Coast Air Quality Management District; SO₂ = sulfur dioxide; Temp = temporary; VOC = volatile organic compound

^a Demolition of existing structures and associated unsuitable material replacement assumes that any hazardous material would be hauled to a disposal site in Kettleman City, with 77 miles of the trip occurring inside the South Coast Air Basin and 106 miles occurring in the San Joaquin Valley Air Basin.

^b Exported non-hazardous material is assumed to travel to the Scholl Canyon Landfill, approximately 36.5 miles from the Project site.

SOURCE: Data compiled by Environmental Science Associates in 2022 and 2023 (see the emissions calculations provided in Appendix P of this Draft EIR).

**TABLE 3.2-9
TOTAL REGIONAL EMISSIONS SUMMARY—SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT**

Regional Maximums	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	Tons/year					
Demo + Parking Provisions – 2027 SCAB ^a	<0.1	0.6	0.2	<0.1	0.2	<0.1
Unsuitable Material Replacement – 2027 SJVAB ^a	<0.1	1.0	0.4	<0.1	0.3	0.1
SJVAPCD Regional Significance Thresholds	10	10	100	27	15	15
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

CO = carbon monoxide; Demo = demolition; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SCAB = South Coast Air Basin; SJVAB = San Joaquin Valley Air Basin; SJVAPCD = San Joaquin Valley Air Pollution Control District; SO₂ = sulfur dioxide; VOC = volatile organic compound

^a Demolition of existing structures and associated unsuitable material replacement assumes that any hazardous material would be hauled to a disposal site in Kettleman City, with 77 miles of the trip occurring inside the South Coast Air Basin and 106 miles occurring in the San Joaquin Valley Air Basin.

SOURCE: Data compiled by Environmental Science Associates in 2022 and 2023 (see the emissions calculations provided in Appendix P of this Draft EIR).

The Proposed Project’s maximum daily localized construction emissions for the Project were estimated for each construction phase and are presented in Table 3.2-7, above. Emissions were analyzed conservatively using screening criteria applicable to a 5-acre site in SCAQMD’s Northwest Coastal LA County Source Receptor Area 2 with sensitive receptors located 25 meters away, which accounts for all adjacent off-site sensitive receptors (SCAQMD 2008).^{11,12} Some individual construction phases could potentially overlap; therefore, the estimated maximum daily emissions include these potential overlaps by combining emissions from the relevant construction phases. Maximum daily localized emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources; they do not represent the emissions that would occur every day during Proposed Project construction, which would be lower on construction days under typical or below-average construction activity conditions. Detailed emissions calculations are provided in **Appendix P** of this Draft EIR.

Tables 3.2-7 through 3.2-9 summarize the total regional and localized emissions for all construction phases. As shown in the tables, Project emissions would not result in the exceedance of the regional or localized SCAQMD thresholds or SJAVPCD thresholds, except NO_x emissions, which would exceed the SCAQMD regional significance threshold. Implementation of **Mitigation Measure AIR-1** would be required and would reduce NO_x emissions to below the

¹¹ As stated on page 3-3 of SCAQMD’s *Final Localized Significance Threshold Methodology*, “Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs [localized significance thresholds] for receptors located at 25 meters.”

¹² Using the screening criteria applicable to a 5-acre site is conservative because the localized significance thresholds are project site dependent, and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project site’s full 14 acres yields a more stringent analysis.

SCAQMD regional significance threshold. Therefore, impacts would be less than significant with implementation of mitigation.

General Conformity Analysis

Emissions were calculated for precursors of ozone (VOC/ROG and NO_x), CO, SO₂, PM₁₀, and PM_{2.5} for construction associated with the federal action. Results are summarized in **Table 3.2-10** for each year of construction. The table shows that annual emissions from construction would not exceed the *de minimis* levels for any construction year. Therefore, a general conformity determination is not required. Detailed emissions calculations are provided in **Appendix P** of this Draft EIR.

**TABLE 3.2-10
 EMISSIONS SUMMARY—DE MINIMIS LEVELS**

Regional Maximums	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	Tons/year					
Demo + Parking Provisions – 2027	0.1	0.8	0.7	<0.1	0.2	0.1
Unsuitable Material Replacement – 2027 SCAB ^a	0.1	1.4	0.9	<0.1	0.3	0.1
Relocate Utilities – 2027	<0.1	0.2	0.4	<0.1	0.1	<0.1
Construct Temp Bridge – Grading – 2027 ^b	<0.1	0.3	0.3	<0.1	0.1	<0.1
Construct Temp Bridge – BC – 2027	0.1	0.5	0.6	<0.1	0.1	<0.1
Construct Temp Bridge – Paving – 2027	<0.1	0.4	0.5	<0.1	<0.1	<0.1
Visitor Services – Site Preparation – 2027	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Visitor Services – Grading – 2027 ^b	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Visitor Services – Building Construction – 2027	0.1	0.5	0.7	<0.1	<0.1	<0.1
Visitor Services – Paving – 2027	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Visitor Services – Architectural Coating – 2027	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NB Road/Bridge – Demo – 2028	<0.1	0.1	0.2	<0.1	0.0	<0.1
NB Road/Bridge – Grading – 2028 ^b	0.1	0.8	0.8	<0.1	0.2	0.1
NB Road/Bridge – BC – 2028	0.1	0.8	1.0	<0.1	0.1	<0.1
NB Road/Bridge – Paving – 2028	<0.1	0.2	0.2	<0.1	0.0	<0.1
SB Road/Bridge – Demo – 2029	<0.1	0.1	0.2	<0.1	0.0	<0.1
SB Road/Bridge – Grading – 2029 ^b	0.1	0.8	0.7	<0.1	0.2	0.1
SB Road/Bridge – BC – 2029	0.1	0.7	0.9	<0.1	0.1	<0.1
SB Road/Bridge – Paving – 2029	<0.1	0.2	0.2	<0.1	<0.1	<0.1
Demo Temp Bridge – 2030	<0.1	0.1	0.2	<0.1	<0.1	<0.1
Construct DBH Facilities – 2030	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Lagoon Grading – 2030 ^b	0.2	4.2	2.8	<0.1	1.0	0.3
Restore Beach Area – 2030	<0.1	0.1	0.2	<0.1	<0.1	<0.1
Wastewater Option 2 – 2030	0.1	0.4	0.7	<0.1	0.1	<0.1
Wastewater Option 3 – 2031	0.2	1.3	1.8	<0.1	0.2	0.1

Overlapping Phases	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	Tons/year					
2027	0.4	5.7	4.8	<0.1	1.2	0.4
2028	0.2	1.9	2.1	<0.1	0.4	0.2
2029	0.2	1.8	2.1	<0.1	0.3	0.2
2030	0.3	4.9	4.0	<0.1	1.2	0.4
2031	0.2	1.3	1.8	<0.1	0.2	0.1
Project Annual Maximum Emissions	0.4	5.7	4.8	<0.1	1.2	0.4
General Conformity <i>de minimis</i> Levels	10	10	100	100	70	100
Exceeds <i>de minimis</i> Levels?	No	No	No	No	No	No
General Conformity <i>de minimis</i> Levels	10	10	100	100	70	100
Exceeds <i>de minimis</i> Levels?	No	No	No	No	No	No

NOTES:

BC = Building Construction; CO = carbon monoxide; DBH = County of Los Angeles Department of Beaches and Harbors; Demo = demolition; NB = northbound; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SB = southbound; SCAB = South Coast Air Basin; SO₂ = sulfur dioxide; Temp = temporary; VOC = volatile organic compound

^a Unsuitable material replacement assumes that any hazardous material would be hauled to a disposal site in Kettleman City, with 77 miles of the trip occurring inside the South Coast Air Basin and 106 miles occurring in the San Joaquin Valley Air Basin.

^b Exported non-hazardous material is assumed to travel to the Scholl Canyon Landfill, approximately 36.5 miles from the Project site.

SOURCE: Data compiled by Environmental Science Associates in 2022 and 2023 (see the emissions calculations are provided in Appendix P of this Draft EIR).

Table 3.2-10 summarizes annual construction emissions for the general conformity determination under Alternative 4.

Operations

Operation of the Proposed Project would generate criteria pollutant emissions from vehicle trips traveling to the Project site from within the county, energy sources such as natural gas combustion, and area sources such as landscaping equipment. As discussed above, the existing lifeguard and public restroom building and helipad at the Project site would be relocated, and criteria pollutant emissions for these uses under the Proposed Project would be comparable to existing criteria pollutant emissions. The Proposed Project would also include a new two-car garage, which would not generate substantial emissions of criteria pollutants. The five currently operating businesses would be shut down, with only one anticipated to be replaced under Alternative 2; however, there would be emissions associated with the motel use under Alternatives 3 and 4 and the Gateway Corner emissions under all Build Alternatives (Alternatives 2, 3, and 4).

All Build Alternatives would remove Topanga Ranch Motel structures; Alternative 2 would remove 25 buildings, while Alternative 3 would retain 20 buildings and Alternative 4 would retain 15 buildings. All Build Alternatives would replace the existing lifeguard and public restroom building with new buildings of the same size, improving building energy efficiency. The Build Alternatives would not provide new recreational facilities or substantial additional beach

area that would cause additional visitors to travel to the area, and they would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details).

Thus, Proposed Project emissions would be slightly less than existing emissions, given the shutdown of the five current businesses and overall reduced VMT. Because the Proposed Project's criteria pollutant emissions under all Build Alternatives would be slightly less than existing criteria pollutant emissions, impacts would be less than significant.

Wastewater Management Options

Wastewater management Option 1 (SDI) and Option 2 (seepage pit) both would require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Connection to the public sewer (Option 3) would involve the construction of an extension of the LACSD public sewer from existing facilities and would take an additional year to construct. As described above, Proposed Project emissions would not result in the exceedance of regional or localized SCAQMD thresholds or SJAVPCD thresholds, and Project impacts would be less than significant.

Mitigation Measures

AIR-1: Construction Equipment. The Applicant shall implement the following requirement for construction equipment operating at each Project site. This requirement shall be included in applicable bid documents and contractor(s) must demonstrate the ability to supply such equipment.

- The Project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency Tier 4 Final off-road emissions standards or equivalent for equipment rated at 100 horsepower or greater, where available within the Air Basin. Such equipment shall be outfitted with Best Available Control Technology (BACT), which means a CARB-certified Level 3 diesel particulate filter or equivalent. A copy of each unit's certified tier specification, BACT documentation, and CARB or South Coast Air Quality Management District operating permit at the time of mobilization of each applicable unit of equipment shall be provided.

Significance Determination

Less than Significant with Mitigation Incorporated

Table 3.2-11 identifies the Proposed Project's maximum daily regional construction emissions with mitigation incorporated. As shown in the table, Proposed Project emissions with mitigation incorporated would not result in the exceedance of the regional SCAQMD thresholds. Implementation of **Mitigation Measure AIR-1** would reduce NO_x emissions to below the SCAQMD regional significance threshold. Therefore, impacts would be less than significant with implementation of mitigation.

**TABLE 3.2-11
TOTAL REGIONAL EMISSIONS WITH MITIGATION SUMMARY—
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Regional Maximums	VOC	NO_x	CO	SO₂	Total PM₁₀	Total PM_{2.5}
Source	lb/day					
Demo + Parking Provisions – 2027 SCAB ^a	1	22	26	0.2	5.9	1.7
Unsuitable Material Replacement – 2027 SCAB ^a	1	47	40	0.4	13.9	4.7
Relocate Utilities – 2027	<1	2	5	<0.1	0.6	0.2
Construct Temp Bridge – Grading – 2027 ^b	1	6	23	0.1	4.0	1.7
Construct Temp Bridge – BC – 2027	1	5	11	<0.1	0.9	0.4
Construct Temp Bridge – Paving – 2027	1	3	15	<0.1	0.7	0.3
Visitor Services – Site Preparation – 2027	<1	1	6	<0.1	0.4	0.1
Visitor Services – Grading – 2027 ^b	<1	2	13	<0.1	3.0	1.5
Visitor Services – Building Construction – 2027	<1	4	12	<0.1	0.4	0.2
Visitor Services – Paving – 2027	1	5	8	<0.1	0.7	0.3
Visitor Services – Architectural Coating – 2027	9	1	2	<0.1	0.1	<0.1
NB Road/Bridge – Demo – 2028	<1	4	6	<0.1	1.0	0.3
NB Road/Bridge – Grading – 2028 ^b	1	22	32	0.2	7.6	2.8
NB Road/Bridge – BC – 2028	1	5	11	<0.1	0.9	0.4
NB Road/Bridge – Paving – 2028	1	3	15	<0.1	0.7	0.3
SB Road/Bridge – Demo – 2029	<1	4	6	<0.1	1.0	0.3
SB Road/Bridge – Grading – 2029 ^b	1	21	31	0.2	7.4	2.8
SB Road/Bridge – BC – 2029	1	5	11	<0.1	0.9	0.4
SB Road/Bridge – Paving – 2029	1	3	15	<0.1	0.6	0.2
Demo Temp Bridge – 2030	<1	3	5	<0.1	0.7	0.2
Construct DBH Facilities – 2030	1	4	10	<0.1	0.7	0.3
Lagoon Grading – 2030 ^b	2	74	49	0.5	18.7	5.6
Restore Beach Area – 2030	<1	1	7	<0.1	0.8	0.2
Overlapping Phases	VOC	NO_x	CO	SO₂	Total PM₁₀	Total PM_{2.5}
Source	lb/day					
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Site Preparation – 2027	3	71	73	0.5	20.2	6.6
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Grading – 2027	3	71	80	0.5	22.9	7.9
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Visitor Services – Building Construction – 2027	3	73	78	0.5	20.2	6.7
Demo + Parking Provisions – 2027 + Unsuitable Material Replacement – 2027 SCAB + 'Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027	3	76	83	0.6	20.8	6.9
Relocate Utilities – 2027 + Visitor Services – Building Construction – 2027 + 'Visitor Services – Paving – 2027 + Visitor Services – Architectural Coating – 2027	10	13	26	<0.1	1.7	0.7

Overlapping Phases	VOC	NO _x	CO	SO ₂	Total PM ₁₀	Total PM _{2.5}
Source	lb/day					
Relocate Utilities – 2027 + Construct Temp Bridge – Grading – 2027	1	8	28	0.1	4.6	1.9
Relocate Utilities – 2027 + Construct Temp Bridge – BC – 2027	1	7	16	<0.1	1.5	0.6
Project Daily Maximum Emissions	10	76	83	0.6	22.9	7.9
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No
Wastewater Option 2 – 2030	<1	3	7	<0.1	1.0	0.3
Wastewater Option 3 – 2031	1	4	22	<0.1	3.6	1.6
Project Daily Maximum Emissions (Max of Option 2 or Option 3)	11	78	90	0.6	23.9	8.2
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

BC = Building Construction; CO = carbon monoxide; DBH = County of Los Angeles Department of Beaches and Harbors; Demo = demolition; lb/day = pounds per day; NB = northbound; NO_x = oxides of nitrogen; PM_{2.5} = particulates up to 2.5 micrometers in diameter; PM₁₀ = particulates up to 10 micrometers in diameter; SB = southbound; SCAB = South Coast Air Basin; SO₂ = sulfur dioxide; Temp = temporary; VOC = volatile organic compound

^a Demolition of existing structures and associated unsuitable material replacement assumes that any hazardous material would be hauled to a disposal site in Kettleman City, with 77 miles of the trip occurring inside the South Coast Air Basin and 106 miles occurring in the San Joaquin Valley Air Basin.

^b Exported non-hazardous material is assumed to travel to the Scholl Canyon Landfill, approximately 36.5 miles from the Project site.

SOURCE: Data compiled by Environmental Science Associates in 2022 and 2023 (see the emissions calculations provided in Appendix P of this Draft EIR).

Programmatic Topanga State Park Visitor Services

Construction

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and parking facilities such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be present. All other existing on-site business leases and structures would be removed. Construction activities using heavy-duty construction equipment could create regional air quality impacts. Specifically, such impacts could be created by vehicle trips and haul trips initiated by construction workers traveling to and from the location of each future visitor services facility. Construction activities would also generate fugitive dust emissions. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions could vary

substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, and the prevailing weather conditions. Project construction is anticipated to begin in 2027 and continue for up to approximately five years.

For the future visitor services development, under Alternative 2, all 25 structures of the Topanga Ranch Motel and all other buildings on State Parks property would be demolished and removed.

Under Alternative 3 and Alternative 4, approximately 20 and 15 structures, respectively, of the Topanga Ranch Motel would be retained and restored in the future for visitor services, which could include a mix of overnight accommodations and park facilities such as employee housing, park offices, maintenance, and a storage facility. Alternatives 3 and 4 include the retention of a 2,400 sf concession located at the site of the current Reel Inn restaurant. All other on-site building leases and structures would be removed. Development at the Gateway Corner would be limited in size and scale and could include an outdoor interpretive pavilion/restroom, a maintenance facility, a small picnic area, a trailhead, and day use parking.

The Proposed Project's maximum daily regional construction emissions, including for the Topanga State Park visitor services, were estimated for each construction phase, and are presented above in Table 3.2-8. Table 3.2-9 identifies the construction-related mobile-source emissions that would be generated by trucks transporting hazardous waste to the Kettleman Hills Hazardous Waste Facility.

The Proposed Project's maximum daily localized construction emissions, including for the Topanga State Park visitor services, were also estimated for each construction phase, and are presented in Table 3.2-7. Emissions were analyzed conservatively using screening criteria applicable to a 5-acre site in SCAQMD's Northwest Coastal LA County Source Receptor Area 2 with sensitive receptors located 25 meters away, which accounts for all adjacent off-site sensitive receptors (SCAQMD 2008).^{13,14}

Tables 3.2-7 through 3.2-9 summarize the total regional and localized emissions for all phases of construction under Alternative 4, including the future Topanga State Park visitor services. As shown in the tables, emissions associated with the Project's future Topanga State Park visitor services would not result in an exceedance of the regional or localized SCAQMD thresholds or SJAVPCD thresholds, and future visitor services impacts would be less than significant except for NO_x emissions, which would exceed the SCAQMD regional significance threshold. Implementation of **Mitigation Measure AIR-1** would be required and would reduce NO_x emissions to below the SCAQMD regional significance threshold. Therefore, impacts would be less than significant with implementation of mitigation. Detailed emissions calculations are provided in **Appendix P** of this Draft EIR.

¹³ As stated on page 3-3 of SCAQMD's *Final Localized Significance Threshold Methodology*, "Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs [localized significance thresholds] for receptors located at 25 meters."

¹⁴ Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site dependent, and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project Site's full 14 acres yields a more stringent analysis.

General Conformity Analysis

Emissions were calculated for precursors of ozone (VOC/ROG and NO_x), CO, SO₂, PM₁₀ and PM_{2.5} for construction associated with the federal action, including the future Topanga State Park visitor services. Results are summarized in Table 3.2-10 for each year of construction. The table shows that annual construction emissions would not exceed the *de minimis* levels for any construction year. Therefore, a general conformity determination is not required. Detailed emissions calculations are provided in **Appendix P** of this Draft EIR.

Operation

The Proposed Project would generate criteria pollutant emissions from vehicle trips traveling to the future visitor services site from within the region, energy sources such as natural gas combustion, and area sources such as landscaping equipment. Depending on the Build Alternative selected, for the future Topanga State Park visitor services some or all buildings of the Topanga Ranch Motel would be either demolished or removed or retained and restored. If retained and restored, the buildings would be used for future visitor services, including overnight accommodations and park facilities such as employee housing, park offices, maintenance, and a storage facility. Although these facilities are mostly vacant, a few of the buildings are still used today for storage and one employee house.

Additionally, the five existing and operating business leases would be shut down and demolished, except that a concession facility located at the site of the current Reel Inn could be kept under all Build Alternatives. The future visitor services would be called Gateway Corner and would be developed with a restroom/outdoor visitor-serving kiosk/concession facility, an employee residence, and a maintenance/office facility. Although these are new facilities, they would meet improved modern building energy efficiency standards and their criteria pollutant emissions would be similar to or less than emissions from the four currently operating businesses on the Project site that would be shut down. Thus, operational emissions at the Project site associated with future visitor services would be similar to or slightly less than existing criteria pollutant emissions. For this reason, operational criteria pollutant emissions associated with future visitor services were not quantified.

Because criteria pollutant emissions associated with future visitor services under all Build Alternatives would be essentially the same as existing criteria pollutant emissions, impacts would be less than significant.

Mitigation Measures

Refer to **Mitigation Measure AIR-1**, above.

Significance Determination

Less than Significant with Mitigation Incorporated. No general conformity determination is required.

Sensitive Receptor Exposure

AIR 3.3-3: The Project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the lagoon footprint or habitat quality, and no new PCH bridge would be constructed. This alternative would not involve substantial construction or operations that would generate new pollutant emissions exceeding SCAQMD significance thresholds or USEPA *de minimis* emission levels. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel) and eroding lifeguard and public restroom building, and potential on-site AOWTS upgrades. These activities would result in the temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than under the Build Alternatives. Alternative 1 would have a less-than-significant impact with respect to exposure of sensitive receptors to substantial pollutant concentrations. Impacts would be less under Alternative 1 than under the Build Alternatives (Alternatives 2, 3, and 4).

Alternatives 2, 3, and 4 (Build Alternatives)

Potential exposure of sensitive receptors to substantial pollutant concentrations would be similar under all Build Alternatives, as described in the following sections.

Construction

As discussed above under Impact AIR 3.3-2, Proposed Project construction would not exceed the SCAQMD localized significance thresholds (see Table 3.2-7 above); therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Operations

As discussed above under Impact AIR 3.3-2, the Proposed Project's operational criteria pollutant emissions would be essentially the same as existing criteria pollutant emissions; therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Wastewater Management Options

Wastewater management Option 1 (SDI) and Option 2 (seepage pits) would both require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Connection to the public sewer (Option 3) would involve the construction of an extension of the LACSD public sewer from existing facilities and would take an additional year to construct. As described above, Proposed Project emissions would not result in an exceedance of regional or localized SCAQMD thresholds or SJAVPCD thresholds. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction

As discussed above under Impact AIR 3.3-2, construction of the future Topanga Site Park visitor services would not exceed the SCAQMD localized significance thresholds (see Table 3.2-7 above). Therefore, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Operations

As discussed above under Impact AIR 3.3-2, the Proposed Project's operational criteria pollutant emissions, including the future Topanga State Park visitor services, would be essentially the same as existing criteria pollutant emissions. Therefore, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Carbon Monoxide Hotspots

The potential for the Proposed Project to cause or contribute to CO hotspots was evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of its AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Proposed Project would not cause or contribute considerably to the formation of CO hotspots; that CO concentrations at Project-affected intersections would remain well below the threshold one-hour and eight-hour CAAQS of 20 ppm or 9.0 ppm, respectively, within one-quarter mile of a sensitive receptor; and that no further CO analysis is warranted or required.

As shown previously in Table 3.2-3, CO levels in the Project area are substantially below the federal and state standards. Maximum CO levels in recent years (2018–2020) were 2.0 ppm (one-hour average) and 1.3 ppm (eight-hour average), as compared to the criteria of 35 ppm (NAAQS one-hour average) or 20 ppm (CAAQS one-hour average) and 9.0 ppm (CAAQS eight-hour average). No exceedances of the CO standards have been recorded at monitoring stations in the Air Basin since 2003 (SCAQMD 2022a) and the Air Basin is currently designated as a CO attainment area for both the NAAQS and the CAAQS.

SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin: Wilshire Boulevard and Veteran Avenue, Sunset Boulevard and Highland Avenue, La Cienega Boulevard and Century Boulevard, and Long Beach Boulevard and Imperial Highway. In the 2003 AQMP's CO attainment demonstration, SCAQMD noted that the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day (SCAQMD 2003a). Relevant information from the 2003 AQMP CO attainment demonstration relied upon in

this assessment is provided in this Draft EIR. This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP showed that the peak modeled CO concentrations from vehicle emissions (i.e., excluding background concentrations) at these four intersections were 4.6 ppm (one-hour average) and 3.2 ppm (eight-hour average), both at Wilshire Boulevard and Veteran Avenue.¹⁵

As stated previously, the Proposed Project would not be growth inducing and would not directly affect traffic volumes, which should stay relatively the same as existing conditions. As discussed in Chapter 2, *Project Description*, to ensure that the bridge and lagoon restoration portion of the Proposed Project would not constrain traffic during construction, a temporary bridge would be constructed on the coastal side of the existing bridge. The temporary bridge would accommodate two lanes of traffic while the new PCH bridge is under construction. (Note: It may be possible to develop alternative strategies for maintaining access at all times for all four lanes in the later design development phase once a preferred alternative is selected.) For all Build Alternatives, the replacement bridge width is proposed at 90 feet to maintain the existing four-lane configuration of PCH with a center turn lane. The four travel lanes and median would all be 12 feet in width and would contain shoulders consistent with Caltrans standards.

Furthermore, the Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area, and they would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). However, even if the Proposed Project were to add the 100,000 vehicles per day that Wilshire Boulevard and Veteran Avenue have, using the peak modeled CO concentration for this intersection, the Proposed Project would have CO concentrations of 6.6 ppm (one-hour average) and 4.5 ppm (eight-hour average), which is still significantly below the NAAQS and CAAQS. This comparison demonstrates that the Proposed Project would not contribute to the formation of CO hotspots and that no further CO analysis is required. Therefore, the Proposed Project would result in less-than-significant impacts with respect to CO hotspots.

Toxic Air Contaminant Emissions

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the Proposed Project's construction phase. According to OEHHA and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD 2003a), health effects from TACs are described in terms of individual cancer risk based on a lifetime-duration (i.e., 70-year) exposure by a resident. Given the Proposed Project's temporary construction schedule (up to approximately 60 months), Project construction would not result in a long-term (i.e., lifetime or 70-year) exposure.

In addition, the Proposed Project would be consistent with the applicable 2022 AQMP requirements for control strategies intended to reduce emissions from construction equipment and

¹⁵ The eight-hour average is based on a 0.7 persistence factor, as recommended by SCAQMD.

activities. The Proposed Project would comply with the CARB Air Toxics Control Measure that limits diesel-powered equipment and vehicle idling to no more than five minutes at a location, and with the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these CARB regulations would minimize TAC emissions during construction. The Project would also comply with the requirements of SCAQMD Rule 1466 for the Control of Particulate Emissions from Soils with Toxic Air Contaminants for the excavation and removal of lead-contaminated soils and Rule 1403 if asbestos is found during demolition.

As stated in Section 3.8, *Hazards and Hazardous Materials*, of this Draft EIR, demolition activities for the Proposed Project would include the removal of existing buildings, structures, and associated infrastructure. As such, hazardous materials may be present in the structures because of their age. The hazardous materials may include asbestos-containing materials and lead-based paint. Numerous existing regulations require that demolition activities that may disturb or require the removal of materials that consist of, contain, or are coated with hazardous materials, such as the soil, include inspection and testing for the presence of hazardous materials. If present, the hazardous materials must be managed and disposed of in accordance with applicable laws and regulations.¹⁶ The nearest residential air quality-sensitive receptors are located adjacent to the Project site on the southwest and the east. Based on the short-term duration of Proposed Project construction and compliance with regulations that would minimize emissions, construction of the Proposed Project would not expose sensitive receptors to substantial TAC concentrations. Therefore, the impact of TACs during construction would be less than significant.

SCAQMD recommends conducting operational health risk assessments for substantial sources of operational DPM (e.g., truck stops and warehouse and distribution centers, transit centers) and has provided guidance for analyzing mobile-source diesel emissions (SCAQMD 2003a). The Proposed Project would not include any truck stop, transit center, or warehouse distribution uses, and as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Furthermore, Project trucks would be required to comply with the applicable provisions of 13 CCR Section 2025 (Truck and Bus regulation) to minimize and reduce PM₁₀, PM_{2.5}, and NO_x emissions from existing diesel trucks. Therefore, operation of the Proposed Project would not be considered a substantial source of DPM emissions.

With respect to the use of low-VOC consumer products and architectural coatings, the Proposed Project's commercial and public recreational uses would be expected to generate minimal emissions. As stated earlier, Project operations would be similar to existing operations, and as such, emissions would not be significantly different from existing emissions. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses on the Project site. Based on the expected uses on the site, operation of the Proposed Project would not expose sensitive receptors to substantial TAC concentrations, and operational impacts would be less than significant.

¹⁶ Impacts from asbestos and lead-based paint from demolition are expected to be less than significant. For additional details, see Section 3.8, *Hazards and Hazardous Materials*, of this Draft EIR.

For the reasons described above, construction of the Proposed Project would not expose sensitive receptors to substantial pollutant concentration and impacts would be less than significant. Similarly, operation of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

As stated above, the future visitor services would not include any truck stop or warehouse distribution uses, and as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Furthermore, trucks visiting the future visitor services would be required to comply with the applicable provisions of 13 CCR Section 2025 (Truck and Bus Regulation) to minimize and reduce PM₁₀, PM_{2.5}, and NO_x emissions from existing diesel trucks. Therefore, operation of the future visitor services would not be considered a substantial source of DPM emissions.

With respect to the use of consumer products and architectural coatings, the future visitor services' commercial and public recreational uses would be expected to generate minimal emissions. As stated earlier, operations of the Proposed Project including the future visitor services would be similar to existing operations, and as such, emissions would not be significantly different from existing emissions. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses on the Project site. Based on the uses expected on the site, operation of the future visitor services would not expose sensitive receptors to substantial TAC concentrations, and operational impacts would be less than significant. Operation of the future visitor services would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Odors

AIR 3.3-4: The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. *Impacts would be less than significant.*

Alternative 1 (No Build)

Alternative 1 would not involve construction or operations, other than repair or demolitions, that would generate new pollutant emissions exceeding SCAQMD significance thresholds or USEPA *de minimis* emission levels. Alternative 1 would not involve any significant construction activities and would have a less-than-significant impact with respect to other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential exposure to other emissions such as those leading to odors would be similar under all Build Alternatives, as described in the following sections.

Construction

Potential Proposed Project construction activities that may emit odors include the use of architectural coatings and solvents, as well as the combustion of diesel fuel in on- and off-road equipment. SCAQMD Rule 1113 would limit the amount of VOCs in architectural coatings and solvents. In addition, the Proposed Project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks.

Through mandatory compliance with SCAQMD rules, construction activities or materials associated with the Proposed Project are expected to avoid creating objectionable odors affecting a substantial number of people. Furthermore, as shown in Tables 3.2-8 and 3.2-9, construction emissions would not exceed the SCAQMD or SJVAPCD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO₂). Therefore, Proposed Project construction activities would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

Operations

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified by SCAQMD as being associated with substantial odors. As a result, the Proposed Project is not expected to discharge contaminants into the air in quantities that would cause a nuisance, injury, or annoyance to the public or property pursuant to SCAQMD Rule 402.

Wastewater Management Options

Both wastewater management Option 1 (SDI) and Option 2 (seepage pits) would require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Connection to the public sewer (Option 3) would involve the construction of an extension of the LACSD public sewer from existing facilities and would take an additional year to construct. As described above, the Proposed Project would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be present. All other existing on-site business leases and structures would be removed. Construction of the future visitor services would comply with SCAQMD Rule 1113 to limit the amount of VOCs in architectural coatings and solvents. In addition, construction of the future visitor services would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks.

Given mandatory compliance with SCAQMD rules, no construction activities or materials associated with future visitor services are expected to create objectionable odors affecting a substantial number of people. Furthermore, as shown in Tables 3.2-8 and 3.2-9, construction emissions would not exceed the SCAQMD or SJVAPCD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO₂). Therefore, construction activities for future visitor services would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

Operation

The future visitor services do not include any uses identified by SCAQMD as being associated with substantial odors. As a result, the future visitor services are not expected to discharge contaminants into the air in quantities that would cause a nuisance, injury, or annoyance to the public or property pursuant to SCAQMD Rule 402. Therefore, operation of the future visitor services would result in less-than-significant impacts with respect to other emissions, including those leading to odors.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Cumulative Impacts

AIR 3.3-5: The Project would not result in cumulatively considerable impacts to air quality. Impacts would be less than significant.

Cumulative effects could result when considering the effects of the Proposed Project in combination with the effects of other projects in the area. For this Draft EIR analysis, other past, present, and reasonably foreseeable future projects have been identified as shown in Table 3-1 of Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*. As described in Table 3-1, multiple projects are being constructed in the vicinity of the Project area. However, there is only one minor project being constructed near the Project area, the PCH Signal System Improvements Project.

The projects to be considered cumulatively with the Proposed Project are identified in **Appendix N**. Based on available information, the nearest related project, Related Project No. 1, would have limited construction activities (e.g., adding cameras, replacing poles, street improvements). Because both the specific timing and the sequencing of construction activities for the related projects are unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Furthermore, as discussed above, all related projects, except for one project, are not located directly adjacent to or near the Project site. Therefore, even if construction of the related projects were to occur at the same time as the Proposed Project, localized emissions from the related projects would not substantially combine with localized emissions from the Project (SCAQMD 2008).¹⁷

Accordingly, SCAQMD recommends using two methodologies to assess the cumulative impact of air pollutant emissions: (1) Use a project's consistency with the current AQMP to determine its potential cumulative impacts or (2) use project-specific air quality impacts to determine the project's potential cumulative impacts on regional air quality (SCAQMD 2003b).¹⁸

Consistency with Air Quality Management Plan

SCAQMD recommends assessing a project's cumulative impacts based on whether the project is consistent with the current AQMP. CEQA Guidelines Section 15064(h)(3) provides guidance for determining the significance of cumulative impacts. Specifically, CEQA Guidelines Section 15064(h)(3) states in part that:

A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with

¹⁷ Page 3-3 of SCAQMD's *Final Localized Significance Threshold Methodology* states that "...allowable emissions increase rapidly with increasing downwind distance." Stated another way, this means that emissions from a source disperse rapidly with increasing distance from the source resulting in corresponding pollutant concentrations that rapidly reduce with increasing distance.

¹⁸ Appendix D, page D-3 states: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR... Projects that exceed the Project-specific significance thresholds are considered by SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency...

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Proposed Project's cumulative air quality impacts have been determined not to be significant based on the Project's consistency with SCAQMD's adopted 2022 AQMP, as discussed above. As also discussed above, the Proposed Project would not increase population, housing, and employment would be consistent with the 2045 RTP/SCS growth projections, upon which the 2022 AQMP is based. Related projects would also be required to assess consistency with 2022 AQMP transportation control strategies, and with population, housing, and employment growth projections in the 2045 RTP/SCS, and to provide mitigation measures if significant impacts are identified. As discussed in Threshold (a), the Proposed Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone. Therefore, the Proposed Project would be consistent with and would not conflict with or obstruct implementation of the 2022 AQMP. Accordingly, impacts of the Proposed Project would not be cumulatively considerable and cumulative impacts would be less than significant.

Project-Specific Impact

The SCAQMD *CEQA Air Quality Handbook* states that the handbook "is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects" (SCAQMD 1993). The SCAQMD *CEQA Air Quality Handbook* also states that "from an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District" (SCAQMD 1993). SCAQMD has provided guidance on addressing the cumulative impacts for air quality, as discussed below (SCAQMD 2003b):

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR... Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

SCAQMD recommends evaluating cumulative impacts for individual projects based on whether the project exceeds SCAQMD's recommended daily thresholds for project-specific impacts for those pollutants for which the basin is in nonattainment. Thus, the cumulative analysis of air quality impacts follows SCAQMD's guidance such that construction or operational project

emissions would be considered cumulatively considerable if project-specific emissions exceed an applicable SCAQMD recommended significance threshold. As discussed above in Impact 3.2-2, the Proposed Project would not result in construction emissions that could exceed the regional and localized SCAQMD significance thresholds. The Proposed Project would not result in significant operational emissions over existing emissions and thus would have a less-than-significant impact. Therefore, cumulative impacts related to regional and localized construction emissions and operational emissions would not be cumulatively considerable and would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

3.2.4 Summary of Impacts

Table 3.2-12 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to air quality. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.2-12
 SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO AIR QUALITY**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
AIR 3.2-1: Air Quality Plan Analysis	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
AIR 3.2-2: Air Quality Standard Violation	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measure AIR-1	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measure AIR-1	LTSM
AIR 3.2-3: Sensitive Receptor Exposure	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
AIR 3.2-4: Odors	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
AIR 3.2-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	None Required	LTS

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less-than-Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.2.5 References

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3.3 Biological Resources

This section summarizes applicable regulations related to biological resources; describes the existing terrestrial and fresh/brackish water biological resources in the Biological Study Area (BSA); and evaluates the potential impacts of the Proposed Project on them, including cumulative impacts. The BSA refers to the entire Project area plus a general 200-foot buffer for terrestrial areas (refer to **Figure 3.3-1**). Marine resources are discussed in detail in Section 3.11, *Marine Biological Resources*.

The information included in this section is based on the results of the *Biological Resources Assessment Report, Topanga Lagoon Restoration Project* prepared by Resource Conservation District of the Santa Monica Mountains (RCDSMM) and State Parks for the Proposed Project, which is included as **Appendix K** to this Draft EIR.

3.3.1 Regulatory Settings

Federal

Endangered Species Act

The federal Endangered Species Act (FESA) (16 United States Code [USC] 1531 et seq.) provides a program for the conservation of federally listed threatened and endangered plants and animals and the habitats in which they are found. “Endangered” means a species is in danger of extinction throughout all or a significant portion of its range and “threatened” means a species is likely to become endangered within the foreseeable future. The federal agencies responsible for administering the FESA are the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife and anadromous fish.

Section 7 of the FESA requires federal agencies to consult with USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally listed species. The FESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term “harm” is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Section 10 provides a means whereby a non-federal action with the potential to result in take of a listed species can be allowed under an incidental take permit, which may be issued once a habitat conservation plan (HCP) is approved. Application procedures are found at Code of Federal Regulations Title 50, Parts 13 and 17 (50 CFR 13, 17) for species under the jurisdiction of USFWS and 50 CFR 217, 220, and 222 for species under the jurisdiction of NMFS.

Rivers and Harbors Act Section 10

The Rivers and Harbors Appropriations Act of 1899 (30 Stat. 1151; 33 USC 401, 403) prohibits the unauthorized obstruction or alteration of any navigable water. Navigable waters are tidally influenced waters that are presently used, have been used in the past, or could be used in the future to transport interstate or foreign commerce (33 CFR 3294). The Rivers and Harbors Act was intended for the protection of navigation and navigable capacity and was later amended to include protection of the environment. The Act authorizes the U.S. Army Corps of Engineers (USACE) to exercise control over all construction projects (Section 10) and discharge of refuse (Section 13) that occur within navigable waters of the United States (WOTUS). Activities that commonly require Section 10 permits include construction of piers, wharves, bulkheads, marinas, ramps, floats, intake structures, cable and pipeline crossings, and excavation.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act, known as the Magnuson-Stevens Act (16 USC 1801 et seq.) is the primary law that governs marine fisheries management in U.S. federal waters. Its objectives include:

- Preventing overfishing.
- Rebuilding overfished stocks.
- Increasing long-term economic and social benefits.
- Ensuring a safe and sustainable supply of seafood.
- Protecting habitat that fish need to spawn, breed, feed, and grow to maturity.

The Magnuson-Stevens Act jurisdiction extends to 200 nautical miles and defines Essential Fish Habitat (EFH) as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Eight regional fishery management councils, composed of representatives of the fishing industry and state fishery officials, prepare fishery management plans for approval and implementation by NMFS. A fisheries management plan is developed to achieve specified management goals for a fishery and is comprised of data, analyses, and management measures. EFH that is identified in a management plan applies to all fish species managed by that plan, regardless of whether the species is a protected species or not. Federal agency actions that fund, permit, or carry out activities that may adversely affect EFH are required under to consult with NMFS regarding potential adverse effects of their actions on EFH.

The waters off Topanga Lagoon are designated as EFH for fish managed under three fisheries management plans: the Pacific Coast Groundfish fisheries management plan, the Coastal Pelagic Species fisheries management plan, and the West Coast Highly Migratory Species fisheries management plan.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703 et seq.) makes it unlawful to pursue, capture, kill, or possess (or attempt to do these things to) any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and

former Soviet Union countries, and authorizes the U.S. Secretary of the Interior (via the USFWS) to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR Parts 10 and 21).

Clean Water Act

The federal Clean Water Act (CWA) and subsequent amendments, under the enforcement authority of the U.S. Environmental Protection Agency, was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The purpose of the CWA is to protect and maintain the quality and integrity of the nation’s waters by requiring states to develop and implement state water plans and policies. The CWA established several programs to regulate and reduce discharges of pollutants into WOTUS, including wetlands. USACE and California State Water Resources Control Board administer the various applicable sections of the CWA with the oversight of the U.S. Environmental Protection Agency as follows:

- Section 404 of the CWA, administered by USACE, established a permit program to regulate the discharge of dredged and fill material into WOTUS.
- Section 401 of the CWA, administered by the state, requires that before a 404 permit can be issued for an activity, the state in which the activity would occur must certify that the activity would not violate state water quality standards.
- Section 402 of the CWA, administered by the state, established the National Pollutant Discharge Elimination System Program. This requires a permit for sewer discharges and storm water discharges from developments, construction sites, or other areas of soil disturbance.
- Section 303, administered by the state, requires states to identify “impaired waters” and to establish total maximum daily loads. A total maximum daily load establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality.

Coastal Zone Management Act

Coastal Zone Management Act Section 307 (16 USC 1456[c]) mandates that federal agency activities be “consistent to the maximum extent practicable with the enforceable policies of approved state management programs,” and that this consistency be documented and coordinated with the state. Applicants for a federal license or permit must submit their own consistency certification to the California Coastal Commission (CCC) and then provide the coastal commission’s concurrence (when a Coastal Development Permit [CDP] is needed, this is the actual CDP, not the notice of intent to issue a CDP) to the federal agency issuing the permit. After receipt of the consistency determination, the state agency informs the federal agency of its concurrence with, or objection to, the federal agency’s consistency determination.

The CCC is the state agency charged with administering the federal act within the California Coastal Zone. Within the commission’s areas of concern, the Coastal Zone consists of all areas located within the commission’s jurisdiction, which extends 3 miles seaward and inland generally 1,000 yards (but can extend up to 5 miles) from the mean high-tide line. Any federal activity that affects any natural resources (including wetlands and other waterbodies), land uses, or water uses within commission’s area of concern is subject to the consistency requirement. Obligations under the act

must be met through the federal consistency determination process that is outlined in the act's Federal Consistency Regulations, 71 Federal Regulation 787–831 at 15 CFR 930. The commission and the California Coastal Act are discussed further in the state regulations section, below.

Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act declares that fish and wildlife are of ecological, educational, aesthetic, cultural, recreational, economic, and scientific value to the United States. The purposes of this Act are to encourage all federal departments and agencies to utilize their statutory and administrative authority, to the maximum extent practicable and consistent with each agency's statutory responsibilities and to conserve and to promote conservation of non-game fish and wildlife and their habitats. Another purpose is to provide financial and technical assistance to the states for the development, revision, and implementation of conservation plans and programs for nongame fish and wildlife.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act provides the basic authority for the USFWS and NMFS involvement in evaluating impacts on fish and wildlife from proposed water resource development projects. The Fish and Wildlife Coordination Act requires that fish and wildlife resources receive equal consideration as other project features. The act also requires federal agencies that construct, license or permit water resource development projects to first consult with the USFWS or NMFS as appropriate, and state fish and wildlife agency regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.

Executive Order 13112

On February 3, 1999, Executive Order 13112 was signed by President Clinton establishing the National Invasive Species Council. The Executive Order requires that a Council of Departments dealing with invasive species be created. Executive Order 13312 revokes the preceding Executive Order 11987 of May 24, 1977. Per Section 2 of the Executive Order (Federal Agency Duties):

(a) Each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law, (1) identify such actions; (2) subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them; and (3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

(b) Federal agencies shall pursue the duties set forth in this section in consultation with the Invasive Species Council, consistent with the Invasive Species Management Plan and in cooperation with stakeholders, as appropriate, and, as approved by the Department of State, when Federal agencies are working with international organizations and foreign nations.

Executive Order 13751

Executive Order 13751 (December 5, 2016) amends Executive Order 13112 and directs actions to continue coordinated federal prevention and control efforts related to invasive species. This order maintains the National Invasive Species Council and the Invasive Species Advisory Committee; expands the membership of the council; clarifies the operations of the council; incorporates considerations of human and environmental health, climate change, technological innovation, and other emerging priorities into federal efforts to address invasive species; and strengthens coordinated, cost-efficient federal action.

Protection of Wetlands, Executive Order 11990, as amended by Executive Order 12608

Under Executive Order 11990, each federal agency takes action to minimize the destruction, degradation, or modification of wetlands and enhance the natural and beneficial values of wetlands. The Executive Order also directs the avoidance of direct or indirect support of new construction in wetlands and public involvement throughout the wetlands protection decision-making process.

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective and provides measures to protect biological resources and wetlands during development of the Park in the “Actions Common to All Alternatives” section (National Park Service 2002).

State

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code [CFGF] Section 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of state threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA program would satisfy CESA if California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the CESA under CFGF Section 2080.1. For projects that would result in take of a species listed under CESA only, an incidental take permit is required under Section 2081(b).

Clean Water Act Section 401 Certification and Porter-Cologne Water Quality Control Act

The State of California regulates discharge of fill material into waters of the state pursuant to Section 401 of the CWA. Section 401 compliance is a federal mandate implemented by the state. Where a Section 404 permit is required, a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB) also is required.

In addition, the state regulates water quality for all waters of the state, including isolated wetlands, as defined under the Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.). The state regulates all discharges that can affect water quality. In such instances, a waste discharge permit may be required even though federal CWA Section 404 permits are not required.

California Fish and Game Code

Sections 1600–1616. Under these sections of the CFGC, a project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a *stream* is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a streambed alteration agreement, which becomes part of the plans, specifications, and bid documents for the project.

Sections 3503, 3503.5, 3513, and 3800. Under these sections, a project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the Migratory Bird Treaty Act; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to CFGC Section 3800.

Sections 3511, 4700, 5050, and 5515. These sections of the CFGC prohibit take or possession of fully protected species. CDFW does not have the authority to permit incidental take of fully protected species when activities are proposed in areas inhabited by those species.

California Coastal Act

The California Coastal Act (Public Resources Code Section 30000 et seq.) governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs (LCPs) and development subject to the Coastal Act. Policies relevant to the Proposed Project are as follows:

Section 30231 Biological productivity; water quality. 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 and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 Diking, filling or dredging; continued movement of sediment and nutrients. *(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: (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.*

(b) Dredging and soils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a CDP for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30240 Environmentally sensitive habitat areas; adjacent developments.

(a) Environmentally sensitive habitat areas 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.

The Coastal Act defines Environmentally Sensitive Areas as follows: “Environmentally sensitive area” means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Native Plant Protection Act

California’s Native Plant Protection Act (CFGCA Section 1900 et seq.) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. Landowners are required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Regional and Local

Los Angeles County General Plan 2035

A general plan is a basic planning document that, alongside the zoning code, governs development in a city or county. Within the Land Use and Conservation and Natural Resources Elements of the *Los Angeles County General Plan 2035*, there are goals and policies that are relevant to the Proposed Project and described in Section 3.10, *Land Use and Land Use Planning*. The following goals and policies related to biological resources are relevant to the Proposed Project (County of Los Angeles 2015):

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

Policy C/NR 1.2: Protect and conserve natural resources, natural areas, and available open spaces.

Policy C/NR 1.5: Provide and improve access to dedicated open space and natural areas for all users that considers sensitive biological resources.

Policy C/NR 2.2: Encourage the development of multi-benefit dedicated open spaces.

Policy C/NR 2.3: Improve understanding and appreciation for natural areas through preservation programs, stewardship, and educational facilities.

Goal C/NR 3: Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.

Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources.

Policy C/NR 3.6: Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

Policy C/NR 3.7: Participate in inter-jurisdictional collaborative strategies that protect biological resources.

Policy C/NR 3.11: Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

Santa Monica Mountains Local Coastal Program

The Los Angeles County Santa Monica Mountains Coastal Zone is the unincorporated portion of the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the City of Malibu. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles.

The Santa Monica Mountains Local Coastal Program (LCP), a component of the *Los Angeles County General Plan 2035*, consists of the land use plan (LUP) and implementing actions included in the local implementation program (LIP). The LIP, a series of ordinance sections added to the County's Zoning Ordinance, Title 22 of the County Code, was created to implement the LUP goals and policies. Implementing actions also include a zoning consistency program. The Santa Monica Mountains LCP was certified by the CCC on October 10, 2014, and was amended on February 9, 2018. The LUP replaced the Malibu LUP, which was certified by the Coastal Commission in 1986.

The LIP establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the LUP. Zoning changes, which included a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LUP. These changes were mandated by state law to eliminate potential conflicts between the Plan and zoning designations. The LUP (LA County Planning 2018) identifies the following goal and policy pertaining to biological resources:

Goal CO-1: Maintain and restore biological productivity and coastal water quality appropriate to maintain optimum populations of marine and freshwater organisms and to protect human health.

Policies **CO-1** through **CO-31** are provided in support of Goal CO-1.

Goal CO-2: Sensitive Environmental Resource Areas shall be protected against any significant disruption of habitat values. Development in areas adjacent to Sensitive Environmental Resource Areas shall be sited and designed to prevent impacts which would significantly degrade these areas and shall be compatible with the continuance of the habitat.

Policies provided in support of Goal CO-2 include policies **CO-33** through **CO-67** related to Sensitive Environmental Resource Areas and H3 Habitat Protection; policies **CO-68** and **CO-69** related to stream protection; policies **CO-70** through **CO-73** related to environmental review policies; policies **CO-74** through **CO-95** related to new development; policies **CO-96** through **CO-98** related to fuel modification; policies **CO-99** and **CO-100** related native tree protection; and policies **CO-101** related to restoration.

Goal CO-4: An integrated open space system that preserves valuable natural resources and provides a variety of recreational opportunities, within a program coordinated among federal, State, local and non-profit agencies.

Policies **CO-117** through **CO-123** are provided in support of Goal CO-4.

Goal CO-7: Shoreline and beaches that are accessible to the public and protected to the greatest extent possible from the impacts of beach sand erosion, development, conflicting uses, sea level rise, and other possible threats.

Policies **CO-187** through **CO-203** are provided in support of Goal CO-7. Policies **CO-191** to **CO-195** also correspond to Section 30230 Marine resources; maintenance of the Coastal Act.

Topanga State Park General Plan

A portion of the BSA is located within the Topanga State Park. The Topanga State Park General Plan (State Parks 2012) was developed by State Parks and directs the long-range management, development, and operation of the Park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The Topanga State Park General Plan sets aside a number of management zones including a Lower Topanga and Lagoon Zones, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The plan also contains specific proposals to consolidate Topanga Park's trail alignment through eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012). The general plan provides the following park-wide goals and guidelines for biological resources that are potentially relevant to the Proposed Project:

- Protect, enhance, and restore the Park's wetlands and hydrologic resources.
 - Perform Wetland delineation in accordance with the 1987 USACE Wetland Delineation Manual prior to development near any wetland site.
 - Support and work towards the preservation, protection, and restoration of the lagoon at the mouth of Topanga Canyon.
- Promote and restore the sustainability of natural ecosystem processes by actively managing plant community health and development, while maintaining the protection of cultural resources.
- Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native plant communities within the park.
 - Protect sensitive plant species, including those that are legally listed under federal and state laws as rare, threatened, or endangered, or that are considered rare by the CDFG [CDFG]. In addition, CSP [State Parks] will protect those species that meet the legal requirements for listing, but are not yet listed (i.e., California Native Plant Society List 1B taxa) and those considered locally sensitive or endemic to the area.
 - Avoid or minimize human activities that cause imbalances in the natural ecological system. Additionally, CSP shall conduct management activities, such as habitat restoration, that foster ecological balance.
- Reduce the presence and further invasion of exotic species in the Park.

- Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native terrestrial and aquatic animals within the park.
 - Ensure that the conservation of native wildlife is incorporated into all future developments, management plans, and visitor-use patterns throughout the Park, and that the protection of sensitive species and habitats receives high urgency.
- Protect all sensitive wildlife species occurring in the Park including those legally listed under federal and state law as threatened or endangered, those that are Species of Concern, and those considered locally sensitive or endemic to the area
 - Preserve sensitive species and habitats to encourage their recovery. Comply with state and federal environmental legislation, Recovery Plans, and Critical Habitat designations enact to protect this disappearing biota.
 - Protect sensitive habitats and species from visitor uses such as equestrian activity, mountain biking, hiking, and other uses not yet established in the park. These activities will be appropriately planned such that the integrity of the habitat and the sensitive species is given highest priority.
- Work to control exotic animals that are found to upset natural ecological dynamics of native species.
- Maintain high standards for ecosystem health and bio-diversity by protecting plant and animal habitat and dispersal corridors within the park.

The Topanga State Park General Plan provides the following Lagoon, Lower Topanga, and Watershed Conservation Zone specific goals and guidelines for biological resources that are potentially relevant to the Proposed Project:

- Restore, maintain, and protect the lagoon/estuarine ecosystem and allow for scientific research as needed to reach these goals.
 - Do not allow development or modification within the Lagoon Zone other than infrastructure that will improve the lagoon wildlife corridor, specifically the steelhead trout (*Oncorhynchus mykiss*) and tidewater goby (*Eucyclogobius newberryi*) populations.
- Restore, maintain, and protect the native ecosystem of the Watershed Conservation Zone, especially the riparian vegetation and wildlife corridor.

National Park Service, Santa Monica Mountains National Recreation Area Final General Management Plan and Environmental Impact Statement

The Final General Management Plan and Environmental Impact Statement for the National Park Service (NPS) Santa Monica Mountains National Recreation Area (SMMNRA) (NPS 2002) provides a framework for managing development, visitation, and natural and cultural resources for the next 15–20 years. It also addressed impacts on natural and cultural resources caused by development, growing visitation and demand for outdoor recreation, lack of public transportation to and within the national recreation area, and increasing awareness about the national recreation area among residents of the metropolitan Los Angeles area. The following restoration goals were identified in the general plan:

- Protect and enhance species, habitat diversity and natural processes.
- Protect and restore estuaries and wetlands.

- Enact programs to combat and remove the encroachment of exotic flora and fauna into natural ecosystems where feasible.
- Maintain or improve water quality and manage riparian communities, natural stream characteristics, estuaries and coastal waters for their significant ecological value.
- Implement collaborative scientific research and innovative resources management programs among federal, state, and local agencies and the private sector to manage, restore, and maintain natural processes.
- Develop scientific geographic information data to inform decision-making concerning appropriate parkland development. Share geographic information data with private landowners and local agencies to promote and support sustainable development in the Santa Monica Mountains.

3.3.2 Affected Environment

Regional Setting

The BSA is located at the southern terminus of the Topanga Creek watershed, on the southern coastal slope of the Santa Monica Mountains in northwestern Los Angeles County, California. Topanga Creek is important both locally and regionally as the third largest watershed that drains into the Santa Monica Bay, and as a remnant bar-built estuarine system. Topanga Creek is notable regional for its lack of constructed impediments in its reaches beyond the PCH bridge, and limited discharges from surrounding development.

The climate in the region is characterized by dry summers with frequent coastal fog and wet, cooler winters. During the summer precipitation is rare, so the climate is quite dry, with the exception of coastal fog, which makes the area prone to wildfires. Fire hazard is especially severe during the fall “Santa Ana” wind events when the air flow reverses due to interior high-pressure systems. During these wind events, compression heated air with very low humidity flows from the inland toward the coast, sometimes with strong winds, creating extreme fire conditions that periodically result in wildfires. The Santa Monica Mountains in general are subject to recurring wildfires due to the naturally dry climate, adapted plant communities, and high levels of human disturbance.

Local Setting

The Proposed BSA is entirely publicly owned with the exception of a 0.7-acre private parcel on the northwest corner at the edge of the Project area, which consists of parcels acquired by State Parks in 2001 as part of the Lower Topanga Acquisition; Caltrans right-of-way (ROW) along Pacific Coast Highway (PCH), including the bridge that bisects the Project site as well as 0.5 mile of Topanga Canyon Boulevard (TCB); and Topanga Beach, operated by DBH. The proposed nearshore soil placement area off Topanga Beach is approximately 34.83 acres. The BSA is within the Topanga, CA, U.S. Geological Survey 7.5-minute quadrangle, Township 1 South, Range 16 West, Non-sectioned (**Figure 3.3-1**).

The BSA climate consists of hot, dry summers and cool winters with highly variable amounts of rain influenced by climatic events known as El Niño and La Niña. Rainfall during the 2020 to 2022 water year was 5.66 inches, which is well below the watershed average of 24 inches (Water Replenishment District of Southern California 2022).



SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023)
 Service Layer Credits: Esri, HERE, Garmin, Intermap, Increment P corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c)

Topanga Lagoon Restoration Project

Figure 3.3-1
 Project Boundary with Biological Survey Area



Once almost 30 acres in size, the current Topanga Lagoon footprint is less than 1 acre. It is a naturally bar-built lagoon, disconnected from the ocean by a beach sand berm for long periods of time. Topanga Lagoon hosts resources considered important at the regional, state, and national levels. A robust population of the federally listed endangered tidewater goby has been documented in the Topanga Lagoon since 2000. The only currently reproducing population of the federally listed endangered steelhead trout within the Santa Monica Mountains is also present. A wide range of other important species use the greater area such as protected nesting birds, state sensitive species like the arroyo chub (*Gila orcuttii*), and two-striped garter snake (*Thamnophis hammondi*), among others. Western pond turtle (*Actinemys marmorata*) has been documented approximately 5 miles upstream of the Project site but has never been observed on the Project site. The beach supports a significant run of California grunion (*Leuresthes tenuis*).

Literature Review

Prior to conducting field surveys, State Parks and RCDSMM staff reviewed state and federal databases and historic reports to identify special-status biological resources potentially present within the BSA. The literature review covered the U.S. Geological Survey Topanga 7.5-minute quadrangle map and all adjacent quadrangles (Malibu Beach, Beverly Hills, Venice, Van Nuys, Canoga Park, and Calabasas) (USGS 2021), as well as adjacent nearshore areas. Specific data resources and literature reviewed included (refer to the Biological Resources Assessment Report, **Appendix K**):

- The California Department of Forestry and Fire Protection’s Fire Hazard Severity Zone Web Map Application (CAL FIRE 2022).
- CDFW *Special Animals List*, July 2022 (CDFW 2022a).
- CDFW *Special Vascular Plants, Bryophytes and Lichens List*, July 2022 (CDFW 2022b).
- *Topanga State Park General Plan* (State Parks 2012).
- CDFW Wildlife Connectivity Advance Mitigation web page (CDFW 2023a).
- California Natural Diversity Database for special-status plants and animals (CDFW 2023b).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2023).
- eBird records of bird observations at Topanga Lagoon, 2000–2022 (eBird 2023).
- Current and historical aerial photography from Google Earth (2021).
- Records available online from iNaturalist (2022).
- NMFS *Southern California Steelhead Recovery Plan Summary* (NMFS 2012).
- National Oceanic and Atmospheric Administration Species Directory (NOAA 2022).
- The following RCDSMM fish research sources, all located online at: <https://www.rcdsmm.org/>:
 - *Santa Monica Bay Anadromous Adult and Juvenile Steelhead Monitoring 2013–2018* (Dagit et al. 2018a).
 - *Comprehensive Lifecycle Monitoring of *Oncorhynchus mykiss* in Topanga Creek, California, Final Report 2008–2018* (Dagit et al. 2018b).

- *Steelhead Abundance Monitoring in the Santa Monica Bay, January 2017–November 2019* (Dagit et al. 2019).
- “Occurrences of Steelhead Trout (*Oncorhynchus mykiss*) in Southern California 1994–2018” (Dagit et al. 2020).
- Santa Monica Mountains LCP Sensitive Environmental Resource Areas website (LA County Planning 2023).
- “Topanga Creek Restoration: Rodeo Berm Removal” (Dagit 2009).
- NPS “Wildflowers of the Santa Monica Mountains Santa Monica Mountains National Recreation Area” web page (NPS 2022).
- USFWS Critical Habitat Portal (USFWS 2022).
- USFWS Information for Planning and Consultation (USFWS 2022).
- *Riparian and Upland Bird Communities at Lower Topanga Canyon, Topanga State Park, California* (USGS 2006).
- U.S. Natural Resources Conservation Service Web Soil Survey (NRCS 2019).

Biological Resources Surveys

Specifics of the biological survey methodologies for each taxonomic group are provided in detail in the Project’s Biological Resources Assessment Report located in **Appendix K**.

Vegetation Communities, Rare Plants and General Wildlife Surveys

Spring, early summer and late summer surveys were conducted by State Parks and RCDSMM between 2020 and 2023 to maximize plant detection during their blooming season. Surveys covered the terrestrial and freshwater/ brackish water habitats of the BSA. Marine areas were not included in this effort. Field efforts were focused on identifying special-status plant and wildlife species, their sign, and potentially suitable habitat. Surveys were conducted by walking transects of convenience through all accessible areas. Areas not accessible were assessed using binoculars. Vegetation community mapping followed the CDFW Natural Communities List.

State Parks staff reviewed the online database for the Santa Monica Mountains LCP (<https://www.arcgis.com/home/item.html?id=594c161b58b547428ffd00911824c773>) to identify mapped LCP habitat categories and Significant Environmental Resource Areas (SERAs) on-site, and were subsequently ground-truthed to provide an updated vegetation/SERA map.

All plant species observed were documented and identified to the level necessary to determine any special status. General wildlife surveys were conducted concurrently with all other field efforts. Biologists recorded incidental wildlife observations and observations of sign, including burrows, middens, tracks, scat, and other evidence of activity by common and special-status wildlife species in the vicinity. An additional focused avian survey was conducted by Dr. Daniel Cooper, RCDSMM Senior Conservation Biologist in advance of on-site percolation testing on April 14, 2022.

Protected Tree Surveys

Between March and November 2021, RCDSMM staff and Watershed Steward Project members completed a tree assessment for a subset of the BSA that had the potential for grading or other

significant disturbance. All trees with a single trunk over 5 inches in diameter or having more than two trunks with a combined diameter of over 8 inches, were tagged with round, stamped, numbered tags at approximately 54 inches above grade (i.e., diameter at standard height [DSH]) on the north side of the tree (unless inaccessible). Native trees under 5 inches in diameter were also tagged to document demography of the site and identify potential volunteer trees that could be used for mitigation. Tree height was visually estimated, number of trunks and DSH were measured, and canopy extent estimated in four cardinal directions.

Trees were assigned a health and vigor rating based on a summary of the condition of roots, trunk, scaffold branches, small branches and twigs, and foliage according to the standards of the International Society of Arboriculture Guide to Judging Plant Condition. Each factor was given a point score according to the guidelines (5 being the highest score, 1 the worst). The total value was divided by 25 (the maximum amount of points possible) and multiplied by 100 to obtain a percent rating. Notes on pests, disease, mechanical injury, constrained roots or other potential impacts were also documented. The full report summarizing the tree assessment is the Native Tree and Oak Tree Report (Demirci and Dagit 2022; **Appendix K**).

Benthic Macroinvertebrates

On April 24 and July 19, 2014, benthic macroinvertebrate (BMI) samples were collected according to California's Rapid Bioassessment protocols (Ode et al. 2005) within Topanga Lagoon and at a site along Topanga Creek called Snake Pit (300 meters upstream of the PCH bridge). Starting at the downstream end of the site, a riffle within the reach was randomly selected and a total of nine 1-square-foot-wide kick net samples were collected at each location left, center, and right of three consecutive riffles, and combined for a composite sample of nine kicks. Samples were preserved in 95 percent ethanol or frozen within eight hours from the collection time and processed and analyzed within a month from the collection date. Most BMI were identified by RCDSMM Conservation Biologist Salvador Contreras and other RCDSMM staff to the family or genus level using a 40x magnification, dissecting microscope.

In November 2020, Brenton Spies, Rosi Dagit, RCDSMM staff, and students from California State University, Channel Islands, conducted a BMI survey as part of an overall assessment of habitat and conditions supporting the federally listed endangered tidewater goby. This survey was repeated during open lagoon conditions in February 2023 by RCDSMM staff. Both surveys used the same methodology.

Aquatic invertebrate assembly was assessed following two different collection methods similar to Turner and Trexler (1997) and the S.O.N.G.S. Wetland Mitigation Monitoring Protocol (S.O.N.G.S. 2006). Algae and emergent vegetation were noted at each survey location, with particular importance of documenting any observed *Ruppia* spp. as its presence is strongly correlated with supporting tidewater gobies. Percent algal/vegetation cover was assessed by a randomly placed 0.5-square-meter quadrat three times at each site.

A conventional D-frame sweep net with 1.2-millimeter (mm) mesh size was used to survey epibenthic as well as epiphytic invertebrates by essentially bumping the net horizontally along the bottom. This method works well in shallow water habitats where the mouth of the net spans most

or the entire water column. One “sweep” of the net approximately 0.5 to 1.0 meter in length was done at each sampling location. A benthic corer was used to assess infaunal invertebrate counts and sediment grain size and organic composition. Two or three sediment cores were collected from each sample location using a 4.8-centimeter (cm)-diameter PVC corer inserted approximately 6 cm deep into the sediments (Flannagan 1970; Kajak 1971; Turner and Trexler 1997; S.O.N.G.S. 2006). Samples from both collection methods were taken to the laboratory, washed through two stacked sieves, 0.5 mm and 0.125 mm mesh, and then manually separated from sediment and other organic materials. Specimens were preserved for identification and submitted to Aquatic Bioassay and Consulting Laboratories for identification and analysis in October 2021 and February 2023.

The summary table with the full results of BMI sampling is in the BMI Surveys and Assessment Appendix (refer to Appendix K).

Overwintering Monarch Butterfly Surveys

Western populations of the monarch are known to overwinter along the California coast from October through March. Over 400 overwintering sites have been identified, of which 60 have been lost to development or tree mortality. On November 13, 28, and 30, 2023, Xerces Society for Invertebrate Conservation (XSIC) and State Parks staff biologists conducted an overwintering monarch butterfly (*Danaus plexippus*) survey of eucalyptus (*Eucalyptus* spp.) groves within the BSA as part of a greater survey effort on State Parks properties. Survey methods were consistent with the Western Monarch Count protocols (XSIC 2023).

California Grunion Survey

Seasonal runs of the locally-sensitive California grunion have been assessed annually at Topanga Lagoon since 2004 by volunteer citizen scientists under the direction of Dr. Karen Martin and others. During 2020–2023, this program at Topanga Lagoon was continued and involved twice a month surveys during peak spawning periods from March through July. The surveys occurred when grunion were likely to run - at night after the highest tides associated with a full or new moon. Surveys involved monitors surveying the beach during forecast runs and reporting on weather, natural predators, and human hunters, along with other features. Monitors submitted their observations during run events via an interactive web site at <http://www.Grunion.Org> or a "hotline" phone number. A detailed overview of grunion in the BSA is included in the technical memo, California Grunion and Topanga Beach (Martin 2021) (refer to Appendix K).

Tidewater Goby Surveys

The RCDSMM has monitored the population of tidewater gobies since 2008 as an ancillary part of the focused southern steelhead trout surveys. Additional surveys have been conducted in collaboration with partners at UCLA and California State University, Channel Islands since 2020-2022 during which individual fish were sacrificed for gut analysis. All surveys were conducted under permits from USFWS (No. TE-811188-4, expired January 4, 2024), CDFW (No. S-200630009-20275-001, expired December 11, 2023; renewal pending), and State Parks Right of Entry and Scientific Collection Permits (expires in 2025). All surveys were conducted by RCDSMM biologists with assistance from USFWS staff, as well as Dr. David Jacobs and Brenton Spies.

Several survey methods have been used and included: (1) visual monitoring during visits to the lagoon that sometimes included snorkeling, and (2) both systematic (30-meter intervals) and spot seining using a 3.2-meter by 1.2-meter by 3 mm mesh seine net affixed to poles with the weighted bottom of the net kept firmly along the substrate, and the net angled to prevent fish from escaping. At the end of each pull, the net was raised, and all fish were counted, sized, and released. Distances for each seine pull varied. A single pass was used to identify species composition, size, and abundance. More detailed information on tidewater goby population trends is found in the technical memo, *Tidewater Goby Surveys for the Topanga Lagoon Restoration Project* (refer to Appendix K).

Steelhead Trout Surveys

The RCDSMM has been surveying southern California Distinct Population Segment of southern steelhead trout, a federally listed endangered species within Topanga Creek since 2001. The species was assumed extirpated locally between 1980 and 1998, when a single individual was documented by Rosi Dagit of RCDSMM in Topanga Creek (Bell et al. 2011). More focused fish surveys were subsequently undertaken by RCDSMM and three adult steelhead trout were observed and confirmed by NMFS in April 2000 (Bell et al. 2011). The RCDSMM then initiated more consistent and almost monthly snorkel surveys within the limits of steelhead anadromy in 2001, followed by the addition of life-cycle monitoring in 2008. These surveys are projected to continue until at least 2026.

All surveys were conducted under permits from CDFW (No. S-200630009-20275-001, expired December 11, 2023; renewal pending), NMFS (Section 10 [a][1][A] No. 15390-2R, expires December 31, 2025), and State Parks Right of Entry and Scientific Collection Permits (expires in 2025). All surveys were conducted by RCDSMM, CDFW, and NMFS biologists, with support of Stillwater Sciences Consultants. Surveys included snorkel surveys (2001–2023), redd surveys (2010–2023), lifecycle monitoring (2008–2023), with the latter including pit tagging, weir trap deployment, instream antenna, DIDSON surveys, tissue sampling and analysis. All surveys were conducted using CDFW (Dagit et al. 2018a, 2018b), NMFS protocols (NMFS 2017), and Coastal Monitoring Program methodologies (Adams et al. 2011). Trained field crews reliably documented fish in a consistent way as per O’Neal (2007). A team of at least two people (one or more snorkeling and one recording and observing from the bank with polarized sunglasses) walked the creek, snorkeling in all possible locations of any habitat type with enough depth to support fish. Young steelhead trout without clear parr marks were not counted to avoid counting arroyo chub by mistake. The size of the fish was estimated and provided to the data recorder independently, to have repeated counts to verify numbers of fish in each size class. If there were any inconsistencies between divers, a repeat pass was made.

Numbers of steelhead trout, size and life stage/maturation were recorded according to both size class and the Juvenile Steelhead Life-Stage Rating Protocol developed by the IEP Steelhead Project Work Team. Habitat characteristic data including habitat type, maximum and average depth, percent canopy cover, dominant substrate, percent algae cover, percent of instream cover, and shelter value were noted at each location where steelhead trout were observed. The presence of other fish species and invasive red swamp crayfish were also noted. Additional details on survey methods are found in Dagit et al. (2018a) and Dagit et al. (2019).

The full report summarizing the steelhead trout surveys can be found in the Southern Steelhead Trout for the Topanga Lagoon Restoration Project (refer to Appendix K).

Fish Passage Assessment Survey

Fish migration conditions have been monitored in Topanga Creek since 2001 by the RCDSMM through monitoring storm event connectivity at the lagoon-ocean interface and monitoring base flow connectivity throughout the lower reaches of the creek subject to sub-surface flow conditions. The entire lagoon was occasionally seined during this time to check for presence of smolts using two teams with 3-meter x 1-meter seines pulling the nets for 10–20 meters at various spots within the lagoon up as far as the PCH bridge. All fish captured were moved into buckets of clean, cold water standing by each net. Types of algae were noted. Fish were identified, fork length measured, then released. No steelhead trout were captured. The full report summarizing the fish passage surveys can be found in the Topanga Lagoon Restoration Ecohydrology Report: Fish Passage, Fish Habitat Suitability and Habitat Zone Elevations (refer to Appendix M).

Aquatic Herpetofauna Survey

A survey focused on detection of aquatic herpetofauna was conducted by Dr. Katy Delaney, NPS SMMNRA Wildlife Ecologist, and Sarah Wenner, NPS SMMNRA Biological Technician, on June 10, 2021, from 12:25 to 2:15 p.m. following the “intensive” protocol of the NPS Mediterranean Coast Network’s Inventory and Monitoring Program (Delaney et al. 2011). A 250-meter section of Topanga Creek was surveyed to collect physical and biological stream data and to verify species identification. NPS surveys were limited to this area as it was where water was present within the Project boundary and along areas to be disturbed. Undersides of rocks, submerged logs and floating vegetation were searched for amphibian egg masses. Banks, exposed rocks, and floating vegetation were also scanned for juvenile and adult amphibians. Abundance estimates and age class counts were collected. The presence/absence and abundance of fish and crayfish were also documented (refer to Appendix K).

Herpetofauna species and general age class (adults, metamorphs, tadpoles, egg masses) were also identified as present when encountered during steelhead snorkel surveys or during other general wildlife surveys.

Terrestrial Herpetofauna Survey

Terrestrial herpetofauna surveys were conducted by Dr. Katy Delaney, NPS SMMNRA Wildlife Ecologist, and NPS SMMNRA and RCDSMM support staff. Between June 24 and August 16, 2021, NPS SMMNRA deployed 25 coverboards (Grant et al. 1992) over the study area in various habitat types to facilitate surveying of terrestrial herpetofauna. Coverboards were approximately 2 feet by 2.5 feet in size and made from quarter-inch plywood. They were not checked or moved for a 26-day “curing” period. Each coverboard and the surrounding area was checked five times over a five-week period (July 20 and 22 and August 3, 5, and 16, 2021) by NPS SMMNRA herpetofauna interns, Randy Viola and Lindsay Nason, and Claire Sanders, Watershed Steward. Checks were performed mid-morning and lasted one to two hours. Other herpetofauna encountered on-site during other field surveys were noted (refer to Appendix K).

Historic U.S. Geological Survey Bird Surveys

Four bird surveys were completed by the U.S. Geological Survey within lower Topanga Park on May 22–23 and June 26–27, 2004. These included 24 sites, of which one (R1) was located on-site along the riparian corridor near the Snake Pit. Trained observers Josephine Falcone and Heather Howitt) censused birds an hour after sunrise to approximately 11 a.m. using both unlimited distance counts (Blondel et al. 1981) and fixed-radius counts (Ralph et al. 1993). Each count began immediately upon the arrival of the observer at the plot and lasted 10 minutes. Observers counted all birds detected and recorded whether each bird occurred inside or outside of a 50-meter-radius count circle centered on the observer. Birds flying overhead (“flyovers”) were recorded separately. Data were recorded separately for the first three minutes, the following two minutes, and the remaining five minutes of the count, to allow for potential comparisons with data from investigators using count durations of less than 10 minutes. When possible, the age and sex of birds detected were recorded. Observers did not move about the plot during the count, and no attracting devices or sounds (e.g., “pishing”) were used (refer to Appendix K).

Least Bell’s Vireo Surveys

Least Bell’s vireo is both state and federally listed as endangered. Surveys for the presence of least Bell’s vireo were conducted in June–July 2021 by Courtney McCammon of CJ Biomonitoring following the 2001 USFWS Survey Guidelines. Five surveys at least 10 days apart between June 21 and July 31 were conducted and within the protocol survey period. Surveys were conducted between dawn and 11:00 a.m., avoided periods of extreme or unusual weather, and were via foot within suitable habitat. All avian species observed were documented. More detailed information on least Bell’s vireo surveys can be found in the technical memo, *Least Bell’s vireo Surveys Topanga Lagoon Restoration Project* (McCammon 2021; refer to Appendix K).

An additional focused avian survey, which included search for least Bell’s vireo, was conducted by Dr. Daniel Cooper, RCDSMM Senior Conservation Biologist, in advance of on-site percolation testing on April 14, 2022.

Terrestrial Mammal Surveys

Trapping efforts for small terrestrial mammals were led by NPS SMMNRA wildlife ecologists with support from RCDSMM staff, Dr. Thea Wang (mammalogy), and volunteers. Dr. Seth Riley and Joanne Moriarty, MS RVT. A total of 40 Sherman small mammal traps were deployed June 14–18, 2021, along seven transects, with traps approximately 10 meters apart. Traps were checked at first light each morning June 15–18, 2021, with all captures identified and processed.

For medium to large mammals, remote cameras were set at four sites in the BSA and were active from June 29 through August 4, 2021, and the photos were subsequently processed by SMMNRA staff (refer to Appendix K).

Bat Surveys

On June 1, 2021, a visual assessment of the BSA was conducted for potential roost sites and bat foraging habitats. Two Titley Scientific AnaBat Swift full-spectrum passive bat detectors/recorders, fitted with Titley’s US-O V3 omni-direction microphones were deployed to passively sample two areas with greatest probability to support bat activity in the BSA. Detector

#1 was located at 34.041255° N, 118.581980° W (World Geodetic System 1984 [WGS84]) at the edge of Topanga Creek to sample the open airspace of the western portion of the BSA. Detector #2 was located at 34.040751° N, 118.582821° W (WGS84) in a small forest glade away from the creek and chosen to sample the eastern portion of the study area within a corridor that included *Salix* sp. and mulefat (*Baccharis salicifolia*) dominated riparian scrub edge and a tall, riparian, California sycamore (*Platanus racemosa*) dominated woodland.

On June 1–4, 2021, the detectors were set to automatically initiate and record bat call files in WAV format from one half-hour prior to sunset until one half-hour following sunrise (approx. 19:30 p.m. until 06:15 a.m.). On June 5, 2021, both detectors were retrieved, and the data files subsequently analyzed to determine the bat species cohort within the BSA (refer to Appendix K).

Jurisdictional Waters and Wetlands Surveys

On January 16, 2020, WRA, Inc. (WRA) conducted a jurisdictional delineation within the BSA to identify regulated aquatic habitats on-site. Note the survey area did not include a small approximately 1.5-acre zone of imported fill located between the east bank of Topanga Creek and the western edge of TCB. Delineated areas included: federal wetlands/waters (WOTUS) under the jurisdiction of USACE per Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act; Waters of the state under the jurisdiction of the California State Water Resources Control Board and the Los Angeles RWQCB; aquatic habitats within the coastal zone regulated by the CCC as Environmentally Sensitive [Habitat] Areas (ESHAs); and CDFW jurisdiction of streams under Section 1600 of the CFGC. WRA also compared the delineated jurisdictional waters and wetlands to mapped Los Angeles County Santa Monica Mountains SERAs. SERAs are areas within the LCP that have the highest biological significance, rarity, and sensitivity.

WRA conducted the on-site “routine” delineation per the methodology outlined in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008), and *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008). The jurisdictional limits of non-wetland waters were mapped based on a combination of field indicators such as OHWM, and within tidally influenced areas, the limits of mean high water and high-tide line elevations (North American Vertical Datum of 1988 [NAVD 88]), which were identified from local tide stations. The three parameters required to define a federal or state wetland were the presence of hydrophytic vegetation, wetland hydrology, and hydric soils as outlined in the USACE Wetlands Delineation Manual. The CCC regulated wetlands are required to only meet one of the parameters. CDFW jurisdiction was delineated by identifying the top of bank or the outer edge of riparian vegetation, whichever distance is greater.

In late 2021, the limits of ground disturbance in the BSA were expanded to the north, along TCB, resulting in the need to delineate an additional section of creek. On April 19, 2022, State Parks staff extended the delineation to encompass the stream and associated wetland habitat to the new northern BSA boundary. Methods mirrored those used during the 2020 WRA survey.

On May 31, June 1, and June 2, 2023, an aquatic resources delineation update for the Project was conducted by ESA to update the 2020 and 2022 delineations (ESA 2023a). Although the updated delineation did not fully include the subsequently expanded Project boundary to include the potential seepage pit and sewer wastewater development, no wetland or water features were observed in these areas during the 2022-23 general biological surveys as the wastewater areas involve the PCH pavement, TCB road shoulder, or disturbed upland areas at the seepage pit location. Once a final preferred alternative with wastewater option is selected, associated areas not covered by ESA's 2023 delineation would be formally reviewed to confirm or update their findings as part of regulatory approvals.

On-site waters, wetlands, and associated riparian cover would be considered H1 Habitat (SERA) under the LCP. H1 Habitat is the highest tier and includes the most sensitive and vulnerable habitat types. WRA estimated on-site H1 habitat via the available County maps. State Parks and RCDSMM subsequently ground-truthed the boundaries of the H1 Habitat to provide a more refined estimate.

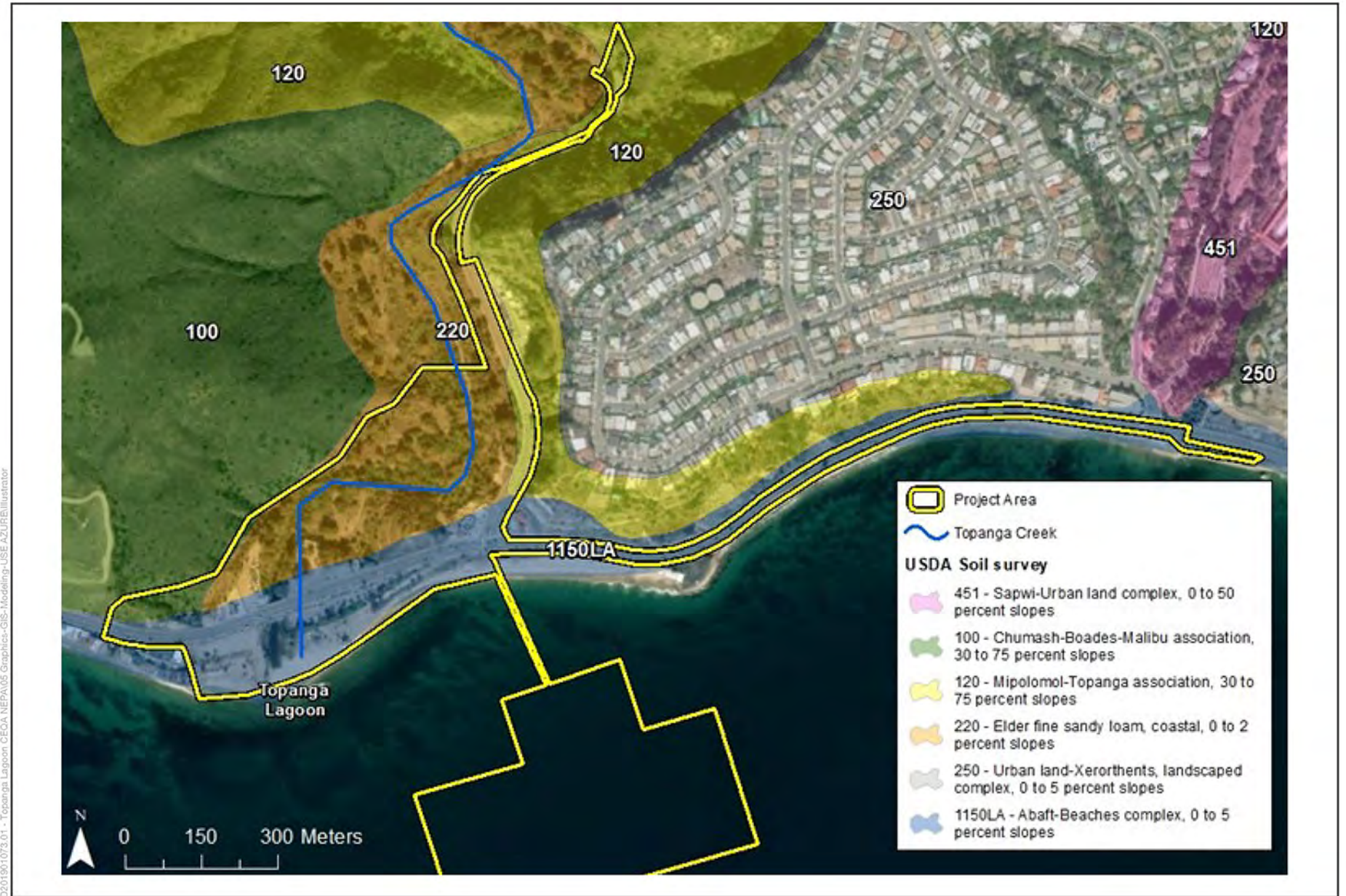
Observations on the BSA, including on-site topography, plant communities and land use, were also noted.

To help determine baseline aquatic resource condition, on February 14 and 26, 2020, The Bay Foundation staff conducted a California Rapid Assessment Method (CRAM) assessment for wetland areas within the Topanga Lagoon to provide a baseline of the overall condition of the area prior to construction and facilitate assessment of post construction success. State Parks staff performed a CRAM assessment of an additional stream segment to the north to accommodate the expanded BSA on April 12, 2022. In general, habitat quality as assessed by CRAM improved as Assessment Areas move further upstream. The full report, 2020 Wetland Condition Assessment for the Topanga Lagoon Restoration Project is attached to Appendix K.

Soils

Four native soil types occur within the BSA. In general, the floodplain of Topanga Creek is comprised of Elder fine sandy loam, coastal, having 0 to 2 percent slopes. The steep hillsides to the northwest of the floodplain are comprised of Chumash-Boades-Malibu association, with 30 to 75 percent slopes, and the remainder of the BSA to the south of the floodplain, including the developed areas and beach, is primarily comprised of Aaft-Beaches complex with 0 to 5 percent slopes. A small area of Mipolomol-Topanga association, 30 to 75 percent slopes, is located along TCB.

There are also areas of imported fill that are associated with previous development at the site. These are primarily along the western edge of TCB, along PCH, and on either side of lower Topanga Creek (**Figure 3.3-2**).



SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), NRCS Web Soil Survey, 2021
 Service Layer Credits: Esri, HERE, Garmin, Intermap, Increment P corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Topanga Lagoon Restoration Project

Figure 3.3-2
Soils Map

Vegetation Communities and Land Cover Types

The BSA shows a high level of disturbance due to historic on-site development, existing surrounding development, invasive species, and ongoing human impacts (e.g., trash, illegal camping). A total of 25 vegetation communities and land cover types were recorded during field surveys (Table 3.3-1, Figure 3.3-3). These include the results of the State Parks 2020–2023 general surveys of non-marine areas of the BSA, supplemented primarily by species documented in the Jurisdictional Delineation Report (WRA 2020), the Aquatic Resources Delineation Update (ESA 2023a), and the Native Tree and Oak Tree Report (Demirci and Dagit 2022). A discussion of sensitive natural communities and their status is discussed in *Sensitive Natural Communities*.

**TABLE 3.3-1
 VEGETATION COMMUNITIES AND LAND COVER TYPES ACREAGES**

Vegetation Community or Land Cover Type	CDFW Conservation Status Rank ¹	LCP Designation ²	Project Area (acres)	BSA (acres) ³
Woodland				
California Sycamore (<i>Platanus racemosa</i>) Woodland / Red & Arroyo Willow (<i>Salix laevigata</i> , <i>S. lasiolepis</i>) and Mulefat (<i>Baccharis salicifolia</i>) Understory [61.312.05]	G3S3	H1	8.98	15.54
Arroyo Willow Thickets Association [61.201.01]	G4S4	H1	0.23	0.38
Individual Native Trees (Sycamore, Cottonwood (<i>Populus fremontii</i>), Coast Live Oak (<i>Quercus agrifolia</i>))	NR	H1	0.16	0.23
<i>Eucalyptus</i> Woodland Alliance/Non-Native Tree Stands [79.100.02]	NR	H3	2.48	6.93
California Black Walnut (<i>Juglans californica</i>) Woodland/ Annual Herbaceous understory [72.100.03]	G3S3	H1	0.03	0.37
California Black Walnut (<i>Juglans californica</i>) / Laurel Sumac (<i>Malosma laurina</i>) Woodland [72.100.07]	G3S3	H1	0.15	1.48
Scrub/Shrublands				
Black Sage (<i>Salvia mellifera</i>) - Coastal Sage (<i>Artemisia California</i>) – Laurel Sumac (<i>Malosma laurina</i>) Association [32.020.15]	G4S4	H2	-	2.49
California Sagebrush (<i>Artemisia californica</i>) - Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) Association [32.010.07]	G4S4	H2	-	1.76
California Brittlebush (<i>Encelia californica</i>) - California Sagebrush (<i>Artemisia californica</i>) Shrubland Association [32.050.01]	G3S3	H2HS	0.51	0.74
Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) Association – [32.035.01]	G2S2	H2HS	0.96	1.76
Lemonade Berry (<i>Rhus integrifolia</i>) Shrubland Association - [37.803.01]	G3S3	H2HS	3.96	16.29
Purple Sage (<i>Salvia leucophylla</i>) - Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) / Annual Herb Association - [32.090.05]	G3S3	H3	0.53	0.53
Coastal Sage Scrub (Disturbed)	NR	H3	1.52	1.73
Mixed Native and Non-native Riparian	NR	H1	0.48	0.48
Bigpod Ceanothus (<i>Ceanothus megacarpus</i>) Chaparral [37.201.01]	G4S4	H2	-	0.98
Herbaceous				
Giant Wildrye (<i>Elymus condensatus</i>) Grassland [41.265.01]	G3S3	H3	0.18	0.18
Salt Grass (<i>Distichlis spicata</i>) Flats [41.200.09]	G5S4	H2	0.07	0.07
Arundo Stands (<i>Arundo donax</i>) Association [42.080.01]	NR	H3	1.88	6.16

Vegetation Community or Land Cover Type	CDFW Conservation Status Rank ¹	LCP Designation ²	Project Area (acres)	BSA (acres) ³
Ruderal Areas and Non-native Annual Grassland	NR	H3	3.41	6.03
Waterways				
Stream Channel (Topanga Creek)	NR	H1	1.50	2.52
Ocean	NR	N/A	34.80	53.10
Other/Developed Areas				
Developed / Landscaped Areas	NR	H3	7.63	12.78
Paved Areas	NR	H3	14.10	16.70
Sand	NR	H3	4.64	11.44
Barren / Sparsely Vegetated Areas	NR	H3	2.73	3.31
Total Acreage⁴			90.94	164.00

NOTES: BSA = Biological Study Area; CDFW = California Department of Fish and Wildlife; LCP = Local Coastal Program.

¹ A conservation status rank (also known as “rarity rank” or “high inventory priority” designation) is used to determine the significance of Project impacts on plant communities. The conservation status ranking system consists of a geographic scale (G=Global; S=State) and a degree of threat (1=critically imperiled; 2=imperiled; 3=vulnerable to extirpation or extinction; 4=apparently secure; and 5=demonstrably widespread, abundant, or secure). Plant community alliances with conservation status ranks of G1 through G3, or S1 through S3, are considered “sensitive natural communities.”

² LCP Habitat Categories: H1, H2, and H2HS are considered Sensitive Environmental Resource Area (SERA).

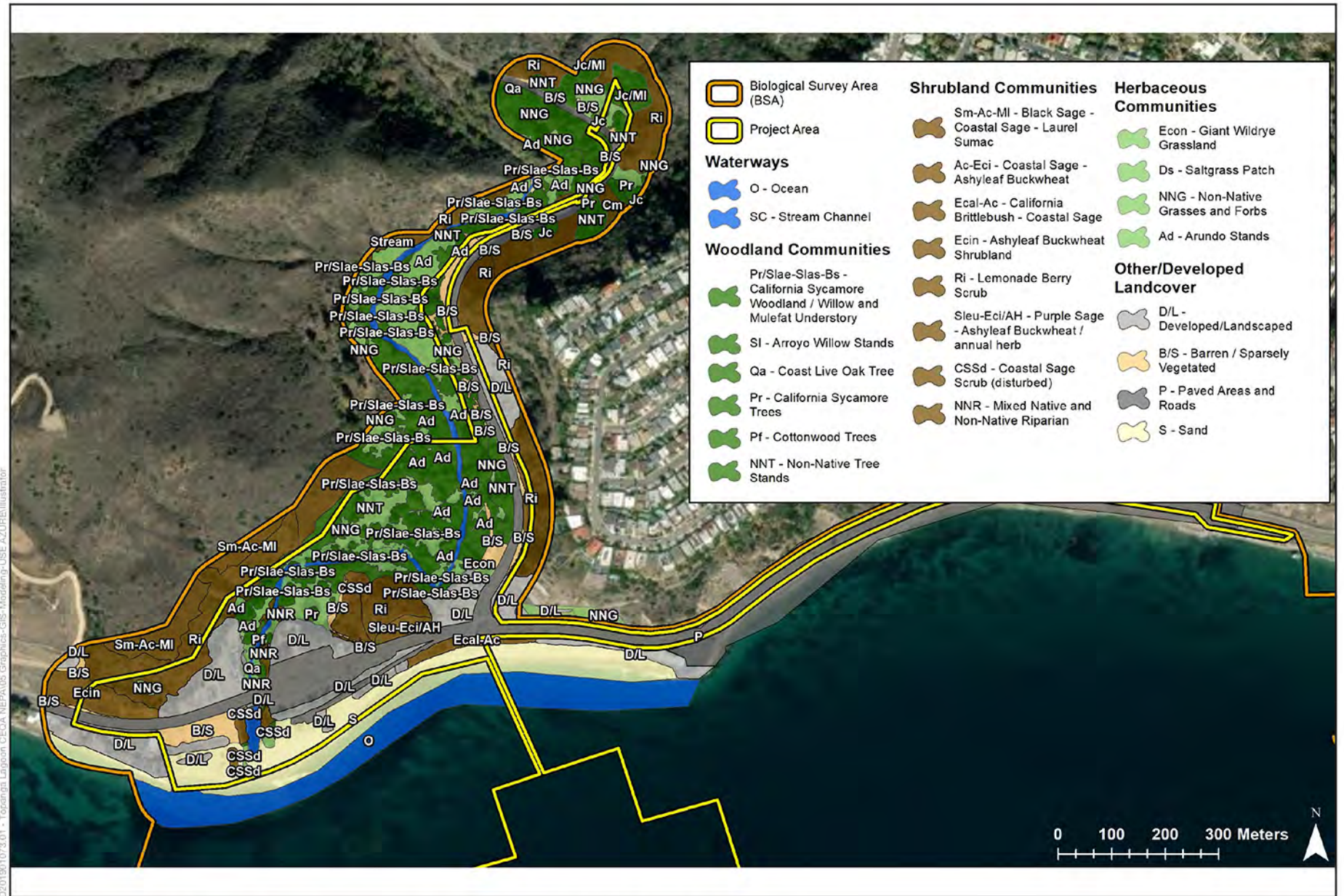
³ BSA refers to the entire Proposed Project plus a general 200-foot buffer for terrestrial areas.

⁴ Acreages may not sum due to rounding.

SOURCE: Data compiled by State Parks in 2023

CDFW uses a conservation status rank to determine the significance of Project impacts on sensitive plants, animals and natural communities. The conservation status ranking system consists of a geographic scale (G=Global; S=State) and a degree of threat (1=critically imperiled; 2=imperiled; 3=vulnerable to extirpation or extinction; 4=apparently secure; and 5=demonstrably widespread, abundant, or secure). Plant community alliances with conservation status ranks of G1 through G3, or S1 through S3, are considered “sensitive natural communities.” CDFW ranking categories are as follows:

- **G1/S1 (Critically Imperiled):** At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors).
- **G2/S2 (Imperiled):** At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors).
- **G3/S3 (Vulnerable):** At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors).
- **G4/S4 (Apparently Secure):** At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors).



SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023), Landcover Mapping; DPR September 2023; Service Layer Credits: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Topanga Lagoon Restoration Project

Figure 3.3-3
 Vegetation Communities and Land Cover Map

A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks. By adding a “?” to the rank (e.g., S2?) this represents more certainty than S2S3, but less certainty than S2.

Habitat categories under the LCP designations of H1, H2HS, H2, and H3 are also provided. The LCP categorizes communities as listed above in descending order of priority of preservation, with H1, H2, and H2HS communities being considered SERA habitat types.

Woodland

Several woodland communities were identified within the floodplain of Topanga Creek north of PCH. The dominant association is a mix of native sycamore, red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), and mulefat. Openings created in the woodland canopy and the introduction of ornamental non-native trees has created breaks in the continuity of the original riparian woodland community. This has resulted in the presence of both non-native tree stands and isolated native trees that were fragmented from the contiguous native tree canopy. Several of these habitats are considered sensitive by CDFW and the LCP.

California Sycamore (*Platanus racemosa*) Woodland / Red & Arroyo Willow (*Salix laevigata*, *S. lasiolepis*) and Mulefat (*Baccharis salicifolia*) Understory [61.312.05]

This community comprises the largest native community delineated within the BSA and encompasses the portions of the floodplain where there is no development, high degree of disturbance, or cleared areas filled with non-native herbaceous plant communities. The arborescent vegetation layer is dominated by western sycamore trees, which vary in density and size. Beneath the sycamores, and particularly near the regular watercourse of Topanga Creek, primarily arroyo willow and some red willow trees, as well as mulefat, grow densely. Southern California black walnut (*Juglans californica*) and white alder (*Alnus rhombifolia*) are also occasionally present. As recently as 2002, over 20 single-family residences existed within this area prior to their removal by State Parks. Some relict ornamental trees and shrubs still grow within this community, such as cape honeysuckle (*Tecoma capensis*), English ivy (*Hedera helix*) and iris (*Iris pseudacorus*). It is also noteworthy that, in some areas within this community, replanting efforts of native trees have been made by the RCDSMM, State Parks, and Mountains Restoration Trust. This community designation is considered sensitive by CDFW (G3S3) and is considered H1 habitat by the LCP.

Arroyo Willow Thickets Association [61.201.01]

This natural community occurs in multiple locations along the stream channel in the southern half of the BSA, in riparian areas without larger trees that are not overrun with invasive arundo (*Arundo donax*). One of these areas is adjacent to the parking area at the Topanga Ranch Motel upslope of the stream course, while the other locations occur further to the northeast in between the stream channel and disturbed grassland. These areas are dominated by arroyo willow with an understory typically composed of mixed native and non-native grasses (*Avena* and *Bromus* sp.) and other native herbaceous plant species such as ragweed (*Ambrosia psilostachya*) and invasive terracina spurge (*Euphorbia terracina*). This natural community is not considered sensitive by CDFW as an alliance (G3S4) but is considered H1 habitat by the LCP. Trees within areas that could be disturbed have been individually tagged and considered in the Native Tree and Oak Tree Report (Demirci and Dagit 2022).

Individual Native Trees

These individual native trees do not meet the dominance criteria to reclassify the vegetation communities in which they are found. Most of these native trees are western sycamores with some coast live oak (*Quercus agrifolia*) and cottonwood trees (*Populus fremontii*). While these trees are not communities, and therefore are not considered a sensitive community by CDFW, they are all considered H1 habitat within their riparian context by the LCP. They are also individually tagged and considered in the Native Tree and Oak Tree Report (Demirci and Dagit 2022), Appendix K.

Eucalyptus Woodland Alliance/Non-native Tree Stands [79.100.02]

This community is common along TCB, as well as in areas of the floodplain that were previously occupied by residences. This community is dominated by non-native eucalyptus trees and other horticultural varieties with an understory of mixed native and non-native shrubs, grasses, and forbs, such as garden nasturtium (*Tropaeolum majus*), wild radish (*Raphanus* sp.), English ivy, and various common weedy annual grasses common to the region, such as bromes (*Bromus* sp.) and Bermuda grass (*Cynodon dactylon*). This community is not native and not considered sensitive by CDFW and is considered H3 habitat by the LCP. All trees within this area that could be disturbed by Project activities are individually tagged and considered in the Native Tree and Oak Tree Report (Demirci and Dagit 2022), Appendix K.

California Black Walnut (*Juglans californica*) Woodland/Annual Herbaceous Understory [72.100.03]

This community occurs in two locations, both in the northern extent of the BSA, on the east side of TCB within the greater area that may be utilized for wastewater seepage pits, if that wastewater option is pursued. Both locations are adjacent to TCB and located at the bottom of draws which channel runoff from the hillside above. In both instances the understory is comprised almost entirely of non-native understory, the first consisting of non-native annual grasses such as bromes, and herbaceous forbs such as terracina spurge. This community is considered sensitive by CDFW (G3S3) and is considered H1 by the LCP.

California Black Walnut (*Juglans californica*) Woodland/Laurel Sumac (*Malosma laurina*) Woodland [72.100.07]

This community occurs in the northern extent of the BSA, adjacent to TCB and the potential site for wastewater seepage pits. The community is found in close proximity to the California black walnut woodland alliance noted above but is more upland in character. There is a distinct difference in slope aspect and steepness which leads to more arid conditions. The understory, where present, consisted mainly of non-native annual grasses and terracina spurge. This natural community is considered sensitive by CDFW (GNRS3) and is considered H1 by the LCP.

Scrub/Shrublands

Several coastal sage scrub natural communities were identified on the steep slopes along the northern and eastern edges of the BSA and to the northeast of the Topanga Ranch Motel. This series of communities is separated topographically by several ridgelines and steep-walled draws in the hillside. These changes in terrain, aspect, and previous development have created breaks in the continuity of these various communities. In general, these communities were dominated by

dense growth of native shrubs and a disturbed understory of primarily non-native grasses and forbs, such as crimson fountain grass (*Pennisetum setaceum*), wild oats (*Avena* sp.), and bromes. Several of these habitats are considered sensitive by CDFW.

Black Sage (*Salvia mellifera*) – California Sagebrush (*Artemisia California*) - Laurel Sumac (*Malosma laurina*) Association [32.020.15]

This natural community was found along the northern boundary on the slopes above the lease development along PCH, west of Topanga Creek. This community is bounded cross slope by two draws which change the slope aspect. Black sage (*Salvia mellifera*), California sagebrush (*Artemisia California*), and laurel sumac (*Malosma laurina*) were the dominant shrubs on-site. The understory is lightly disturbed by common invasive grasses, such as bromes and rattail fescue (*Festuca nyruos*). This community is not considered sensitive by CDFW (G4S4) but is considered H2 habitat by the LCP.

California Sagebrush (*Artemisia californica*) – Ashyleaf Buckwheat (*Eriogonum cinereum*) Association [32.010.07]

This natural community was found along the northern boundary of the BSA on the slopes above the vegetated Topanga Creek floodplain. This community is bounded by a draw on one side, a change in slope face on the other, and by non-native tree stands that remain from the past residential development to the southeast. California sagebrush and ashyleaf buckwheat (*Eriogonum cinereum*) dominated the shrub layer. The herbaceous layer, as is common within the region, is invaded by common invasive grasses including bromes, rattail fescue, and wild oats. This community is not considered sensitive by CDFW (G4S4) but is considered H2 habitat by the LCP.

California Brittlebush (*Encelia californica*) – California Sagebrush (*Artemisia californica*) Shrubland Association [32.050.01]

This community was located within a strip of disturbed, but largely native, vegetation located between Topanga Beach and PCH in the southeast corner of the BSA. California brittlebush and California sagebrush were predominant, but sugar bush (*Rhus ovata*) was also present. Non-native invasive and horticultural species were frequent and included palm trees, arundo, fountain grass, horseweed (*Erigeron* sp.), terracina spurge, and English ivy, among others. While this community designation is considered sensitive by CDFW (G3S3), this habitat type when found along PCH is subject to recurring disturbance and will presumably remain highly disturbed indefinitely. The LCP would classify this community as H2 or H3 habitat where disturbance frequently recurs due to PCH.

Ashyleaf Buckwheat (*Eriogonum cinereum*) Association – [32.035.01]

This community was mapped at the extreme western edge of the BSA along PCH. Ashyleaf buckwheat is the dominant native in the shrub layer, with rarely occurring lemonade berry (*Rhus integrifolia*). This community is highly disturbed by crimson fountain grass and iceplant (*Carpobrotus edulis*), which is commonly seen along PCH and other roads along the south coast, as well as other invasive annuals such as bromes and wild oats. Areas nearest the road are also subjected regularly by humans, vehicles, and their associated refuse disturbance. This community is considered sensitive by CDFW (G2S2) and would be considered H2 habitat, or perhaps H3 in this highly disturbed state, by the LCP.

Lemonade Berry (*Rhus integrifolia*) Shrubland Association – [37.803.01]

This community was mapped in several locations along the northern edge of the BSA and on a small hill landform uprising from the floodplain of Topanga Creek, located immediately west of the businesses on the northwest corner of the intersection of PCH and TCB. This hill is crossed by a switchback trail that leads to the top and is subject to heavy visitor traffic. Despite this high degree of disturbance, plant life on the hill is predominantly native shrubs. Aside from dominant species lemonade berry, other prevalent native shrubs include laurel sumac, ashleaf buckwheat, California sagebrush, clustered tarweed (*Deinandra fasciculata*), native needlegrass (*Stipa* sp.) and deerweed (*Acemisson glaber*) among other native species. Non-native plants within this community include an abundance of century plants (*Agave americana*), various landscape plants that are remnant from past development on-site, and invasive annuals such as bromes, wild oats, and onionweed (*Asphodelus fistulosus*). This community is considered sensitive by CDFW (G3S3) and is classified as H2HS habitat by the LCP.

Purple Sage (*Salvia leucophylla*) – Ashleaf Buckwheat (*Eriogonum cinereum*) / Annual Herb Association – [32.090.05]

This community is in a small area between steep slopes on the southern side of the hill near PCH. This community is heavily disturbed, likely due to its steep and eroded slope, constant exposure to winds, and proximity to PCH. In addition to the dominant purple sage and ashleaf buckwheat shrubs, coast prickly pear (*Opuntia littoralis*) and lemonade berry are also present. The area is heavily colonized by crimson fountain grass, Russian thistle, and wild oats along with other non-native grasses and forbs. While this community designation is considered sensitive by CDFW (G3S3), this area will likely remain highly disturbed indefinitely regardless of any potential Project activities due to its exposure, slope, and proximity to PCH. The LCP would classify this habitat as H3 habitat due to its high level of disturbance.

Coastal Sage Scrub (Disturbed)

This community designation was used to classify areas where a component of coastal sage scrub species (i.e., lemonade berry, coast goldenbush [*Isocoma menziesii*], or California sagebrush) exists but are dominated by non-native plants or is otherwise highly disturbed. This includes areas west of the small hill on the north side of PCH, and a highly disturbed patch of coast goldenbush found on the beach in the southwestern portion of the BSA. These areas are dominated by ornamental plants and non-native grass species, including bromes, wild oats, crimson fountain grass, and other invasive annuals. This community is not designated in the CDFW Natural Communities List and is therefore not considered sensitive. The LCP designation would classify such disturbed habitats as H3 habitat.

Mixed Native and Non-Native Riparian

This community is used for convenience to refer to areas adjacent to the Topanga Creek stream channel that are dominated by non-native vegetation. These areas are often dominated by umbrella sedge (*Cyperus involucratus*), mint species (*Mentha* sp.), and various predominantly non-native grasses and herbaceous species. Natives of note in this area include one small (approximately 40-square-foot) patch of native California bulrush (*Schoenoplectus californicus*) south of the PCH bridge on the eastern bank of the creek, as well as occasional occurrences of native narrowleaf cattail (*Typha latifolia*) and giant horsetail (*Equisetum telmateia*). The small

size of these stands makes mapping impractical, however, this community is not designated in the CDFW Natural Communities List and is therefore not considered sensitive. The LCP classifies all riparian habitat as H1 habitat, even if it is disturbed habitat.

Bigpod Ceanothus (*Ceanothus megacarpus*) Chaparral [37.201.01]

This community is present on portions of the eastern slopes above TCB and consisted of bigpod ceanothus (*Ceanothus megacarpus*) and a limited understory on rocky substrate. This community was limited in extent and associated with a flat aspect dividing draws along the slope with riparian communities. This community is not considered sensitive by CDFW (G4S4) and is classified as H2 habitat by the LCP.

Herbaceous Communities

Several herbaceous communities were identified within the BSA. Non-native plant communities represent the most of these communities by area. These non-native herbaceous communities are frequently present in areas disturbed by previous development within the Topanga Creek floodplain north of PCH.

Giant Wildrye (*Elymus condensatus*) Grassland [41.265.01]

This community was identified in between the hill north of PCH and west of TCB, where it is differentiated from its barren or developed surroundings by a dominance of giant wildrye (*Elymus condensatus*). The community's proximity to TCB as well as cleared and developed areas has resulted in a high degree of disturbance. Smaller plants in the herbaceous layer are overwhelmingly non-native grasses and forbs typical of disturbed areas, such as rattail fescue and bromes, as well as some terracina spurge. It is worth note that north from this area along the western edge of TCB, there is abundant giant wildrye that occurs underneath the canopy of non-native trees, though the area is highly disturbed due to its proximity to the road and sidewalk. While this community designation is considered sensitive by CDFW (G3S3), this area is highly disturbed and modified from its natural state. The LCP would classify this habitat as H3 habitat due to the high level of disturbance.

Salt Grass (*Distichlis spicata*) Flats [41.200.09]

This habitat exists in one small patch on the east bank of Topanga Creek at the beach. This is a relatively homogenous patch of salt grass (*Distichlis spicata*) with some scattered silver beach bur (*Ambrosia chamissonis*) and ruderal species nearby. It exists in a mat adjacent to the creek outlet, beach sand, and a patch of disturbed coastal sage scrub vegetation. This community is not considered sensitive by CDFW (G5S4). The LCP would classify this habitat as H2 habitat.

Arundo Stands (*Arundo donax*) Association [42.080.01]

This community designation refers to those areas that are overgrown and dominated by arundo. Arundo is ubiquitous in nearly every watershed in California, forming dense stands with deep rhizomes that make it resilient in the face of attempted control. Arundo occurs throughout the BSA within the riparian area adjacent to the stream channel and comprises the second most common community mapped therein. This community is invasive and has no CDFW ranking. The LCP would classify this habitat as H3 because it is dominated by invasive plants.

Ruderal Areas and Non-native Annual Grasslands

This mapping unit is used for convenience and encompasses multiple areas within the BSA that are typified by low-lying primarily non-native herbaceous vegetation typical of disturbed areas. These areas are typically overrun with non-native grasses and forbs and other annuals, predominantly bromes, wild oats, wild radish, and nasturtium.

Areas assigned to this category were located on the hillside in the southwestern corner of the BSA, throughout large portions of the riparian area, and along the north side of PCH east of TCB. Some native annuals may live in these areas but do not approach dominance. This community is not designated by CDFW and is therefore not considered sensitive. The LCP would classify this habitat as H3.

Waterways

This category represents unvegetated areas consisting of open water and seasonally wetted. Within the Topanga Creek floodplain, open water and seasonally wetted unvegetated areas are frequently associated with riparian plant communities considered sensitive by CDFW and considered H1 habitat by the LCP, and as such is mapped separately from other barren and sparsely vegetated areas.

Stream Channel (Topanga Creek)

This mapping unit represents the bank full stage of Topanga Creek. Southern portions of the stream channel, and the entirety of the lagoon, are open water, while northern portions of the stream channel are a mixture of open water and unvegetated seasonally wetted areas. The stream channel is closely associated with the California Sycamore woodland - red & arroyo willow and mulefat, the Arundo stands, and the mixed native and non-native riparian communities. This landcover type is not a CDFW designated community and therefore cannot be considered sensitive. The LCP would likely categorize the creek as H1 habitat.

Ocean

The extended BSA includes a portion of the Pacific Ocean. This area was not surveyed in the course of the terrestrial surveys and is only included in the southernmost portion of the buffer. Marine resources are discussed in Section 3.11, *Marine Biological Resources*. This landcover type is not a CDFW designated community and therefore cannot be considered sensitive.

Other/Developed Areas

Due to their developed and disturbed nature, all of these land cover types are not designated by CDFW and are therefore not considered sensitive. These land cover types are considered H3 per the LCP.

Developed and Landscaped Areas

This land cover type includes all developed areas associated with the Topanga Ranch Motel and on-site leases, including associated landscaping and ancillary structures. It also applies to the roads including TCB, PCH (inclusive of the Topanga Creek bridge), and large parking lots associated with the Topanga Ranch Motel and Topanga Beach. This land cover type is one of the most prevalent mapped.

Paved Areas

This mapping unit is used for convenience and applies to all roads and parking lots identified within the BSA, including TCB, PCH, and large parking lots associated with the Topanga Ranch Motel and Topanga Beach.

Sand

This land cover type encompasses all areas covered by bare sand, specifically the majority of Topanga Beach. Additionally, one area of Topanga Creek had a large unvegetated deposition of sand, which was also mapped under this unit.

Barren/Sparsely Vegetated Areas

This land cover type is used for convenience and applies to all undeveloped and unpaved areas with no significant native or non-native vegetation present. These areas were mostly associated with roadside turnouts and the vacant footprints of previously developed areas.

General Plant Species

A total of 253 species of plants were recorded during terrestrial and freshwater field surveys, including 99 native and 154 non-native species. These include the results of the State Parks 2020–2022 general surveys of the BSA, supplemented primarily by species documented in the Jurisdictional Delineation Report and the Native Tree and Oak Tree Report (Demirci and Dagit 2022). A list of the plant species observed is provided in Appendix K.

A discussion of special-status plant species and their presence and potential for occurrence is discussed in *Special Status Plant Species* section.

Invasive Plant Species

A total of 154 non-native plant species were recorded during field surveys. The non-native plant species listed with a California Invasive Plant Council Rating are considered invasive and total 63 species (**Table 3.3-2**). Invasive plant species can spread and disperse further throughout the BSA during construction related activities and are likely to outcompete or take over native vegetation.

TABLE 3.3-2
INVASIVE PLANT SPECIES OBSERVED WITHIN THE BIOLOGICAL STUDY AREA

Scientific Name	Common Name	Cal-IPC Rating ¹
<i>Acacia baileyana</i>	Cootamundra Wattle	Watch
<i>Acacia dealbata</i>	Silver Wattle	Moderate
<i>Acacia melanoxylon</i>	Blackwood Acacia	Limited
<i>Ailanthus altissima</i>	Tree-Of-Heaven	Moderate
<i>Arundo donax</i>	Giant Reed	High
<i>Asparagus aethiopicus</i>	Asparagus Fern	Watch
<i>Asphodelus fistulosus</i>	Onion Weed	Moderate
<i>Atriplex semibaccata</i>	Australian Saltbush	Moderate
<i>Avena barbata</i>	Slender Wild Oat	Moderate
<i>Brassica nigra</i>	Black Mustard	Moderate

3.3. Biological Resources

Scientific Name	Common Name	Cal-IPC Rating ¹
<i>Bromus diandrus</i>	Rippgut Grass	Moderate
<i>Bromus hordeaceus</i>	Soft Chess	Limited
<i>Cakile maritima</i>	European Sea Rocket	Limited
<i>Carduus pycnocephalus</i>	Italian Thistle	Moderate
<i>Carpobrotus edulis</i>	Iceplant	High
<i>Centaurea melitensis</i>	Tocalote	Moderate
<i>Cirsium vulgare</i>	Bull Thistle	Moderate
<i>Conium maculatum</i>	Poison-Hemlock	Moderate
<i>Cortaderia jubata</i>	Jubata Grass	High
<i>Cortaderia selloana</i>	Pampas Grass	High
<i>Cotoneaster pannosus</i>	Silverleaf Cotoneaster	Moderate
<i>Cynodon dactylon</i>	Bermuda Grass	Moderate
<i>Delairea odorata</i>	Cape Ivy	High
<i>Dipogon lignosus</i>	Okie bean	Watch
<i>Echium candicans</i>	Pride of Madeira	Limited
<i>Erodium cicutarium</i>	Redstem Filaree	Limited
<i>Eucalyptus camaldulensis</i>	Red Gum	Limited
<i>Eucalyptus globulus</i>	Blue Gum	Limited
<i>Euphorbia terracina</i>	Carnation Spurge	Limited
<i>Festuca perennis</i>	Italian Ryegrass	Moderate
<i>Foeniculum vulgare</i>	Sweet Fennel	High
<i>Hedera helix</i>	English Ivy	High
<i>Hirschfeldia incana</i>	Short Pod Mustard	Moderate
<i>Hypochaeris glabra</i>	Smooth Cat's Ears	Limited
<i>Ipomea</i> sp.	Morning Glory	Watch
<i>Iris pseudacorus</i>	Yellowflag Iris	Limited
<i>Lantana camara</i>	Lantana	Watch
<i>Ligustrum lucidum</i>	Glossy Privet	Limited
<i>Malephora crocea</i>	Coppery Mesembryanthemum	Watch
<i>Marrubium vulgare</i>	Horehound	Limited
<i>Myoporum laetum</i>	Ngaio Tree	Moderate
<i>Nicotiana glauca</i>	Tree Tobacco	Moderate
<i>Olea europea</i>	Olive	Limited
<i>Oxalis pes-caprae</i>	Bermuda Buttercup	Moderate
<i>Pennisetum setaceum</i>	Crimson Fountain Grass	Moderate
<i>Phoenix canariensis</i>	Canary Island Date Palm	Limited
<i>Pittosporum</i> sp.	Pittosporum	Watch
<i>Plantago lanceolata</i>	English Plantain	Limited
<i>Polypogon monspeliensis</i>	Rabbitsfoot Grass	Limited
<i>Raphanus sativus</i>	Wild Radish	Limited
<i>Ricinus communis</i>	Castor Bean	Limited
<i>Rumex crispus</i>	Curly Dock	Limited

Scientific Name	Common Name	Cal-IPC Rating ¹
<i>Salsola tragus</i>	Russian Thistle	Limited
<i>Schinus molle</i>	Peruvian Pepper Tree	Limited
<i>Schinus terebinthifolius</i>	Brazilian Pepper Tree	Moderate
<i>Silybum marianum</i>	Milk Thistle	Limited
<i>Sisymbrium irio</i>	London Rocket	Limited
<i>Spartium junceum</i>	Spanish Broom	High
<i>Stipa miliacea</i> var. <i>miliacea</i>	Smilo Grass	Limited
<i>Tamarisk ramosissima</i>	Saltcedar	High
<i>Tetragonia tetragonioides</i>	New Zealand Spinach	Limited
<i>Vinca major</i>	Periwinkle	Moderate
<i>Washingtonia robusta</i>	Mexican Fan Palm	Moderate

NOTE: Cal-IPC = California Invasive Plant Council

¹ Cal-IPC Invasive Plant Inventory Database, 2022. Overall rating listed for southwest region, factoring impact, invasiveness, distribution, and documentation level.

Cal-IPC Inventory Categories:

High: Species have severe ecological impacts, are conducive to moderate to high rates of dispersal/establishment, and most are widely spread.

Moderate: Species have substantial and apparent, but generally not severe, ecological impacts; are conducive to moderate to high rates of dispersal, though establishment is generally dependent on ecological disturbance; and distribution may range from limited to widespread.

Limited: Species are invasive, but their ecological impacts are minor on a statewide level, or there was not enough information to justify a higher score; have low to moderate rates of invasiveness; and are generally limited but may be locally persistent and problematic.

Watch: Species have been assessed as posing a high risk of becoming invasive in the future in California

SOURCE: Data compiled by State Parks in 2023.

General Wildlife Species

More than 100 animal species were observed during terrestrial and freshwater Project surveys, including 12 non-native species. Of the native species observed, 24 were identified as special-status species present during their protected life stage and are discussed in Special Status Wildlife Species section below. A complete list of animal species observed is provided in Appendix K.

Sensitive Biological Resources

Sensitive or special status species are defined as those plants and wildlife that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or local agencies as being under threat from development pressure as well as natural causes. Many of these species receive specific protection that is defined and regulated by the FESA or CESA. Other species have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities and/or special districts to meet local conservation objectives. Special-status species include all of the following:

- Species listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the FESA or the CESA.

- Species that meet the definitions of rare or endangered under CEQA Guidelines Section 15380.
- Plants considered “rare, threatened, or endangered in California” by the CNPS, adopted by CDFW, and assigned a California Rare Plant Rank (CRPR), which are summarized as follows:
 - CRPR 1A (plants presumed to be extinct in California and either Rare or Extinct elsewhere).
 - CRPR 1B (plants that are rare, threatened, or endangered in California and elsewhere).
 - CRPR 2A (plants presumed to be extirpated in California but more common elsewhere).
 - CRPR 2B (plants that are rare, threatened, or endangered in California but more common elsewhere).
 - CRPR 3 (plants about which more information is needed).
 - CRPR 4 (plants of limited distribution).

CRPR 1B and 2B meet the definitions of Section 1901 of the Native Plant Protection Act or CFGC Sections 2062 and 2067 (CESA) and are eligible for state listing. Many CRPR 3 and 4 species do not meet the definitions of special-status plants but may be significant locally and are recommended for consideration under CEQA (CNPS 2001). The CNPS appends CRPR categorizations with “threat ranks” that parallel the ranks used by the California Natural Diversity Database and are added as a decimal code after the CRPR (e.g., CRPR 1B.1). The threat codes are as follows:

- 0.1 (seriously threatened in California [over 80 percent of occurrences threatened/high degree and immediacy of threat]).
- 0.2 (fairly threatened in California [20–80 percent of occurrences threatened]).
- 0.3 (not very threatened in California [<20 percent of occurrences threatened, or no current threats known]).
- Species designated by CDFW as “species of special concern” or “special animals.”
- Species designated “fully protected” in California (CFGC Sections 3511, 4700, and 5050).
- Species designated sensitive by the NPS SMMNRA and State Parks staff due to local expertise or listing in the SMMNRA sensitive species list within the USDOJ-NPS Final General Management Plan (NPS 2002).
- NatureServe Network ranking of G1/S1 through G3/S3, as initially described and outlined in more detail under the Vegetation Communities and Land Cover Types section (NatureServe 2006).
- Vegetation communities with LCP Habitat Categories of H1 or H2.
- Western Bat Working Group species designated as high or medium. Species designated as high are those bat species with highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment. Species designated as medium are those bat species with a level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species’ status and should be considered a threat.

Special-status plant and animal species observed or anticipated to have some potential to be present within the BSA are summarized in Appendices O and P of the *Biological Resources Assessment Report*.

Sensitive Natural Communities

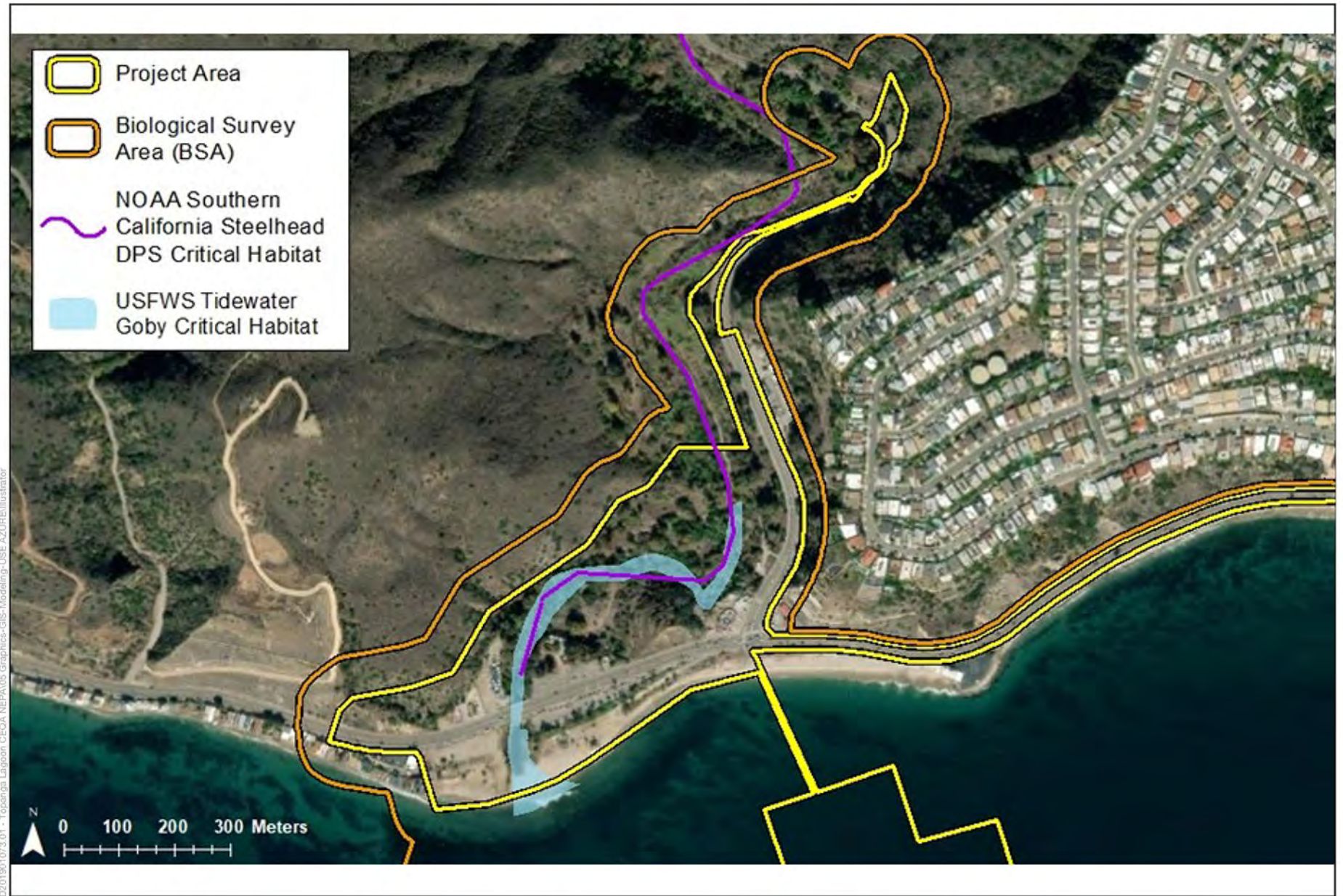
Sensitive natural communities are of limited distribution statewide or within a county or region. These communities may or may not contain special-status species or their habitat. Sensitive natural communities are those designated by CDFW to have a state rarity ranking of S1–S3 (CDFW 2023c). A total of eight sensitive natural communities classified by CDFW are found within the BSA:

- California Sycamore (*Platanus racemosa*) Woodland / Red & Arroyo Willow (*Salix laevigata*, *S. lasiolepis*) and Mulefat (*Baccharis salicifolia*) Understory [61.312.05].
- California Black Walnut (*Juglans californica*) Woodland/ Annual Herbaceous understory [72.100.03].
- California Black Walnut (*Juglans californica*)/ Laurel Sumac (*Malosma laurina*) Woodland [72.100.07].
- California Brittlebush (*Encelia californica*) - California Sagebrush (*Artemisia californica*) Shrubland Association [32.050.01].
- Ashyleaf Buckwheat (*Eriogonum cinereum*) Association – [32.035.01].
- Purple Sage (*Salvia leucophylla*) - Ashyleaf Buckwheat (*Eriogonum cinereum*) / Annual Herb Association - [32.090.05].
- Lemonade Berry (*Rhus integrifolia*) Shrubland Association - [37.803.01].
- Giant Wildrye (*Elymus condensatus*) Grassland [41.265.01].

Each sensitive natural community is described under Vegetation Communities and Land Cover Types section and acreages are shown in Table 3.3-1 and Figure 3.3-3 above. LCP Habitat Designations are discussed further below under the ESHA Section.

Critical Habitat

The BSA currently overlaps with critical habitat as defined and used in the FESA by the USFWS and National Oceanic and Atmospheric Administration. The final boundaries of the critical habitat are also published in the Federal Register. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. The BSA contains critical habitat for two species: tidewater goby and southern California steelhead trout (**Figure 3.3-4**). The Proposed Project includes approximately 5 acres of tidewater goby critical habitat and approximately 3 acres of southern California steelhead trout.



D201901073 01 - Topanga Lagoon CEQA NEPA/06 Graphics-GIS-Modeling-USE AZURE/illustrator

SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023), Tidewater water goby; Federal Register 78 FR 8745 8819, February 6, 2013, and U.S. Fish Wildlife (USFWS Critical Habitat Portal online at <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>), Steelhead trout; Federal Register 70 FR 52487; September 2, 2005; Service Layer Credits: Esri; HERE, Garmin, Intermap, Increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap Contribution, and the GIS User Community

Figure 3.3-4
Critical Habitat for California Steelhead & Tidewater Goby

Special Status Plant Species

Only one special-status plant species was observed within the BSA, Southern California black walnut, a CNPS Watch List plant. Five trees were noted within the BSA, with two trees located in the potential wastewater treatment option #2. No other special-status plant species had a high or moderate potential to occur within the BSA. See Appendix K, for the full list of special-status plant species considered for this analysis.

Special-Status Wildlife Species

A total of 13 special-status species were confirmed to be present on-site during their protected life stage. An additional eight special-status wildlife species were not observed but have a moderate to high potential to occur in the BSA during their protected life stages. California grunion is another species with a moderate to high potential to occur within the BSA, but this species is discussed in Section 3.11, *Marine Biological Resources*, as it is found solely in the marine realm unless inadvertently overwashed into Topanga Lagoon, where it cannot survive. See Appendix K, for the full list of special-status wildlife species considered for this analysis.

Invertebrates

One special-status invertebrates were confirmed present during their protected life stages. Monarch butterfly individuals were present during all annual surveys, and a potential newly established overwintering site was documented in November 2023 on-site (**Figure 3.3-5**). One additional species had a moderate to high potential to be present, Crotch's bumble bee (*Bombus crotchii*). Both species are discussed below.

Monarch Butterfly

Monarch butterflies are included on the CDFW Terrestrial and Vernal Pool Invertebrates of Conservation Priority list and identified as a Species of Greatest Conservation Need in California's State Wildlife Action Plan. The species is a candidate for listing under the FESA. In December 2020, USFWS found that listing was warranted but precluded by other listing actions on its National Priority List. The species is now scheduled for listing in 2024.

Monarch butterflies are an iconic North American invertebrate known primarily for its striking coloration and their long-distance migration between sites in Canada, the United States, and Mexico. A distinct western population is known to overwinter along the Pacific Coast from central California to Baja Mexico. Current population numbers for this western population are highly variable, with surveys estimating an overwintering population in 2020–2021 in the low thousands, and the 2021–2022 population in the low hundreds of thousands. Regardless, the wider population trend is downward when compared to historical averages in the low millions (USFWS 2016).

Monarch overwintering sites require a number of specific features, which limit the number of suitable sites within their range. These include large trees to act as wind breaks, open canopy to allow for dappled light, running water in easy proximity, and abundant nectar producing plants. The behavior of overwintering monarchs is not entirely understood, however there is a clear preference for sub-populations to return to the same grove and even the same individual tree on a consistent annual basis. Loss of historic overwintering sites is thought to be the primary driver behind downward population trends.



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SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023)

Topanga Lagoon Restoration Project

Figure 3.3-5
Monarch Butterfly Potential Overwintering Site

Monarch butterflies were only observed as individuals during the 2020–2022 surveys and usually associated with western sycamore, coast live oak, and eucalyptus trees. State Parks and XSIC conducted focused surveys in November 2023 on-site in the BSA as part of larger effort on State Parks lands in Ventura and Los Angeles Counties. On November 13, 2023, multiple monarch butterfly clusters totaling approximately 90–100 individuals were observed during a focus survey at one site within the BSA north of Topanga Creek, and were still present on November 28, 2023 during a repeat survey. A third survey was conducted by XSIC and State Parks on November 30, 2023, of eucalyptus groves for the entirety of the BSA to identify other potential overwintering locations. No additional potential overwintering sites were observed.

As shown in Figure 3.3-5, the monarch butterfly potential overwintering population is located just at the northern edge of the Project boundary on the north side of Topanga Creek. The Core Zone identifies the area where butterfly clustering was observed. The Proposed Shelter Zone is an additional preliminary buffer recommended by XSIC staff for protection of the site as it includes other features that provide wind protection and other microclimate conditions that support monarch clustering and/or aggregation. Together, the Core Zone and Shelter Zone define the extent of an overwinter site (XSCI staff personal communication, November 2023).

Crotch's Bumble Bee

Crotch's bumble bee, a CDFW Special Animal and candidate species for listing under the CESA, has a moderate potential to be present. *Bombus* species was observed on-site but was not definitively identified as Crotch's bumble bee. Generalist foragers that use a wide variety of flowering plants, the Crotch's bumble bee is best suited to flowers with short corollas due to their short tongue length. Key food plant families include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae, and Boraginaceae (Thorp et al. 1983; Richardson 2017), which are present on-site (CDFW 2019).

The Crotch's bumble bee is nearly endemic to California and occupies grasslands and shrublands in southern to central California. A 25 percent decrease in range and 97 percent decrease in abundance has been recently documented. Like most bumble bees, this species usually nests underground (Williams et al. 2014). Colony size and overwintering sites are unclear, but the species likely overwinters in soft soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014; CDFW 2019).

Fish

Four special-status fishes occur within the BSA within the marine, lagoon and creek areas: tidewater goby, arroyo chub, southern steelhead trout (*Oncorhynchus mykiss irideus*, population 10), and California grunion. California grunion is discussed in Section 3.11, *Marine Biological Resources*, as noted above.

Tidewater Goby

Once common in coastal lagoon systems from Oregon to the U.S.-Mexico border, the federally listed endangered tidewater goby was extirpated from most systems in the Santa Monica Bay by the 1980s (Swift et al. 1989), with the only population remaining in the lagoon at Pt. Mugu. Historically present in Malibu Lagoon, a translocation of 56 individuals in 1991 resulted in the re-

establishment of a population there (Manion 1993). By 2001, tidewater gobies had migrated down the coast to recolonize Topanga Lagoon and DNA analysis indicated that Malibu had been the source population (Jacobs and Swift, personal communication, 2001). Incidental visual monitoring has been tracking the population in Topanga Lagoon since 2008, and more focused surveys were initiated in 2020–2023 in anticipation of the need to better document current conditions and examine the impacts and benefits of the proposed restoration Build Alternatives. Although the population of tidewater gobies appears relatively stable, the space available to support this population is small and constrained.

Arroyo Chub

Arroyo chub is a CDFW Species of Special Concern, is seen occasionally in Topanga Creek within the BSA when surface water is present but is more prevalent upstream of the BSA. This species is able to survive in low oxygen concentrations and wide temperature fluctuations (Castleberry and Cech 1986). Chubs are largely found in slow-moving water at depths greater than 40 cm (Wells and Diana 1975). They are most common in streams with gradients of less than 2.5 percent slope (Feeney and Swift 2008) and where water temperatures range from 10 to 28 degrees Celsius (O'Brien and Barabe 2022). The arroyo chub's breeding season is February–August, during which fertilized eggs dropped onto vegetation and substrate hatch within a few days. Chubs eat algae, insects, and small crustaceans.

Steelhead Trout – Southern California (Population 10)

Southern California steelhead trout is federally listed as endangered and currently under review for listing by CDFW. Topanga Lagoon is one of the last remaining coastal systems supporting a reproducing population of steelhead trout in the Southern California Distinct Population Segment. Topanga Creek is identified as a Core 1 priority habitat for southern steelhead trout (NMFS 2012), with replacement of the PCH bridge and expansion of the lagoon identified as recovery actions. Restoration of Topanga Lagoon, including the replacement of the constraining bridge supporting PCH, is listed as a high priority for Caltrans District 7 in the statewide Fish Passage Barrier Removal list (PAD ID#716891). The PCH bridge over Topanga lagoon was identified as a partial Fish Passage Barrier by CalTrout (2006).

Preservation of both life history forms (anadromous steelhead and resident rainbow trout) is considered a high priority in the NMFS Recovery Plan (NMFS 2012). Both anadromous and resident steelhead trout have been documented within the Topanga Creek watershed since 2001, although there has been limited opportunity for immigration or emigration from the creek during drought conditions. Since it is difficult to detect the difference between resident and anadromous individuals visually, we use the term steelhead trout to reference both.

Amphibians and Reptiles

There are no special-status amphibians with a moderate or high potential to occur within terrestrial or freshwater/brackish habitats of the BSA and none were observed on-site during surveys.

Three special-status reptiles were identified on-site during surveys: San Bernardino ringneck snake (*Diadophis punctatus modestus*), coast mountain kingsnake (*Lampropeltis multifasciata*),

and two-striped garter snake. Five additional special-status reptiles were not observed but have a moderate or high potential to occur: California legless lizard (*Anniella* sp.), Southern California legless lizard (*Anniella stebbinsi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), and coast patch-nosed snake (*Salvadora hexalepis virgulata*).

California and Southern California Legless Lizards

California and Southern California legless lizards are CDFW Species of Special Concern and prefer moist loose soil with a high moisture content. They usually forage at the base of plants either on the surface or just below but are more typically encountered under objects or during excavation in moist soils. Within the BSA, legless lizards are most likely to be found in vegetated moist sandy soils at the back of the beach, or soft soil areas along the creek that are moist, or leaf littered (Zeiner et al. 2000).

The species designation of legless lizards is complicated. Using genetics to examine the *Anniella* species complex, it appears there are more species of legless lizards in Southern California than previously thought (Papenfuss and Parham 2013). However, species designation is not agreed upon in the scientific community, therefore it is possible that more than one species of legless lizard could be present at Topanga Lagoon, but it cannot be determined at this time. Through long-term monitoring using pitfall traps, SMMNRA have detected Southern California legless lizard in the Santa Monica Mountains, albeit rarely (Delaney and Riley 2019). State Parks staff have also encountered this genus in remnant dune habitat within the vegetated PCH road edge in Point Mugu State Park.

Coastal Whiptail

Coastal whiptail is a CDFW Species of Special Concern found throughout the Santa Monica Mountains (Delaney and Riley 2019). This species is found in a variety of ecosystems, primarily hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas. While this species is not rare, they require more habitat specificity than more common reptiles. For example, SMMNRA staff detects coastal whiptails most often in chaparral. Coastal whiptails are most likely to be encountered on-site in the less disturbed scrub areas along the knoll near PCH or within the northern boundaries of the BSA.

San Bernardino Ringneck Snake

San Bernardino ringneck snakes are secretive and typically found under rocks, wood, bark and boards. San Bernardino ringneck snake is endemic to California and is a CDFW Special Animal. While this species is not rare, they require more habitat specificity than more common reptiles. San Bernardino ringneck snake prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands. San Bernardino ringneck snake are most likely to be encountered on-site in the less disturbed scrub areas along the knoll near PCH or within the northern boundaries of the BSA. This species was detected during least Bell's vireo protocol surveys in 2021 (refer to Appendix K).

Coast Mountain Kingsnake

Coast mountain kingsnake is considered locally sensitive by NPS and State Parks in the Santa Monica Mountains. This species is a habitat generalist, found in diverse habitats including

coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, coastal sage scrub, and wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun. This species is active between 55 and 85 degrees Fahrenheit, spends most of its time underground, under surface objects, or inside rock crevices, and hibernates during winter. It has been documented preying upon lizards, small mammals, bird eggs and young, amphibians, and snakes (Nafis 2022). The species occurs in shady areas with oaks or riparian habitat within the Santa Monica Mountains. A confirmed sighting was made in the BSA near the knoll by RCDSMM in 2021.

Coast Horned Lizard

Coast horned lizard, a CDFW Species of Special Concern, is a flat-bodied oval-shaped lizard with scattered enlarged pointed scales on the upper body and tail, and a large crown of horns or spines on the head. They eat ants, especially harvester ants, and other small invertebrates such as spiders, beetles, termites, flies, honeybees, moth larvae, and grasshoppers. They are often found near ant hills feeding on ants. Coast horned lizards inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains and can be found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil; often being found in lowlands along sandy washes with scattered shrubs and along dirt roads. Populations have declined in the area but can frequently be encountered where open space and their food supply (harvester ants) has been protected (Fisher et al. 2002). Through SMMNRA long-term monitoring and collaboration with California State University, Northridge, graduate student Sarah Wenner, we know that coast horned lizards can be found throughout Topanga State Park (Delaney 2021). If present on-site, they are most likely to occur in the less disturbed scrub areas along the knoll near PCH or within the scrub slopes along the northern boundaries of the BSA.

Coast Patch-nosed Snake

Coast patch-nosed snake, a CDFW California Species of Special Concern, is a fast, moderately sized slender striped snake with smooth scales, large eyes, and an enlarged rostral (the scale over the tip of the snout). It eats lizards, especially whiptails, small mammals, possibly small snakes, nestling birds, reptile eggs, and amphibians is considered uncommon along the southern coast area. Little is known about the natural history of this species. Coast patch-nosed snake inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains and burrows in loose soils. This subspecies of western patch-nosed snake occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the deserts, into coastal northern Baja California. A large component of its diet consists of whiptail (*Aspidoscelis*) species, this species may be susceptible to decline in areas where whiptails are also noted as declining. Within the BSA, this species has a moderate potential to be found in the scrub areas associated with the steep slopes to the north and west, and near the hill north of PCH and west of TCB.

Two-Striped Gartersnake

Two-striped gartersnake, a CDFW Species of Special Concern, is a medium-sized snake with a head barely wider than the neck and is primarily aquatic where it forages for food in and under water. It is typically found near water sources such as pools, creeks, cattle tanks, and other ephemeral wetlands, in rocky areas and association with oak woodlands, willow scrubs, coastal

sage scrub, scrub oak chaparral, chaparral and other native brushland dominated communities. While these species are not rare, they require more habitat specificity than more common reptiles. For example, SMMNRA staff had detected two-striped garter snakes in non-urbanized riparian areas and streams (Delaney and Riley 2019). This snake is strongly associated with water and was observed in 2022 within Topanga Creek, both on-site at the northern terminus of the BSA and 1 kilometer upstream.

Birds

Individuals of the following 13 special-status species were observed on-site, but are not expected during their protected life stage (nesting, nesting colony, communal roosts, wintering), and therefore are not discussed further here: great egret (*Ardea alba*), great blue heron (*Ardea herodias*), olive-sided flycatcher (*Contopus cooperi*), snowy egret (*Egretta thula*), Caspian tern (*Hydroprogne caspia*), California gull (*Larus californicus*), long-billed curlew (*Numenius americanus*), double-crested cormorant (*Phalacrocorax auritus*), black-crowned night heron (*Nycticorax nycticorax*), osprey (*Pandion haliaetus*), brown pelican (*Pelecanus occidentalis*), and elegant tern (*Thalasseus elegans*).

Two additional special-status species have been observed on-site, and also have a moderate or high potential to occur with the BSA during their protected life stage. These include Cooper's hawk (*Accipiter cooperi*) and yellow warbler (*Setophaga petechia*) and are discussed below.

Protocol surveys in 2021 for least Bell's vireo identified a low potential for the species to nest on-site as it is not known to breed within the Santa Monica Mountains, although structurally suitable habitat is present on-site (refer to Appendix K).

Cooper's Hawk

Cooper's hawk is a CDFW Watch List species that is protected when nesting. It is a resident in wooded areas throughout state, including urban woodland environments from 0 to 2,700 meters. Although this species most typically uses dense stands of live oak, riparian deciduous, or other forest habitats near water, it has become more prevalent in urban habitats since the 1990s. Cooper's hawk feeds upon small birds, mammals and herpetofauna and typically utilizes a platform stick nest in deciduous trees or conifers near streams.

This species is resident along Topanga Creek and surrounding hills. Although no nesting activity has been documented in the BSA, the species was observed on-site during Project bird surveys and eBird observations during 2020–2022.

Yellow Warbler

Yellow warbler is a CDFW Species of Special Concern when nesting. This species breeds in riparian woodlands from coastal and desert lowlands up to 2,500 meters in Sierra Nevada in California and migrates south during the winter. It is usually found in riparian deciduous habitats in summer and visits woodland, forest, and shrub habitats during migration. Yellow warbler nests in an open cup placed 0.6 to 5 meter above ground in a deciduous sapling or shrub and eats insects, spiders, and occasionally berries.

Yellow warbler has been documented by eBird observers as a transient in fall in the BSA. Although it may potentially nest on-site along the creek corridor, it has few breeding-season records in the coastal Santa Monica Mountains and appears to favor inland habitats in the Topanga Creek watershed. This species is expected as a common transient through the BSA.

Mammals

Five special-status mammal species were identified on-site during surveys. These included silver-haired bat (*Lasiurus noctivagus*), western red bat (*Lasiurus blossevillii*), Yuma myotis (*Myotis yumanensis*), San Diego desert woodrat (*Neotoma lepida intermedia*), and mountain lion (*Puma concolor*). There were no additional special-status mammal species with a moderate or high potential to occur with the BSA.

Silver-Haired Bat

Silver-haired bat is a CDFW Special Animal and a medium priority for the Western Bat Working Group. A “solitary” lasiurine tribe bat and generally considered a forest-dwelling species associated primarily with north temperate zone conifer and mixed conifer/hardwood forests, the silver-haired bat may be one of western North America’s most ecologically misunderstood bats. Its occurrence in winter and during seasonal migrations in low elevation xeric habitats gives a hint to its probably overall more diverse habitat preferences, which helps also to explain its occurrence in Topanga Canyon. Females form maternity roosts almost exclusively in trees, typically inside natural hollows and (e.g., bird-excavated) cavities or behind exfoliating bark of large diameter snags. Hibernating individuals may be found in tree hollows including trees hollowed by disease or wildfire, behind exfoliating bark, in rock crevices, and occasionally under wood piles or in leaf litter. Silver-haired bat would be expected to use areas on-site for foraging as it typically forages above the tree canopy, over open meadows, and along water courses within riparian habitats. It was uncommonly encountered during surveys (recorded on three to four nights, but fewer than 25 call files/night).

Western Red Bat

Western red bat is a CDFW Species of Special Concern and Western Bat Working Group high priority. Western red bat is a “solitary” species, often truly solitary although occasionally (especially male) individuals congregate in small numbers (e.g., three, four, or five individuals). The western red bat roosts primarily in the foliage of trees or shrubs, and occasionally in rock crevices and, most often in relatively cold periods, leaf litter. The use of rock crevices is most prevalent when such habitat is near or adjacent the species’ favored day roost habitats: riparian corridors with large cottonwood, sycamores, or alder trees. Favored foraging habitats are forest edge adjacent to streams or open fields and open riparian corridors. Consequently, where healthy riparian habitats have remained intact in the western U.S., the species is a common member of the bat cohort, albeit almost always in small numbers. Reduction in amount and health of riparian corridors, reduced stream flows, and lowered water tables—features often associated in the west to a combination of climate change and a suite of anthropogenic activities—has resulted in sufficiently reduced population numbers. This species was rarely encountered during surveys (recorded on only one or two nights, fewer than five call files/night).

Yuma Myotis

Yuma myotis is a CDFW Special Animal and a low–medium priority for the Western Bat Working Group. Yuma myotis is usually associated with permanent sources of water including rivers, streams, lakes, ponds, and reservoirs, but also uses tinajas in the arid west. It occurs in a variety of habitats including riparian, arid scrublands and deserts, and forests. The species roosts in bridges, buildings, cliff crevices, caves, mines, and trees. They are a roosting generalist (i.e., a species that may roost in tree cavities, caves, lava tubes, and anthropogenic structures) that forages over ponds and/or slow-moving streams. This species was rarely encountered during surveys (recorded on only one or two nights, fewer than five call files/night).

San Diego Desert Woodrat

San Diego desert woodrat, a CDFW Species of Special Concern, is a moderate-sized small mammal 9–15 inches long with large eyes and a relatively long tail. Life span is not well studied but may live up to two years in the wild. San Diego desert woodrats are active year long and generally nocturnal. They eat buds, fruits, seeds, bark, leaves, and young shoots of many plant species, but prefer live oak, chamise, and buckwheat as food plants in coastal scrub (Meserve 1974), while prickly pear is preferred in more desert habitats. San Diego desert woodrats build large dens (or middens) “nests” which consist of vegetation and woody materials such as twigs, sticks, cactus, and rocks, with a preference for rock crevices when available. The species breeds from October to May, depending upon the habitat. Although desert woodrats are less common and widespread than the more common big-eared woodrat on-site, they are plentiful in good habitat within the Santa Monica Mountains and Simi Hills (Riley 2021). While both species are generally sympatric, they are often locally separated by habitat. They are also thought to be competitors, with big-eared woodrat being potentially behaviorally dominant (Cameron 1971; Cameron and Rainey 1972; though see Meserve 1974). Six individuals were captured during SMMNRA surveys in 2021 in areas west of the knoll and along the northern boundary of the BSA near areas of cactus scrub.

Mountain Lion

Although the BSA does not represent high quality habitat due to its small size and degraded nature, it is connected to adjacent large areas of open space and can provide food, shelter resources, and be part of a movement corridor. Mountain lion is a state candidate for listing under the CESA and is considered locally sensitive by SMMNRA and State Parks. Mountain lions are known and anticipated to use the site occasionally but use for natal denning is not anticipated. SMMNRA ecologists have been tracking mountain lions using GPS collars since 2002 in the Santa Monica Mountains. Between 2019 and 2020, one female (P75) utilized the northern edge of the BSA on November 1, 2019, likely while feeding on a nearby kill, and again on April 5, 2020.

Migratory Wildlife Corridors

Impacts on wildlife movement corridors and habitat fragmented through development can be detrimental to populations of species that rely on these areas for seasonal migration (usually one direction per season), interpopulation movement (long-term genetic exchange), and daily movements within an animal’s territory (small travel pathways). Small travel pathways facilitate movement for daily home range activities such as foraging and escape from predators; however, they also provide connection between outlying populations and larger movement corridors,

permitting an increase in gene flow between populations. Larger linkages between habitat types can extend for miles between primary habitat areas and occur on a regional scale throughout California. Habitat linkages facilitate movement between populations located in discrete areas and populations located within larger habitat areas. Even where patches of pristine habitat are fragmented, the movement between wildlife populations is facilitated through habitat linkages, i.e., migration corridors and movement corridors.

Within the Project boundary, there is abundant cover and forage for a variety of fish and wildlife, albeit it is highly disturbed and patchy due to large areas dominated by invasive weeds. On-site movement of fish and wildlife between habitat patches is therefore generally not limited.

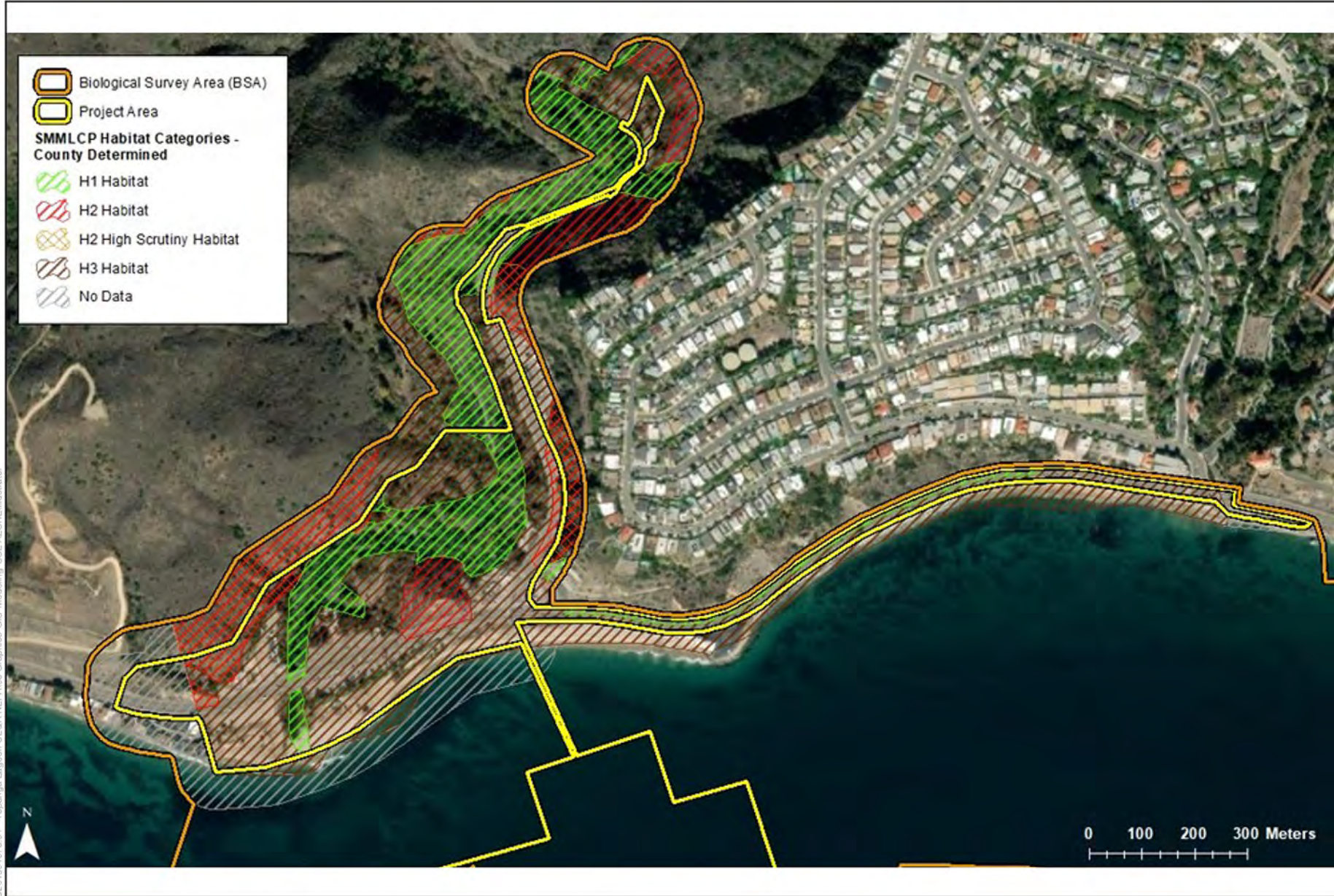
Fish and wildlife movement between the Project site and adjacent areas has some limitations, however. The terrestrial portion of the BSA is abutted to the south by PCH and the Pacific Ocean. To the east, TCB forms a barrier, as does the nearly sheer hillside beyond the paved road. To the west and north, the BSA is abutted primarily by undeveloped vegetated, mountainous terrain and the Topanga Creek corridor, which provides cover for wildlife passage to the upper Topanga Creek watershed and into the large undeveloped portions of the Santa Monica Mountains. Essentially, the BSA comprises the southern terminus of otherwise continuous wildlands to the north and northwest. For this reason, the surrounding environment to the south and east is often impassable for terrestrial and freshwater limited species.

Species that utilize or tolerate salt and brackish water such as steelhead trout and tidewater goby, are able to move off-site to the south into the Pacific Ocean, which is a known migratory fish corridor for these species. There is currently limited southern steelhead trout migration through the lagoon due to limited seasonal rainfall and a short window when conditions are suitable and impacts from storm surges and coastal erosion at high tides. In addition, arroyo chub is known to use Topanga Creek in moving into the BSA from locations further upstream.

Within terrestrial, freshwater and brackish habitats BSA, there is abundant cover and forage for a variety of fish and wildlife, both resident and transient. The state of California, including the Project site, is located within the Pacific Flyway, a major north-south flyway for migratory birds in America, extending from Alaska to Patagonia. The Project site can provide habitat as a stopover site for both resident and migratory birds. Bird nesting is expected to be abundant in vegetated areas within the BSA and active nests are protected under the Migratory Bird Treaty Act and CFGC. Individual monarch butterflies were observed but no protected overwintering sites with dense cluster of *Eucalyptus* trees were found or have been historically documented in the BSA.

Protected Trees

A total of 292 native trees were tagged in the BSA in 2021 (**Figure 3.3-6**). 277 were of protected size, and 15 were undersized natives that could grow to protected size during Project development. None of these trees are considered Heritage (native with a single trunk > 36 inches) or Historic. Eleven trees are “biologically significant clusters” due to their colocation and size (arroyo willow: #358, 383; California sycamore: #359, 384, 386; and elderberry (#360, 388, 389, 390, 391, 392) and grading around these trees would be avoided.



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SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023), SMM LCP, 2014
 Service Layer Credits: Esri; Maxar, Earthstar Geographics, and the GIS User Community

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Figure 3.3-6
 Existing Protected Trees and Fuel Modification Zone, DPR Mapped LCP Habitat Designations



Additionally, 343 non-native trees representing 36 species were documented within the BSA. Of these, eight eucalyptus, one Canary Island palm, and a mature euphorbia tree located within the Topanga Ranch Motel are considered potentially Historic. Four of these (#418, 421, 422, and 425) also meet the criteria as Heritage trees due to having a single trunk exceeding 36 inches DSH. Historic and/or Heritage trees are discussed further in Section 3.4, *Cultural Resources*. The locations of all trees were overlaid upon LCP ground-truthed Habitat Categories and fuel modification zones. The number of on-site trees per species are summarized in **Table 3.3-3**.

**TABLE 3.3-3
 SUMMARY OF PROTECTED TREES IN THE BSA***

Scientific Name	Common Name	Remain
<i>Alnus rhombifolia</i>	White Alder	4
<i>Cercocarpus betuloides</i>	Mountain Mahogany	1
<i>Heteromeles arbutifolia</i>	Toyon	2
<i>Juglans nigra</i>	Black walnut	5
<i>Juniperus californicus</i>	Juniper ¹	4
<i>Malosma laurina</i>	Laurel Sumac	13
<i>Platanus racemosa</i>	California Sycamore	46
<i>Populus fremontii</i>	Cottonwood	2
<i>Quercus agrifolia</i>	Coast Live Oak	3
<i>Rhus integrifolia</i>	Lemonade Berry	3
<i>Salix lasiolepis</i>	Arroyo Willow	142
<i>Salix laevigata</i>	Red Willow	50
<i>Sambucus nigra</i>	Elderberry	22
Total		297

NOTES: BSA = Biological Study Area.

* Tree surveys limited to portion of BSA anticipated to have ground disturbance.

¹ Cultivated landscaping

SOURCES: Data compiled by State Parks in 2023; Demirci and Dagit 2022

Environmentally Sensitive Habitat Area

The Coastal Act defines ESHA as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments (California Coastal Act Section 30107.5). Section 30240 of the Coastal Act states that ESHAs “shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.” Also, development in areas adjacent to ESHAs 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.

SERAs are the equivalent of ESHA in the County LCP, and areas of relatively undisturbed habitat with high biological significance, typically with rare or special-status species present. The

LCP breaks out habitats into three categories: H1, H2, and H3, the latter not being a SERA. H3 is categories as habitat that is disturbed or isolated and does not provide biological significance, which is why the LCP excluded it from SERA classification. Only H1 and H2 are considered sensitive or a SERA and are defined in more detail below. The BSA has a total of 11 vegetation communities that qualify as SERA on-site (**Figure 3.3-6**).

H1 Habitat

H1 habitat is defined as habitat with the highest biological significance and may include the following habitat types: alluvial scrub; coastal bluff scrub; dune; native grassland and scrub with a strong component of native grasses or forbs; riparian; native oak, sycamore, walnut and bay woodlands; rock outcrop; and wetlands including creeks, streams, marshes, seeps and springs. Special-status species populations, as described by the LCP, may also qualify as H1 habitat.

In addition, a buffer of no less than 100 feet from the H1 habitat is a development standard for new development, and additional 100-foot is defined as a H1 habitat “Quiet Zone” to provide additional protection of coastal resources.

H2 Habitat

H2 habitat is defined as habitat with high biological significance and are important for the ecological vitality and diversity of the Santa Monica Mountains Mediterranean Ecosystem. This habitat category includes large, contiguous areas of coastal sage scrub and chaparral-dominated habitats. There is a subcategory to H2 habitat called H2HS habitat; the HS stands for “High Scrutiny.” H2HS habitat may include sensitive natural communities as described in the LCP. In additional, special-status species that are normally associated with H1 habitat but occur as individuals not as a population within H2 habitat may be defined as H2HS. New development should avoid, or minimize to the greatest extent, H2 and H2HS habitats, where feasible. Because of the more sensitive resources present, H2HS habitat is given a higher priority for avoidance than H2 habitat.

State Parks ground-truthed County LCP mapping during field surveys and updated the boundaries within the BSA. These updated boundaries will be formally submitted to the County and CCC during processing of the consolidated CDP.

Jurisdictional Waters and Wetlands

Within the BSA, Topanga Creek runs from the northeast to the southwest and initially parallel to TCB before arcing west across the BSA, and finally curving sharply to the south to terminate in Topanga Lagoon, a natural bar-built estuary closed much of the year. The creek is fed by freshwater ground seeps and watershed precipitation, with more limited input from upstream urban runoff. Although considered perennial overall, Topanga Creek typically lacks surface flows during summer months due to drought conditions for sections of the creek upstream between 300 and 1,700 meters from the lagoon.

The creek’s path is constrained by several factors. Near the existing PCH development, artificial fill, armored banks, and a narrow Caltrans bridge opening constrain the footprint of the creek. In the east-west section of Topanga Creek (the Rodeo Grounds/Snake Pit areas), historic residential

development and associated fill are factors. The most upstream north-south leg of the creek is constrained by steep canyon walls and the presence of TCB. Dense vegetation dominated by willows and arundo extends along the majority of the creek corridor on-site.

Topanga Lagoon is perennially ponded with water levels varying depending on precipitation and the status of the lagoon as open or closed to the ocean. Winter storm flows from Topanga Creek are the main driver for breaching the sand bar, allowing greater direct tidal influence during the rainy season, and tidal muting and eventual closing during the summer and fall months.

The USACE, RWQCB, CDFW, and CCC regulate wetlands and other waters that meet the respective agencies' criteria for defining wetland or water features. Three definitions of "wetland" are considered for purposes of the Proposed Project, one administered by the USACE under the federal CWA (federal wetlands and other waters), one administered by the California State Water Resources Control Board and RWQCB under the Porter-Cologne Water Quality Control Act (state wetlands and other waters), and one administered by the CCC under the California Coastal Act (wetlands and other waters in the Coastal Zone). See Section 3.3.1, *Regulatory Setting*, above, for agency definitions of "wetlands" and a description of federal and state regulations applicable to wetlands and other waters. An aquatic resources delineation of the survey area was conducted to identify wetlands and waters subject to federal and state regulation (see Jurisdictional Waters and Wetlands Surveys, above).

Waters of the United States

Wetland Waters

Wetland 1

Based on the results of ESA's 2023 aquatic resources delineation, Wetland 1 is situated within the periphery of Topanga Lagoon, immediately downstream of Drainage 1. This wetland met all three wetland parameters, resulting in 0.014-acre of federal wetland WOTUS within the BSA (**Figure 3.3-7**). The Topanga lagoon is open water (non-wetland) as it does not meet all three parameters, lacking hydrophytic vegetation.

Wetland 2

Wetland 2 is situated at the upstream extent of Drainage 2 and appears to serve as its source of flow. This wetland met all three wetland parameters, resulting in 0.014-acre of federal wetland WOTUS within the BSA (**Figure 3.3-7**).

Non-wetland Waters

Topanga Lagoon

As mentioned above, the Topanga lagoon is non-wetland waters because the open water lacks hydrophytic vegetation, except along the peripheral shoreline.



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SOURCE: ESA, 2023

Topanga Lagoon Restoration Project
Figure 3.3-7
 Potential Waters of the U.S.

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Topanga Creek (Drainage 1)

Topanga Creek is a perennial stream that receives natural, precipitation-driven surface and groundwater flows from its watershed, as well as limited year-round nuisance flows from upstream developed areas. Evidence of an OHWM was noted within the Creek including break-in bank slope, change in sediment texture, and scour marks with an average OHWM width of 22 feet. The Creek extends approximately 2,352 linear feet over 1.52 acres within the survey area and has a hydrological connection to downstream waters (Pacific Ocean) through Topanga Lagoon and is considered a WOTUS subject to regulation by USACE (see **Table 3.3-4** and Appendix K, Figure 3.3-7).

**TABLE 3.3-4
POTENTIAL WATERS OF THE UNITED STATES**

Aquatic Feature	Linear Feet	Acres
Non-Wetland Waters		
Topanga Creek (Drainage 1)	2,352	1.52
Topanga Lagoon	449	0.75
Drainage 2	106	0.002
Non-Wetland Waters Total:	2,907	2.28
Wetland Waters		
Wetland 1	--	0.014
Wetland 2	--	0.014
Wetland Waters Total:	--	0.029
Tidal Waters – CWA		
Tidal Waters – CWA Total:	2,585	5.84
Tidal Waters - RHA		
Tidal Waters – RHA Total:	--	38.11
TOTAL Potential WOTUS	5,492	46.26
NOTES: CWA = Clean Water Act; RHA = Rivers and Harbors Act; WOTUS = waters of the United States.		
SOURCE: ESA 2023a		

Unnamed Ephemeral Stream (Drainage 2)

A single unnamed ephemeral stream extends approximately 106 linear feet over 0.002 acre within the survey area and flows southeast to its confluence with Topanga Creek. Evidence of an OHWM was noted within the stream, including change in sediment texture, scour marks, drift deposits and destruction of terrestrial vegetation with an average OHWM width of 0.75 foot (see Table 3.3-4 and Figure 3.3-7, and Appendix K).

Pacific Ocean (Tidal Waters)

Based on the tidal gauge data from the Santa Monica Tidal Gauge Station (adjusted to plot on NAVD 88 datum), the limits of potential Section 404 and Section 10 waters were determined to be +6.66 feet (NAVD 88) and +4.5 feet (NAVD 88), respectively. Along the coastline of the survey area, 5.84 acres (2,585 linear feet) of WOTUS below the high-tide line are subject to Section 404 of the CWA and a subset, 38.11 acres below the mean high water boundary, are

subject to Section 10 of the Rivers and Harbors Act (i.e., navigable waters). In addition, the Pacific Ocean is considered a traditional navigable water.

A summary of potential wetlands and other WOTUS and State within the BSA is provided in Table 3.3-4 and **Figure 3.3-8**.

Waters of the State

All potential wetland and non-wetland WOTUS summarized in Table 3.3-4 above are also potential wetland and non-wetland Waters of the State subject to regulation by the Los Angeles RWQCB. Additional Waters of the State include Drainages 3 through 8, which were delineated based on identification of OHWM indicators, as was done for WOTUS. These wetlands and waters are also regulated under the Porter-Cologne Water Quality Control Act and subject to regulation under the California Coastal Act (see *Wetlands and Waters Subject to the California Coastal Act* below). Potential waters of the State mapped within the survey area are presented in **Table 3.3-5** and depicted in **Figure 3.3-8** and **Figure 3.3-9**.

Tidal Waters of the State are delineated by the same standard as CWA Non-wetland WOTUS and are shown in Figure 3.3-8.

**TABLE 3.3-5
 POTENTIAL WATERS OF THE STATE**

Aquatic Feature	OHWM (range in feet)	Linear Feet	Acres
Non-wetland Waters			
Topanga Creek (Drainage1)	13-40	2,352	1.52
Topanga Lagoon	40-100	449	0.75
Drainage 2	0.5-1	106	0.002
Drainage 3	3-6	363	0.07
Drainage 4	3-6	202	0.03
Drainage 5	3-6	76	0.01
Drainage 6	2-4	169	0.02
Drainage 7	2-4	130	0.01
Drainage 8	2-4	302	0.03
Other Waters Total:	--	4,148	2.44
Wetland Waters			
Wetland 1	--	--	0.014
Wetland 2	--	--	0.014
Wetland Waters Total:	--	--	0.029
Tidal Waters			
Tidal Waters Total	--	2,585	5.84
Total Potential Waters of the State		6,733	8.309

NOTE: OHWM = ordinary high-water mark.
 SOURCE: ESA 2023a



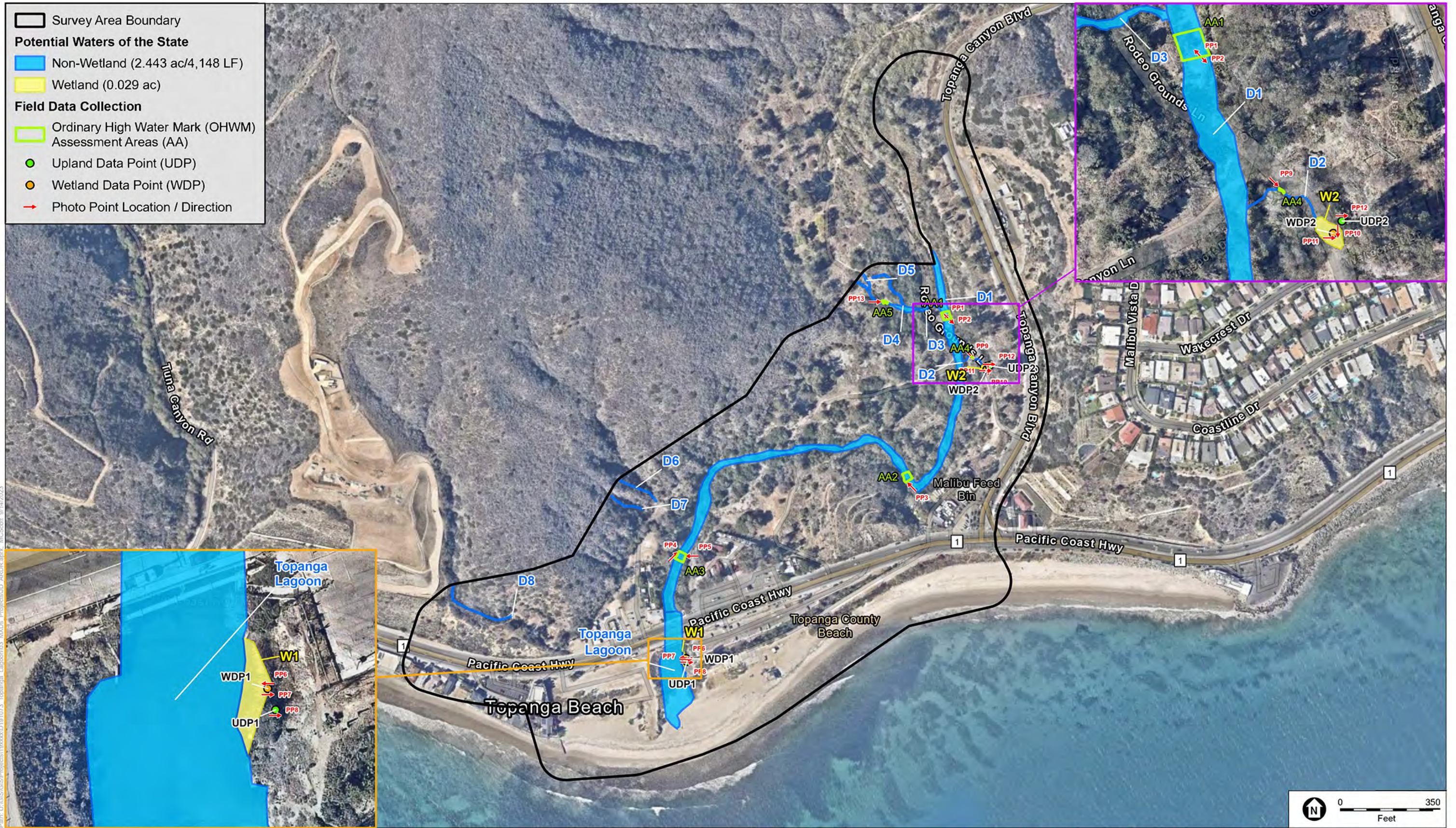
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SOURCE: ESA, 2023

Topanga Lagoon Restoration Project

Figure 3.3-8
Potential Tidal Waters of the U.S. and State





SOURCE: ESA, 2023

Topanga Lagoon Restoration Project
Figure 3.3-9
 Potential Waters of the State

Rivers, Streams, and Lakes subject to California Fish and Game Code Section 1600

Rivers, streams, and lakes potentially subject to CFGC Section 1600 mapped within the survey area are presented in **Table 3.3-6** and **Figure 3.3-10**. Drainages 1–5 and Wetlands 1 and 2 were delineated based on the extent of riparian vegetation. Topanga Lagoon and Drainages 6 and 7 were delineated based on top-of-bank indicators (i.e., break in slope). Drainage 8 was delineated through a review of aerial imagery, and the limits of the top of bank were estimated.

**TABLE 3.3-6
RIVERS, STREAMS, LAKES**

Aquatic Feature	Acres
Drainages 1–5, Topanga Lagoon and Wetland 1 and 2	18.45
Drainage 6	0.02
Drainage 7	0.01
Drainage 8	0.03
Total:	18.51
SOURCE: ESA 2023a	

Wetlands and Waters Subject to California Coastal Act

Coastal wetlands and waters potentially subject to the California Coastal Act mapped within the survey area are presented in **Table 3.3-7** and depicted in **Figure 3.3-11**. Topanga Lagoon and Drainages 1–8 meet the CCC’s wetland definition. Drainages 1–5 and Wetlands 1 and 2 were delineated based on the extent of riparian vegetation. Drainages 6 and 7 were delineated based on top-of-bank indicators (i.e., break in slope). Drainage 8 was delineated through the review of aerial imagery, and the limits of the top of bank were estimated. The extent of coastal waters along Topanga Beach was delineated along the mean high water line.

**TABLE 3.3-7
COASTAL WETLANDS AND WATERS**

Aquatic Feature	Acres
Drainages 1–5, Topanga Lagoon and Wetland 1 and 2	18.45
Drainage 6	0.02
Drainage 7	0.01
Drainage 8	0.03
Topanga Beach	3.29
Total:	21.79
SOURCE: ESA 2023a	

3.3.3 Environmental Consequences

CEQA Guidelines Appendix K, Environmental Checklist Form, includes questions pertaining to biological resources. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- 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. (Refer to Impact BIO 3.3-1.)
- 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. (Refer to Impact BIO 3.3-2.)
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Refer to Impact BIO 3.3-3.)
- 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. (Refer to Impact BIO 3.3-4.)
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Refer to Impact BIO 3.3-5.)
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (Refer to Impact BIO 3.3-6.)
- Result in cumulatively considerable impacts on biological resources. (Refer to Impact BIO 3.3-7.)

This section provides an overview of the anticipated impacts on biological resources in terrestrial, freshwater and brackish habitats per alternative for both the construction and post-construction operations phase. For impacts related to marine resources including giant kelp (*Macrocystis pyrifera*), surfgrass (*Phyllospadix torreyi*), California spiny lobster (*Panulirus interruptus*), California grunion, California halibut (*Paralichthys californicus*), green sea turtle (*Chelonia mydas*), harbor seal (*Phoca vitulina*), and bottlenose dolphin (*Tursiops truncatus*) associated with the sediment placement on nearshore marine communities, see Section 3.11, *Marine Biological Resources*. The significance of these impacts is described, as is the mitigation measures to be implemented to reduce impacts to a less-than-significant level in Section 3.11.



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SOURCE: ESA, 2023

Topanga Lagoon Restoration Project
Figure 3.3-10
 Rivers, Streams and Lakes



SOURCE: ESA, 2023

Topanga Lagoon Restoration Project

Figure 3.3-11
 Potential Coastal Wetlands and Waters

The following regulatory approvals are required prior to implementation of the Proposed Project. These approvals would implement measures to avoid or minimize Project impacts on sensitive biological resources.

Section 404 Clean Water Act and Section 10 Rivers and Harbors Act permits from the USACE, a **Section 401 water quality certification** from the Los Angeles RWQCB, and a **1602 Streambed Alteration Agreement** from CDFW are required. Prior to restoration activities involving impacts on wetlands or waters, State Parks would obtain the appropriate permits from USACE, the Los Angeles RWQCB, and CDFW, and implement the permit conditions.

Section 7 consultation under the FESA with USFWS and NMFS is required to avoid and minimize effects to federally listed species and critical habitat. USFWS covers tidewater goby, while NMFS covers steelhead trout. The Project compliance measures may include additional or modified requirements by USFWS and/or NMFS, as identified during the Section 7 consultation process. The Conservation Measures required by the agencies during the consultation would be implemented.

A CDP pursuant to the California Coastal Act from the CCC is required. Prior to restoration activities involving impacts on coastal wetlands or waters, State Parks will obtain the CDP and implement the permit conditions. Pursuant to Section 22.44.1950 et seq. of the LIP, State Parks would consult with CCC/Caltrans/Los Angeles County/City of Malibu to confirm that the Project provides an adequate amount of on-site natural habitat creation and enhancement to offset any impacts on coastal wetlands/waters and/or ESHA. In the event additional mitigation actions or acreages are required for coastal wetlands and waters and/or ESHA, State Parks would coordinate with CCC/Caltrans/Los Angeles County/City of Malibu to identify on-site or off-site opportunities.

Project Design Features

The following actions are required of the Project design to avoid or minimize project impacts on biological resources.

PDF-BIO-3.3-1: Avoid the use of pesticides within the lagoon and creek (including the wetted channel) and immediately adjacent areas to the lagoon and creek, unless deemed appropriate for aquatic habitats, consistent with State Parks policies. Any use of pesticides and herbicides shall comply with California Department of Pesticide Regulation requirements.

PDF-BIO-3.3-2: In the event grading boundaries are modified, all required tree protection measures including fencing and avoiding encroachment into the protected zone (15 feet from trunk or 5 feet from edge of dripline) will be implemented.

Special-Status Species

BIO 3.3-1: The Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions would slowly decline with anticipated degradation to biological resources. Operational activities would continue in the BSA, including lagoon mouth impacts during emergency response, and beach grooming activities on that would allow grunion spawning to continue undisturbed based on the current DBH Grooming Protocol. The Topanga Ranch Motel would continue to deteriorate without restoration, the lifeguard and public restroom building would continue to deteriorate due to coastal erosion, and existing local businesses would remain in current operations but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. All degrading structures are anticipated to increase pollutant movements into adjacent open space unless proactively managed.

Invasive plant species would remain present and would continue to outcompete native plant species and reduce native habitat quality within the BSA. Beach and lagoon dependent species in general would suffer as habitats are compressed due to sea level rise. Steelhead trout would continue to decline without restoring the lagoon, as outlined in the Build Alternatives (Alternatives 2, 3, and 4), to reduce high-velocity breaches during storm events for migration. In addition, both juvenile steelhead trout and tidewater goby refugia areas within the lagoon would decrease if restoration of the lagoon does not occur due to high velocity breaches during storm events. Both steelhead trout and tidewater goby critical habitat would be expected to degrade over time if no action occurs.

Alternatives 2, 3, and 4 (Build Alternatives)

Proposed Project impacts on candidate, sensitive, or special status species would be similar under Alternatives 2, 3, and 4.

Construction

Plants

One special-status plant species is present in the BSA, Southern California black walnut. Implementation of the Build Alternatives (Alternatives 2, 3, and 4) would not affect this species. This species would only be affected under the wastewater management options, which are discussed further below.

There is a small potential that special-status plants could colonize the site or be found on-site prior to construction. With implementation of **Mitigation Measure BIO-1**, impacts on special-status plants would be less than significant through preconstruction surveys with plant avoidance or propagule salvage, if observed on-site. Incorporation of special-status plants into the Habitat Restoration and Adaptive Management Plan (HRAMP) would ensure that the Project results in a net benefit to them.

Wildlife

There were 13 non-marine special-status wildlife species documented in the non-marine areas of the BSA during their protected life stage: monarch butterfly, tidewater goby, arroyo chub, steelhead trout, San Bernardino ringneck snake, coast mountain kingsnake, two-striped gartersnake, silver-haired bat, western red bat, Yuma myotis, San Diego desert woodrat, and mountain lion. An additional eight special-status wildlife species have a moderate and high potential to occur in non-marine areas of the BSA: Crotch's bumble bee, California legless lizard, Southern California legless lizard, coastal whiptail, coast horned lizard, coast patch-nosed snake, Cooper's hawk, and yellow warbler.

Multiple special-status species were observed on-site but would not be present during their sensitive life stage, and so would not be adversely affected by the Project. Twelve special-status birds utilize the site, but their protected nesting or roosting areas are not present on-site and would not be affected. These species include great egret, great blue heron, olive-sided flycatcher, snowy egret, Caspian tern, California gull, long-billed curlew, double-crested cormorant, black-crowned night heron, osprey, brown pelican, and elegant tern. Due to the mobile nature of these species, they are anticipated to easily shift away from active work areas to forage and roost in adjacent open space areas and are not anticipated to be significantly affected by the Project during construction.

Migratory birds, raptors, and their nests are generally protected under the Migratory Bird Treaty Act and the CFGC. Construction of the Project could result in the direct impacts on special-status species migratory birds and raptors, if any are present during ground disturbance, vegetation removal, or adjacent demolition or construction activities.

Individual discussions for special-status species determined to have the potential for significant impacts are further discussed below.

Monarch Butterfly: A potential overwintering site for monarch butterfly was identified within the BSA and Project area largely on the north side of Topanga Creek. While there are many similar groves throughout the local area which have the potential to serve as habitat if the identified overwintering site is affected, the monarchs instinctually return to a specific overwintering site, meaning impacts on a historical overwintering site can cause wider impacts on the local population even if alternative suitable habitat exists.

Overwintering sites can typically be broken into a Core Zone consisting of a roosting tree or trees which provide overnight shelter against wind chill, and a wider Shelter Zone of windbreak trees around the Core Zone, which provide shelter for daytime activities such as feeding. Both Zones make up an overwinter site. As shown in **Figure 3.3-12**, the Core Zone is within the northern edge of the Project boundary, north of Topanga Creek, and outside of areas proposed for grading/restoration. Trees within the Core Zone would therefore not be removed or otherwise affected. The preliminary Potential Shelter Zone is also largely outside of the restoration grading footprint, although a small edge on the opposite south side of Topanga Creek overlaps with the restoration grading area and may involve removal of a single eucalyptus and an invasive plant species dominated understory in preparation for restoration activities and plantings. Restoration

plantings would provide appropriate native tree, shrub and herbaceous vegetation that would improve the habitat values for monarch butterfly and other wildlife over the long term. Impacts on monarch butterfly would be similar under Alternatives 2–4.

In order to protect monarch overwintering to the maximum extent feasible during construction, **Mitigation Measure BIO-2** would be required, which would include a species construction monitoring plan, clear identification and protection of roosting trees, avoidance of intense vibrations within 200 ft of roosting trees, and avoidance of butterfly harming pesticides or application methods within 200 ft of overwintering sites when monarchs may be present. Implementation of these avoidance measures would reduce potential Project impacts to a less-than-significant level.

Crotch’s Bumble Bee. This candidate species under CESA prefers underground nest sites and may use abandoned rodent dens. The species’ preferred plants for nectaring include the following plant taxa: Asclepiadaceae, Asteraceae, Fabaceae, Boraginaceae, and Lamiaceae, which are all present within the Project site. The restoration activities could result in the temporary loss of suitable habitat; however, temporary habitat disturbance is not expected to be significant because of the abundance of similar suitable habitat surrounding the BSA and because restoration of suitable habitat for this species and currently disturbed areas would improve foraging areas. While individual adults are mobile and can move away from the BSA during construction, if present, if a nest colony exists underground, ground disturbance could result in injury or mortality of individuals or the entire colony. **Mitigation Measure BIO-3** would require presence/absence surveys for Crotch’s bumble bees and avoidance of any nests to the extent feasible, consultation with CDFW to identify appropriate measures to minimize impacts and avoid take to the maximum extent feasible, and replacement of habitat if occupied by the species. Implementation of this mitigation measure would reduce potential impacts on the species and occupied habitat (if present) to a less-than significant-level.

Tidewater Goby. This species is known to occupy the Topanga Creek and Lagoon within the BSA. Individuals could be directly affected by construction activities due to direct mortality when in-water construction or dewatering activities are occurring, injury due to underwater sound pressure from vibrations or noise during piling driving, and temporary loss of nursery habitat within the lagoon. Indirect impacts from construction activities to tidewater goby include fish movement changes due to underwater sound pressure from vibrations or noise and habitat quality due to water quality, water turbidity, and sediment changes. Formal consultation with USFWS is required for this species. Project design for the replacement bridge is anticipated to avoid aquatic species by eliminating any middle-bent column and foundation and using precast steel truss bridge structure to avoid installing any trestle falsework with driven piles in wetted areas. To avoid potential significant impacts during construction to tidewater goby, implementation of **Mitigation Measures BIO-4** through **BIO-7** would be required, which includes underwater sound monitoring, dewatering and fish rescue plan, and monitoring during in-water construction activities.



D201901073.01 - Topanga Lagoon CEQA NEPA/05 Graphics-GIS-Modeling-USE AZURE/illustrator

SOURCE: Project Boundary (E PD, Moffat & Nichol, RCDSM M 9/20/2023), Biological Survey Area (CDPR, CRM 9/21/2023)

Topanga Lagoon Restoration Project

Figure 3.3-12
Monarch Butterfly Overwintering Site

There are 5 acres of mapped tidewater goby critical habitat on-site, and an estimated 0.33 acre of that are estimated to be temporarily disturbed during removal of the existing bridge. Relocation of tidewater gobies during construction to the creek area would be into adjacent suitable habitat or as otherwise directed by USFWS approvals. An assessment of carrying capacity and crowding would occur at the time of relocation in coordination with USFWS to ensure that there is sufficient area to support any fish that are moved. With implementation of these mitigation measures, the Proposed Project may still be considered to have a temporary adverse effect on tidewater goby during the relocation and would require coordination with USFWS regarding acceptable levels of take. Post-construction, the proposed Build Alternatives are expected to provide long term benefits to tidewater goby and its critical habitat.

Arroyo Chub. This species may occasionally be washed down from upstream locations into the BSA during large rain events. Individuals could be directly affected by construction activities, if present, due to direct mortality when in-water construction and dewatering activities are occurring. Indirect impacts on arroyo chub from construction due to habitat quality such as water quality are unlikely, given the scarcity of the species in the BSA and the ability to move upstream away from construction areas. This species likely spends short periods of time within the BSA before swimming back upstream to more freshwater habitats. To avoid potential significant impacts during construction to arroyo chub, implementation of **Mitigation Measures BIO-4** through **BIO-7** would be required, which includes dewatering and fish rescue plan and monitoring during in-water construction activities. With implementation of this mitigation measure, Project construction impacts on arroyo chub would be less than significant.

Steelhead Trout. This species is known to occupy Topanga Creek and Lagoon within the BSA, however they are only present during migration into or out of the creek when the lagoon is connected to the ocean. During that time, individuals could be directly affected by construction activities due to direct mortality when in-water construction or dewatering activities occur and injury due to underwater sound pressure from vibrations or noise during piling driving, if required. Indirect impacts from construction activities to steelhead trout include fish movement or migration changes due to underwater sound pressure from vibrations or noise and habitat quality due to water quality, Project contaminants, water turbidity, and sediment changes. Formal consultation with NMFS and CDFW would be required. Project design for the replacement bridge is anticipated to avoid aquatic species by eliminating any middle-bent column and foundation and using a precast steel truss bridge structure to avoid installing any trestle falsework with driven piles in wetted areas. To avoid potential significant impacts during construction to steelhead trout, implementation of **Mitigation Measures BIO-4** through **BIO-7** would be required, including underwater sound monitoring, dewatering and fish rescue plan, monitoring during in-water construction activities, water quality, and erosion control best management practices (BMPs). With implementation of these mitigation measures, temporary Project construction impacts on steelhead trout would be less than significant.

Reptiles. Eight special-status reptile species (California legless lizard, southern California legless lizard, coastal whiptail, San Bernardino ringneck snake, coast mountain kingsnake, coast horned lizard, coast patch-nosed snake, and two-striped gartersnake) have been documented or have a moderate or high potential to occur on the BSA. Each species could be directly affected by

construction activities due to direct mortality and loss of suitable foraging and refuge habitat. Loss of suitable foraging and refuge habitat is not expected to be potentially significant because of the abundance of similar suitable habitat surrounding the BSA. However, while these species are mobile and can move away from the BSA during construction activities, they are small and less mobile than larger species, and are more likely to be affected during construction activities, if present. To avoid potential significant impacts during construction for special-status reptile species, implementation of **Mitigation Measure BIO-8** would be required, which includes pre-construction surveys, and development of a relocation plan for translocate any individual animals to suitable habitats outside of the construction area, and use of exclusion materials to minimize animal reentry into the active work area. With implementation of this mitigation measure, Project construction impacts on special-status reptile species would be less than significant.

Birds. Cooper's hawk and yellow warbler forage and roost on-site and have the potential to nest on-site due to the presence of suitable habitat. Due to the mobility of these species, it is unlikely that mortality or injuries to individuals would occur due to construction activities. The loss of foraging and nesting habitat is not expected to be significant because of the abundance of suitable habitat surrounding the BSA. If nesting occurred on-site, direct impacts could occur during the nesting season that could result in mortality or injury to eggs or chicks. To reduce potential temporary significant impacts on Cooper's hawk, yellow warbler, and other nesting birds, **Mitigation Measure BIO-9** would be implemented, which includes pre-construction nesting bird surveys, avoidance and minimization measures in the event nesting activity could be disturbed by Project activities. There is also a small potential that a communal nesting site could become established before completion of restoration activities. In this event, a relocation plan with construction of new nest rookery making use of recently used nest materials would be prepared for CCC, CDFW, and USFWS review. With the implementation of this mitigation measure, impacts on Cooper's hawk, yellow warbler, and nesting birds in general would be less than significant.

Bats. Three special-status bat species (silver-haired bat, western red bat, and Yuma bat) were documented on the BSA. Direct impacts on these species include the potential temporary loss of foraging habitat and direct mortality if individuals are roosting on-site during construction activities. Potential roosting habitat include human-made structures such as bridges and abandoned buildings, as well as tree hollows, exfoliated tree bark, rock crevices, and tree or shrub foliage, especially dead palm fronds. To avoid potential significant impacts during construction, implementation of **Mitigation Measure BIO-10** would be required to ensure that no roosting bats would be affected. With implementation of these measures, impacts on the three special-status bat species would be less than significant.

San Diego Desert Woodrat. This species has potential to occur due to the presence of suitable habitat. Direct impacts on this species include the loss of foraging habitat, displacement, and direct mortality if individuals are present during construction activities. The loss of foraging habitat is not expected to be significant because of the abundance of suitable habitat surrounding the BSA and the small area of impacts on natural communities on-site. To reduce potential temporary significant direct impacts on San Diego desert woodrat, **Mitigation Measure BIO-11** would be implemented, which includes pre-construction surveys for woodrat middens, midden

avoidance, and midden and animal relocation, if required. With the implementation of this mitigation measure, impacts would be less than significant.

Mountain Lion. This species is known to occasionally occupy the Project area based on tracking studies by the NPS. However, the species would not be directly affected by construction activities because the species is not known to have natal dens on or near the BSA and no natal dens are expected. This species is highly mobile and can move away from the Project area during construction if present. Indirect impacts could result from an interruption of their movement through the area during construction activities, however, these impacts are temporary and would not require mitigation. Therefore, no specific avoidance and minimization measures are proposed for this species.

Impacts on special-status species during construction would generally be temporary and similar across alternatives. Temporary habitat degradation or habitat loss may occur to designated critical habitat for tidewater goby and steelhead trout. However, because the Proposed Project is a restoration project that would increase lagoon and riparian habitats depending on the alternative selected, it would result in a significant net benefit and is considered self-mitigating. Alternatives 2–4 generally have similar levels of potential impacts on special-status species. These effects would be at on the scale of individuals, and not populations. Under Alternative 2, there is a slightly higher potential for impacts on bats with the restoration of the entire Topanga Ranch Motel compared to other alternatives, while Alternative 4, may have increased potential to impact aquatic species temporarily as the relocation of PCH to the north involves two corridors of activity across wetted areas.

Operation

There would generally be a net benefit to special-status species resulting from lagoon restoration, bridge replacement, and improved visitor services. Available habitat areas for all species are expanded under Alternatives 2–4, with Alternative 2 providing the greatest benefit as it maximizes restoration acres. The bridge would remain in the same location as current conditions, albeit longer, under Alternatives 2 and 3, but would move slightly north under Alternative 4. The beach would increase and would continue to operate using the current DBH Grooming Protocol under all Build Alternatives. Alternative 4 would provide additional benefits to special-status species dependent upon the beach as it would maximize the potential for managed retreat.

Development would be generally reduced under Alternative 2 as the Topanga Ranch Motel would be restored and most on-site leasees would be removed. Development of the interpretive center and pavilion, limited park facilities, and parking lot improvements at the Gateway Corner and along TCB are not anticipated to significantly increase human activity and encroachment/environmental damage due to volunteer trails, and unmanaged use is anticipated to decrease. Although Alternatives 3 and 4 provide for the option of overnight accommodations, operational impacts are generally anticipated to be similar to existing conditions as leasee use would decrease.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an advanced on-site wastewater treatment system (AOWTS) via either seepage pits (Option 2) or a sewer connection (Option 3). Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Since Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2 impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above in “Construction.”

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction activities associated with this option could potentially impact sensitive biological resources such as southern California black walnut trees, a special status plant. These trees are not anticipated to be directly affected by construction activities but could be indirectly affected by large machinery or equipment driving over tree roots. All required tree protection measures including fencing and avoiding encroachment into the protected zone (15 feet from trunk or 5 feet from edge of dripline) would be implemented to ensure that indirect impacts are reduced to less-than-significant levels. **Mitigation Measure BIO-1** would also be implemented to protect walnuts and other unanticipated sensitive plants encountered on-site. In the event any Project element would occur within the protected zone of a Southern California black walnut, tree protection measures outlined in **Mitigation Measures BIO-14** and **BIO-15** would apply (see Impact BIO 3.3-5 for the text of these mitigation measures). Other potential special-status species that could be directly and indirectly affected by wastewater management Option 2 due to direct mortality or roost/nest destruction or disturbance include California legless lizard, southern California legless lizard, coastal whiptail, San Bernardino ringneck snake, coast mountain kingsnake, coast horned lizard, coast patch-nosed snake, two-striped gartersnake, Cooper’s hawk, yellow warbler, other nesting birds, silver-haired bat, western red bat, Yuma bat, and San Diego desert woodrat. However, with the implementation of **Mitigation Measures BIO-8** through **BIO-11**, impacts would be reduced to less than significant.

Wastewater management Option 3 is anticipated to be limited to paved or disturbed areas within the Caltrans ROW along PCH and is not expected to impact special-status species. In the event Option 3 requires movement onto the roadway shoulder or adjacent vegetation, **Mitigation Measures BIO-1**, and **BIO-7** through **BIO-11** would apply.

With the implementation of **Mitigation Measures BIO-1** through **BIO-11**, **BIO-14**, **BIO-15** and **MAR-1**, impacts on special-status species and their habitat would be less than significant.

Mitigation Measures

BIO-1: Special-Status Plant Protections. The following measures shall be implemented to avoid and minimize impacts on special-status plants:

- Preconstruction plant surveys shall occur in the appropriate blooming period preceding construction, and again within two weeks prior to construction activities affecting vegetation.
- In the event a special-status plant is identified, steps shall be taken to avoid, or if infeasible, collect propagules for propagation and installation on-site. CDFW, USFWS, and CCC shall be coordinated with to discuss findings and actions.
- Special-status plants shall be incorporated into the Habitat Restoration and Adaptive Management Plan (HRAMP) plant palette and sourced from genetically appropriate stock. Species shall be chosen that are well matched to on-site soils, exposure, and water regime:
 - Southern California black walnut shall be included.
 - The following species shall be considered for inclusion as they are special status species that could occur historically on-site: Coulter's saltbush (*Atriplex coulteri*), Malibu baccharis (*Baccharis malibuensis*), Lewis' evening-primrose (*Camissoniopsis lewisii*), Santa Monica dudleya (*Dudleya cymosa* ssp. *ovatifolia*), white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*), and south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*).
 - Additional special-status wetland species shall be incorporated that would be expected in similar wetland systems in the Santa Monica Bay.
 - Native species from the region identified by the Gabrielino/Tongva tribe as traditionally important will be included.

BIO-2: Monarch Butterfly Measures. The following measures shall be implemented to protect and minimize impacts on overwintering monarchs:

1. During the overwintering season (October 15–March 15) prior to the start of restoration activities, a qualified biologist shall conduct a roosting monarch survey every two weeks to monitor the size of the population and map the locations of roosting monarchs. Roosting monarch surveys shall follow the Xerces Society monarch count protocol.
2. To prevent disturbance of monarchs during the overwintering season by construction personnel or work activity, roosting trees will be flagged, and snow fencing or a similar technique shall be used to cordon off monarch roost trees at a reasonable distance of at least 25 feet away from the roosting monitor. The monitor shall determine the placement of the fencing to protect the monarchs while allowing work to continue.
4. While work is occurring in the Project vicinity during the overwintering season, the monitor shall visit the property a minimum of two times per week to verify protection measures remain in place and document that roosting monarchs are not disturbed by work activities. The monitor shall have authority to stop work if monarchs show signs of unnatural disturbance. If monarchs are being disturbed or affected, protection measures shall be relocated by the monitor in consultation with the foreman.

5. Work crew shall be educated on the monarch protection measures and how the measures apply to their work.
6. During the overwintering season when monarchs are present, activities that could result in vibration and thus movement of monarch clusters, shall be avoided within 200 feet of occupied trees. A qualified biologist can modify the buffer with approval of the regulatory agencies if adjacent activities are determined not be disturbing.
7. Aerial pesticide applications or pesticides that are harmful to butterflies shall be avoided within 200 feet of overwintering sites when monarch overwintering is occurring. Small cut and paint efforts or directed spot spraying when it is not windy will be allowed if required to control invasive arundo treatments or other highly invasive species to avoid invasive regrowth in the Project area. All weed treatments shall be under the supervision of a qualified biologist to ensure no impacts on monarchs occur. Any weed treatments shall be under the supervision of a Qualified Applicator Certificate and conducted per State Parks and California Department of Pesticide Regulation guidelines.
8. Monarch nectary plants shall be incorporated into the plant palette of the HRAMP near potential overwintering sites.

BIO-3: Crotch's Bumble Bee Measures. The following measures shall be implemented to protect and minimize impacts on Crotch's bumble bees:

1. Surveys for Crotch's bumblebee shall be conducted within one year of vegetation removal/ground disturbance by a qualified entomologist familiar with the identification, behavior and life history of the species. A minimum of three surveys during peak flying season shall be conducted when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983), (INSERT INFO ON PREFERRED WEATHER CONDITIONS). [JK1] Non-lethal survey methodology shall be used and photo vouchers for species confirmation will be obtained (CBBA 2023[JK2]). At minimum, a survey report shall provide the following:
 - a. A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee.
 - b. Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched.
 - c. Map(s) showing the location of nests/colonies.
2. If Crotch's bumble bee is detected, the following shall be implemented:
 - a. The qualified entomologist shall:
 - i. Identify the location of all nests within and adjacent to the Project site.
 - ii. Provide a summary of the physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. This shall include native plant composition (e.g., density, cover, and abundance) within affected habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

- iii. Establish a 15-meter no disturbance buffer zone around any identified nest(s) to reduce the risk of disturbance or accidental take. The buffer zone will be expanded as necessary to prevent disturbance or take to the extent feasible.
- b. If complete avoidance of the buffer zone is not feasible, consultation with CDFW shall occur to identify any additional measures needed to avoid impact on the species, confirm allowable activities within the buffer zone, and determine if take authorization from CDFW is required.
- c. Floral resources associated with Crotch's bumble bee that require removal during restoration activities shall be replaced at a 1:1 ratio and with guidance from CDFW. Floral resources will be planted within 200 meters of the original plant location or in the most centrally available location relative to identified Crotch's bumble bee nests, and be located no more than 1.5 kilometers from the nest sites.
- d. The Habitat Restoration and Adaptive Management Plan will include native and local plant species preferred by Crotch's bumblebee within the plant palette to further support the existence and expansion of the species on-site.

BIO-4: Fish Protection Measures During Work in Wetted Areas. Formal consultation with USFWS/NMFS will further refine these measures and the Project shall comply with all permit requirements. The following measures shall be implemented to protect and minimize impacts on tidewater goby and steelhead trout, their critical habitat, and other special-status aquatic species during construction:

1. Cofferdam, sediment curtain, and/or another method approved by NMFS/USFWS shall be used to cordon off the area (approximately 0.33 acre) around the existing bridge abutment to both exclude fish and wildlife and to contain construction debris and runoff within the work area. Final construction design shall meet all permit conditions and be developed by the contractor in coordination with State Parks.
 - a. The cofferdam shall not be fully dewatered until the supervising biologist determines that no fish remain within the area.
 - i. Dewatering shall be done slowly with supervision to ensure that any fish trapped in the area can be captured and relocated reducing the risk of injury or stress.
 - ii. Pumps shall be properly screened to prevent fish from entering the intake.
 - iii. Dewatering and flow diversion shall comply with permit requirements from USFWS and NMFS.
 - iv. Once the supervising biologist has confirmed that the work area is isolated, all fish are excluded, and there is no risk of entraining fish, then the pump screen may be removed.
 - v. Water removed from the work area shall be directed to an adjacent holding area according to permit requirements before being infiltrated into the existing fill or release into the lagoon or ocean downstream of the work area.
 - vi. Water quality testing including turbidity, temperature, salinity, dissolved oxygen, pH, and conductivity, nutrients (and potentially metals if required) shall be monitored and documented at the start, middle and end of each day.

- b. Blocking nets providing a buffer area outside the work zone shall remain in place until all work is completed and the coffer dam removed.
 - i. Blocking nets shall be inspected at least three times a day (start, middle, end) or more if requested by the supervising biologist. If fish are impinged on the net, or weather/flow conditions change significantly, the supervising biologist can increase inspection efforts.
 - c. Silt curtains may also be installed inside the blocking nets to further reduce potential for water quality impacts.
2. All construction activities within or directly adjacent to the lagoon, creek, and wetted areas will occur preferentially outside of the steelhead migration season (December through March). In the event, this time frame cannot be avoided, measures shall be implemented with the approval of NMFS and CDFW to avoid impacts such as allowing passage through a protected portion of the work area and implementation of additional BMPs to buffer fish from adjacent work, such as use of silt curtains within the wetted edge and silt fence along the dry edge, etc.).
 3. If fish upstream are observed in distress, a fish kill occurs, or spills occur, the supervising biologist shall immediately contact the contractor to stop work, contact the relevant agencies, and work with the contractor to correct the problem.
 4. Upon completion of the removal of the old bridge within the coffer dam area, water quality shall be tested within the work area before removal of the walls. Flow shall be restored slowly, and fish shall remain excluded upstream of the work area pending confirmation that water parameters are suitable for direct release into the lower lagoon.

BIO-5: Fish Relocation Measures. Formal consultation with USFWS will further refine these measures and the Project will comply with all permit requirements. The following measures shall be implemented to protect and minimize direct impacts on special-status fish species:

1. All fish shall be relocated out of the BSA by a permitted biologist prior to work within the lagoon, creek, and wetted areas. The fish shall be relocated in an approved location upstream (or downstream if conditions are suitable). Assessment of carrying capacity and crowding shall be made at the time of relocation in conjunction with USFWS to ensure that there is sufficient area to support any fish that are moved.
2. Downstream blocking nets (having no greater than 1/8-inch mesh) shall be secured to both banks and the bottom to prevent movement downstream or upstream of the work area in the main lagoon.
3. Fish shall be herded upstream above the limit of the proposed work area and then seining will continue until all fish are captured. The upstream blocking net shall be installed and secured so that no fish can move back into the work area.
4. Fish that are not herded but captured in the seine nets shall be placed in buckets of cool, clean water collected from an undisturbed area of the lagoon with bubblers attached at the sides and then immediately hand carried upstream above the upstream blocking net or downstream into the main lagoon if conditions are suitable.
5. Fish shall not be crowded or held in buckets for more than 10 minutes.

6. Fish handling shall be minimized while the supervising biologist documents the species, number, size class, and condition of release.
7. Individuals handling fish shall ensure that their hands are clean and free of potentially harmful substances such as sunscreen, insect repellent, etc.
8. Should there be any mortality, the fish incidentally killed shall be preserved whole on ice then frozen, data on species, size and cause of mortality will be documented, and the remains delivered to the appropriate agencies.
9. If the limits of incidental take are approached, the supervising biologist shall postpone work until the appropriate agency is notified and a plan developed to further reduce potential for further stress or injury.

BIO-6: Fish Hydroacoustic Buffering Measures. Formal consultation with USFWS/NMFS will further refine these measures and the Project will comply with all permit requirements. The following measures shall be implemented to protect and minimize direct and indirect impacts on special-status fish species from hydroacoustics:

1. Construction of the bridge foundation and footings shall be completed within the existing fill material.
2. Construction of the temporary bridge shall avoid placement of any foundations within or immediately adjacent to the wetted area and any construction shall be completed within existing fill material.
3. Construction of the coffer dam or other devices within or immediately adjacent to the wetted area associated with removal of the existing bridge shall comply with all Caltrans requirements as outlined in the *Technical Guidance for Assessment and Mitigation of Hydroacoustic Effects of Pile Driving on Fish* (Caltrans 2020).

BIO-7: General BMPs for Biological Resources. To minimize temporary and limited turbidity or water pollution impacts from adjacent ground disturbing activities, the following BMPs shall be implemented at a minimum. If more stringent measures are identified in the Project permits and Storm Water Pollution Prevention Plan (SWPPP), they will also be implemented.

1. Siltation fences, or other suitable material, shall be installed at the edge of the work areas to be graded to avoid movement of soil into wetted areas.
2. Vegetation removal shall be conducted so that materials are not permitted to fall into wetted areas.
3. Stockpiles shall be located away from the lagoon and creek corridor and will be contained by standard BMPs such as wattles, tarps, or burlap to ensure materials are not moved into the creek due to wind, rain, gravity, or flooding.
4. No equipment maintenance or refueling shall be permitted within 100-feet to avoid accidental spills from entering the lagoon and/or creek.
5. Soil shall be stabilized in bare areas with mulch, straw matting, hydroseeding or other approved methods as described in the Restoration Plan to avoid movement of soils into wetted areas.
6. Ground disturbing activities shall not occur during rain events. Within 24 hours of a projected likely rain event, the site will be “buttoned up” with appropriate BMPs

such as covers over stockpiles and wattle installation at graded area boundaries and along slopes so that soil and Project materials will not wash into adjacent areas.

7. Access roadways shall be periodically swept (paved) or wetted down (unpaved) to minimize soil movement into adjacent areas due to wind.
8. Construction lighting shall be directed away from non-work areas and directed downward to avoid adversely affecting adjacent species and their movement corridors.

BIO-8: Herpetofauna Measures. The following measures shall be implemented to protect and minimize impacts on protected herpetofauna:

1. Thirty days prior to ground disturbance or grading activities, a qualified biologist shall conduct pre-construction surveys to detect the presence of special-status herpetofauna. A minimum of three preconstruction surveys shall be conducted during periods when the target species are most likely to be active. Periods of lower temperatures, generally December through February, should be avoided.
2. In the event special-status herpetofauna are identified during preconstruction surveys, a capture and relocation plan shall be developed for review and approval of CDFW. The plan shall, at a minimum, include the timing and location of the surveys, trapping and relocation methods and locations, species exclusions methods from active work areas, and required documentation/recording data. Species specific guidance shall be included.
3. Exclusion fencing (e.g. 4- to 6-foot-high silt fence keyed in) shall be installed around the active work area to limit the potential for re-colonization of the site prior to construction activities. Fence stability shall be surveyed daily and repaired within 24 hours.
4. A qualified biologist will be present during vegetation removal or initial ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Special attention shall be given to burrows and allowing animals to escape during earth work. Earthwork and vegetation removal should be sequenced where feasible to facilitate animal movement towards open space areas.

BIO-9: Nesting Bird Measures. If the nesting bird season cannot be avoided and construction or vegetation removal occurs between February 1 through August 1 (February 1–September 15 for large tree removal), the Project shall do the following to avoid and minimize impacts on nesting birds and raptors:

1. A qualified biologist shall conduct a nesting bird study within two weeks of the anticipated start date, and again within two days prior to ground disturbance, to identify any active nests within 500 feet of the development footprint.
2. If an active nest is found, the nest shall be avoided and a suitable avoidance buffer shall be delineated in the field where no impacts may occur until the chicks have fledged the nest as determined by a qualified biologist. Construction buffers shall be 300 feet for passerines or up to 500 feet for raptors or as identified by a qualified biologist. Avoidance buffers may be modified at the discretion of the qualified biologist in coordination with CDFW, depending on the species, location of the nest, species tolerance to human presence, and the type of construction-related noises and vibrations that would occur.

3. In the event a communal nesting site becomes established before completion of restoration activities, coordination with CDFW and USFWS shall occur to determine avoidance and minimization measures. In the event it is determined that the communal nesting site needs relocation, a relocation plan shall be prepared for CDFW and USFWS. The plan shall identify methods and locations for construction of new sites making use of recently used nest materials.

BIO-10: Bat Roost Measures. The most suitable bat roosting habitats on the Proposed Project are along the PCH bridge, within the motel, leasee or lifeguard and public restroom building, and within oak, palms, and other large, mature trees. Rock crevices could also be used. Bats are their most vulnerable during their maternity roosting period (May 1 to October 31) and during hibernation periods (December 1 to March 31).

The following measures shall be implemented to protect and minimize impacts on protected and roosting bats:

1. When feasible, disturbance to suitable bat roosting habitat shall be scheduled in November and April, or otherwise outside of sensitive hibernation and roosting periods.
2. Within two weeks prior to disturbance of potential bat roosting sites (large trees, structures, rocky crevices), a qualified bat specialist shall conduct a visual and acoustic pre-construction survey of the Proposed Project and surrounding 200 feet for possible roosting habitat. The bat specialist shall document all survey results and prepare a summary report to CDFW.
3. In the event no roosting bats are present within the survey area, one-way exclusion devices shall be installed prior to structure demolition to exclude bat use and avoid their potential harm.
4. If potential roosting sites are identified, an additional survey to pinpoint roosting locations should occur within seven days prior to disturbing activities. The biologist, in coordination with CDFW, shall refine a 200-foot or other agreed-upon buffer to keep in place during construction until the roosting site is confirmed to be no longer in use for hibernation or dependent young. Night lighting for construction shall not be directed towards these roost sites.
5. Large tree cutting or removal shall be supervised by a qualified biologist to document the presence or absence of bats that might be affected. A local bat rehabilitation facility shall be available in the event tree-felling results in unanticipated injury to any bat.
6. If bat roosts are affected during construction, the Project applicant shall provide replacement roosts within similar habitat and with a gap no greater than 3.8 centimeters and interior surface comparable to that of the original roost. The replacement roost shall be swabbed with bat guano and urine collected from the original roost.

BIO-11: San Diego Woodrat Measures. The following measures shall be implemented to protect and minimize impacts on protected woodrats:

1. Exclusion fencing (e.g., 4- to 6-foot-high silt fence keyed in) shall be installed around the active work area to limit the potential for re-colonization of the site prior to

- construction activities. Fence stability shall be surveyed daily and repaired within 24 hours.
2. Thirty days prior to construction activities, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego desert woodrat.
 3. If inactive woodrat nests are found, they shall be disassembled and relocated out of the active work area under the supervision of the qualified biologist.
 4. If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone, a construction fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist. Clearing and construction within the fenced area shall be postponed or halted until young have left the nest. The biologist shall be present during those periods when disturbance activities will occur near active nest areas to avoid inadvertent impacts on these nests.
 5. If San Diego desert woodrat nest avoidance is not possible, the Project biologist shall clear vegetation from areas immediately surrounding the active nests, followed by a night without further disturbance to allow woodrats to vacate the nest. Preference will be given to non-breeding-season destruction of the nests (May through October) and relocation of adults shall target undeveloped areas of the Project, including salvage of nest-building material—rocks, sticks, etc. Each occupied nest shall subsequently be gently disturbed by a qualified wildlife biologist to entice any remaining woodrats to leave the nest and seek refuge outside the Project construction area. The stick nests shall be carefully removed from the Project construction area and be placed near a suitable vegetation or rocky substrate like original nest location. The Project biologist shall document all woodrat nests moved and provide a written report to CDFW.
 6. Results of the surveys and relocation efforts shall be provided to CDFW.

BIO-14: Protected Native Tree Survey. (See Impact BIO 3.3-5, below.)

BIO-15: Tree Management and Preservation Program. (See Impact BIO 3.3-5, below.)

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, all 25 existing structures of the Topanga Ranch Motel and all other buildings on State Parks property would be fully removed. All new State Parks development would be located at the Gateway Corner (intersection of TCB and PCH) within currently developed areas. The one exception is that a maximum 2,400-square-foot leasee could remain at the current location of the Reel Inn restaurant just southeast of the historic motel. Thus, no impacts on special-status species or their habitats are anticipated.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and Park facilities such as employee housing, a maintenance facility, park offices, and storage. This Project component

would remain within developed and landscaped areas and would not affect any sensitive biological resources. During construction, direct impacts could occur during the nesting season that could result in mortality or injury to eggs or chicks. Bat roosts or hibernation sites could also be affected by modification or removal of site structures. To reduce potential significant impacts on nesting birds, **Mitigation Measure BIO-9** would be implemented. To reduce impacts on roosting/hibernating bats, **Mitigation Measure BIO-10** would be implemented, and roosting/hibernating bats, and roosting/hibernating bats, measures to avoid and minimize impacts on bats by timing of activities, bat exclusion, surveys, and avoidance. During operational activities, programmatic visitor center services are anticipated to be similar to current surrounding conditions and therefore would not affect any sensitive biological resources.

Mitigation Measures

Implement **Mitigation Measures BIO-9** and **BIO-10** (presented above).

Significance Determination

Less than Significant with Mitigation Incorporated

Sensitive Natural Communities

BIO 3.3-2: The Project could have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by California Department of Fish and Game or U.S. Fish and Wildlife Service. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing lagoon conditions would slowly decline with anticipated degradation to biological resources. Operational activities would continue in the BSA including lagoon mouth impacts during emergency response, and beach grooming activities based on the current DBH Grooming Protocol. The Topanga Ranch Motel would continue to deteriorate without restoration, the lifeguard and public restroom building would continue to deteriorate due to coastal erosion, and existing local businesses would remain in current operations but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. All degrading structures are anticipated to increase pollutant movements into adjacent natural communities unless proactively managed.

Invasive plant species, including the highly invasive species arundo, would remain present and would likely outcompete many species within the California Sycamore - Red & Arroyo Willow - Mulefat sensitive vegetation community among other habitat types, reducing habitat quality. Eucalyptus and nonnative tree dominated areas would continue to spread into sensitive wood and scrublands, and terracina spurge and non-native weeds would continue to infill the understory in most habitats, further reducing habitat quality. Although there would no direct impacts due to Project-related activities under this alternative, the consequences of no action would continue to gradually reduce the quantity and quality of sensitive natural communities.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts on riparian habitat or other sensitive natural communities would be similar under Alternatives 2, 3, and 4, although Alternative 2 would have the largest impact acres.

Construction

Native trees within the California Sycamore - Red & Arroyo Willow - Mulefat Association and Lemonade Berry Scrub sensitive natural communities adjacent to the creek would be preserved and protected during grading activities. Additionally, native tree protection and mitigation measures are discussed below in Threshold 3.3-5 *Local Policies and Ordinances*.

As shown in **Table 3.3-8**, five of the sensitive natural communities for Alternatives 2–4 would be affected during Project construction. These include California sycamore woodland/red and arroyo willow and mulefat understory, California brittlebush-California sagebrush, purple sage-ashleaf buckwheat/annual herb, lemonade berry, and giant wildrye grassland. Large areas of highly disturbed habitats would be graded and replanted with native vegetation per the Project's Conceptual HRAMP (CHRAMP). Although construction results in short-term disruption to up to 1.65 acres of the sensitive natural communities, the net result would be an increase in the quantity and quality of sensitive plant communities on-site. Construction of Alternatives 2–4 would restore a more natural topography, remove invasive species, and replant with a more diverse mix of native plants. Allowing space for managed retreat to proactively address climate change is an element of the Project design and CHRAMP.

Alternative 2 would result in somewhat greater impacts on sensitive natural communities during construction (1.65 acres) compared to Alternatives 3 and 4 (1.43 acres vs 1.38 acres), as it involves more restoration acres, but would also restore the most native habitat compared to the other two alternatives. Because the Proposed Project is a restoration project that would remove non-native and invasive species, and would create ~~7–10 acres of~~ lagoon and riparian habitats and increase both riparian and upland habitats, it would result in a significant net benefit to the BSA and is considered self-mitigating. These benefits are expected to be visible within the first two years of restoration. Restoration efforts would be guided by the Project HRAMP to be reviewed and approved by CCC and CDFW. Therefore, while impacts on sensitive natural communities from the Alternative 2 Maximum Lagoon Habitat would be temporarily significant during construction, impacts would be reduced to less than significant with incorporation of **Mitigation Measure BIO-12**.

Potential indirect impacts on sensitive natural communities would include introduction of invasive plants from construction or personnel equipment onto or adjacent to sensitive natural communities. To avoid the spread of invasive plant species to sensitive natural communities, implementation of **Mitigation Measure BIO-12** would be required, including measures to minimize the potential for habitat degradation.

**TABLE 3.3-8
VEGETATION COMMUNITY OR LAND COVER TYPE IMPACTS**

Vegetation Community or Land Cover Type	CDFW Conservation Status Rank ¹	Alternative 2 Impact Acreage ³	Alternative 3 Impact Acreage	Alternative 4 Impact Acreage	Wastewater Mgmt Option 2	Wastewater Mgmt Option 3
Reached Woodland						
California Sycamore (<i>Platanus racemosa</i>) Woodland / Red & Arroyo Willow (<i>Salix laevigata</i> , <i>S. lasiolepis</i>) and Mulefat (<i>Baccharis salicifolia</i>) Understory [61.312.05].***	G3S3	1.04	0.82	0.82	0.10	-
Arroyo Willow Thickets Association [61.201.01]	G4S4	0.08	0.08	0.07	-	-
Individual Native Trees (Sycamore, Cottonwood (<i>Populus fremontii</i>), Coast Live Oak (<i>Quercus agrifolia</i>))	NR	-	-	-	-	-
Eucalyptus Woodland Alliance/Non-native Tree Stands [79.100.02]	NR	1.26	0.77	0.72	0.32	-
California Black Walnut (<i>Juglans californica</i>) Woodland/ Annual Herbaceous understory [72.100.03] ***	G3S3	-	-	-	0.03	-
California Black Walnut (<i>Juglans californica</i>)/ Laurel Sumac (<i>Malosma laurina</i>) Woodland [72.100.07]***	GNRS3	-	-	-	0.14	-
Scrub/Shrublands						
Black Sage (<i>Salvia mellifera</i>) - Coastal Sage (<i>Artemisia California</i>) – Laurel Sumac (<i>Malosma laurina</i>) Association [32.020.15]	G4S4	-	-	-	-	-
California Sagebrush (<i>Artemisia californica</i>) - Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) Association [32.010.07]	G4S4	-	-	-	-	-
California Brittlebush (<i>Encelia californica</i>) - California Sagebrush (<i>Artemisia californica</i>) Shrubland Association [32.050.01]***	G3S3	0.41	0.41	0.34	-	-
Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) Association – [32.035.01]***	G2S2	-	-	-	-	-
Lemonade Berry (<i>Rhus integrifolia</i>) Shrubland Association – [37.803.01]***	G3S3	-	-	-	0.01	-
Purple Sage (<i>Salvia leucophylla</i>) - Ashyleaf Buckwheat (<i>Eriogonum cinereum</i>) / Annual Herb Association - [32.090.05]***	G3S3	0.04	0.04	0.06	-	-
Coastal Sage Scrub (Disturbed)	NR	0.81	0.57	0.79	0.05	-
Mixed Native and Non-native Riparian	NR	0.19	0.20	0.04	-	-
Bigpod Ceanothus (<i>Ceanothus megacarpus</i>) chaparral [37.201.01]	G4S4	-	-	-	-	-

Vegetation Community or Land Cover Type	CDFW Conservation Status Rank ¹	Alternative 2 Impact Acreage ³	Alternative 3 Impact Acreage	Alternative 4 Impact Acreage	Wastewater Mgmt Option 2	Wastewater Mgmt Option 3
Herbaceous						
Giant Wildrye (<i>Elymus condensatus</i>) Grassland [41.265.01]**	G3S3	0.16	0.16	0.16	-	-
Salt Grass (<i>Distichlis spicata</i>) Flats [41.200.09]	G5S4	-	-	-	-	-
Arundo Stands (<i>Arundo donax</i>) Association [42.080.01]	NR	0.46	0.44	0.43	-	-
Ruderal Areas and Non-native Annual Grassland	NR	0.89	0.66	0.67	0.21	-
Waterways						
Stream Channel (Topanga Creek)	NR	0.10	0.10	0.10	-	-
Ocean	NR	-	-	-	-	-
Other/Developed						
Developed / Landscaped Areas	NR	5.14	4.98	4.74	-	-
Paved Areas	NR	3.90	3.87	3.73	0.03	2.39
Sand	NR	1.03	0.87	0.72	-	-
Barren / Sparsely Vegetated Areas	NR	1.72	1.28	1.32	0.43	-
Subtotal Sensitive Community Acreage		1.65	1.43	1.38	0.11	-
Total Acreage¹		17.23	15.24	14.71	1.32²	2.39²

NOTES: CDFW = California Department of Fish and Wildlife.

***CDFW sensitive natural community

¹ Acreages may not sum due to rounding.

² Impact acreages may be duplicative based on Alternative chosen.

³ Wastewater Mgmt Option 1 is included in Alternative 2.

SOURCES: Data compiled by State Parks in 2023; ESA 2023b

Operation

Terrestrial areas not associated with potential wastewater development total 45.92 acres. A total of 39.24 acres of this are anticipated to be restored/enhanced under Alternative 2, while Alternative 3 and Alternative 4 would restore/enhance a total of 38.54 and 38.71 acres, respectively (**Table 3.3-9**). Restoration efforts would be focused on areas graded to restore more natural topography and hydrological processes and would require extensive restoration plantings (see Figures 2-5c, 2-6c, and 2-7c). Additional habitat enhancement would occur within terrestrial open space areas not proposed for grading. These areas would be enhanced via weed management and focused plantings for enhancement as funding permits. As discussed in the *Construction* section above, this would result in a significant net benefit to sensitive natural communities through their improved quantity and quality for Alternatives 2–4, which would be most evident upon completion of the construction/restoration phase. Alternative 2 would provide the greatest benefit to sensitive native communities as it would maximize restoration acres, especially for aquatic and riparian habitats, while Alternative 4 would provide the greatest opportunity for creating sensitive dune habitat types.

**TABLE 3.3-9
 ACREAGES OF AREAS RESTORED/ENHANCED**

Area	Alternative 2 Restored Acreage	Alternative 3 Restored Acreage	Alternative 4 Restored Acreage
Terrestrial Area, excluding wastewater option areas	45.92	45.92	45.92
Total Graded/Disturbed Areas	15.89	15.25	14.71
Proposed Development	6.68	7.38	7.21
Proposed for Restoration	9.21	7.87	7.50
No Grading/Ground Disturbance (Enhancement Area)	30.03	30.67	31.21
Total Area Proposed for Restoration/Enhancement	39.24	38.54	38.71

A CHRAMP (ESA 2023b) has been prepared to outline the general approach to restoration planting, maintenance, monitoring, and adaptive management at this conceptual 30 percent level of design and is attached in Appendix L. The CHRAMP incorporates the findings of the *Topanga Lagoon Restoration Alternatives Analysis Report* (Moffatt & Nichol 2022), which includes a summary of potential habitat types that are anticipated to occur in a 42-acre subarea associated with the lagoon and creek and project how those habitats shift over time under the 1.6-foot and 6.9-foot sea level rise scenarios. Alternative 2 tends to increase the extent of seasonal shallow open water, seasonal unvegetated flat, emergent marsh and decreased developed areas. Alternatives 3 and 4 are anticipated to result in somewhat more uplands habitats and Alternative 4 maximizes beach habitat gains. Alternatives 2–4 are projected under sea level rise to shift toward more open water and seasonally unvegetated flat habitats at the expense of decreased riparian presence.

An HRAMP would be prepared for agency approval at the 60–90 percent design phase (**Mitigation Measures BIO-1 and BIO-12**) and provides detailed planting plans with plant palettes and layout information, in addition to a refined installation, maintenance, monitoring and adaptive management approach.

Operations of the Project post-construction are not expected to adversely affect sensitive natural communities. The bridge and Topanga Beach area improvements are not expected to generate additional pressures on adjacent sensitive habitats under any of the Build Alternatives. Development is generally reduced under Alternative 2 as the Topanga Ranch Motel is restored and most on-site leasees are removed. Development of the interpretive pavilion, limited park facilities, and parking lot improvements at the Gateway Corner and along TCB are not anticipated to significantly increase human activity and encroachment/environmental damage due to volunteer trails, and unmanaged use is anticipated to decrease. Although Alternatives 3 and 4 provide for the option for potential overnight accommodations, operational impacts on adjacent habitat areas are generally anticipated to be similar to existing conditions as leasee use decreases.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an AOWTS via either Option 2 or Option 3. Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Because Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2 impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above under *Construction*.

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Up to 0.11 acre of sensitive natural communities could be affected by Option 2. However, with the implementation of **Mitigation Measure BIO-12**, impacts would be reduced to less than significant.

Wastewater management Option 3 is anticipated to be limited to paved or disturbed areas within the Caltrans ROW along PCH and is not expected to impact sensitive natural communities. In the event the sewer alignment requires movement onto the roadway shoulder or adjacent vegetation, impacts would be less than significant with avoidance implementation of **Mitigation Measure BIO-12**.

Impacts on sensitive natural communities from all Build Alternatives and wastewater management options would be significant, but impacts would be reduced to less than significant with **Mitigation Measure BIO-12**.

Mitigation Measures

BIO-12: Habitat Restoration and Adaptive Management Plan: Impacts on sensitive plant communities shall be mitigated with implementation of the following measures:

1. The Project shall complete on-site restoration and enhancement of sensitive plant communities (e.g., removal of invasive species; transplantation, seeding, or planting of representative plant community species; salvage/dispersal of duff and seed bank) at a ratio of no less than 1:1 for temporary impacts and not less than 2:1 for permanent impacts.
2. A HRAMP shall be prepared and reviewed by CCC and CDFW for compliance prior to ground disturbance. The HRAMP shall be consistent with and include the monitoring and adaptive management provisions detailed in the Topanga Lagoon CHRAMP. The plan shall focus on the creation of equivalent sensitive plant habitats within disturbed habitat areas within the Proposed Project or directly off-site within Topanga State Park and Topanga Beach. In addition, the plan shall provide details as to the implementation of the plan, maintenance, and future monitoring including the following components:
 - Description of existing sensitive habitats on the Proposed Project.
 - Summary of permanent impacts on sensitive communities based on approved Project design.
 - Proposed location for mitigation areas, either on-site or off-site, with description of existing conditions prior to mitigation implementation.
 - Detailed description of restoration or enhancement goals.
 - Inclusion of sensitive communities and plant species with the goal to provide a net increase in the quantity and quality of them on-site.
 - Description of implementation schedule, site preparation, erosion control measures, planting plans, and seed collection or plant propagation of genetically appropriate plant materials.
 - Provisions for mitigation site maintenance and control on non-native invasive plants.
 - Monitoring plan, including performance standards, adaptive management measures, and monitoring reporting to CDFW.
3. The HRAMP shall include the following measures to minimize the spread of invasive species:
 - Stockpiled soil, and grubbed vegetation when blooms or seeds are present, shall be covered to avoid spread of weed seed.
 - If any soil is slated to be used off-site outside of being disposed in a landfill, it shall be inspected by a qualified biological monitor prior to removal to avoid inclusion of invasive propagules (e.g., sections of *Arundo*, ivy) that reproduce vegetatively and could spread from the receiver site.
 - Haul trucks shall be covered to avoid seed dissemination during soil and vegetation treatment.

- Areas slated for planting shall be pretreated for emergent weeds prior to planting. Typical measures include irrigating and then spot treating germinating weeds three times prior to planting to reduce the invasive seed base. This is usually initiated three to four months prior to planting. Any herbicide use shall be approved by State Parks and a Pest Control Advisor and shall be conducted by trained staff overseen by a supervisor with a Qualified Applicator License or Certification from the Department of Pesticide Regulation. All herbicide application shall be in accordance with state and federal requirements.
- Any weed removal work shall take an Integrated Pest Management approach where manual, mechanized, cultural and chemical methods are all considered to determine the most environmentally friendly and functional methods. State Parks policies and Department of Pesticide Regulation guidelines shall be followed when limited pesticide use is determined to be needed.
- Use of jute netting, landscape cloth, or mulch, as appropriate, shall be used to cover bare soil reduce the area available for weed intrusion.
- Irrigation design shall consider weed control. Drip systems are preferred if feasible, as water is directed solely at the target plant species.
- Biodegradable materials shall be used when available for erosion control and soil management. All plant-derived materials (mulch, straw) shall be certified weed free.
- Monthly weeding shall be required for the first-year post planting, Quarterly weeding will be required thereafter for the five-year mitigation and monitoring period.
- Success criteria shall include the following for five-years post restoration:
 - i. Native vegetation shall reach 85 percent cover except for areas such as mudflats, rocky slopes, beach areas and other habitats that are not naturally or highly vegetated.
 - ii. No highly invasive plants shall be present on-site.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

This Project component under Alternatives 2, 3, and 4 would remain within developed or landscaped areas and would not affect any sensitive natural communities. Operational impacts are generally anticipated to be similar to existing conditions. No impacts would occur and no mitigation would be required.

Mitigation Measures

None Required

Significance Determination

No Impact

Jurisdictional Waters and Wetlands

BIO 3.3-3: The Project could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions would remain unchanged and would slowly decline with anticipated degradation to aquatic resources. Operational activities would continue in the BSA, including lagoon mouth impacts during emergency response. The Topanga Ranch Motel would continue to deteriorate without restoration, the lifeguard and public restroom building would continue to deteriorate due to coastal erosion, and existing local businesses would remain in current operations but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. All degrading structures are anticipated to increase pollutant movements into adjacent wetland areas unless proactively managed.

Unmanaged human incursion is expected to increase into wetland areas over time and would continue to deteriorate wetland values on-site. Over the past few decades, State Parks and RCDSMM have observed an increase in human waste, creek modification, fires, encampments, and the associated trash and vegetation removal within and directly adjacent to wetland areas. This trend is expected to increase with the apparent rise in the unhoused and increasing pressures to access open space areas due to population growth trends.

Alternative 1 would not increase the state or federally protected wetlands. Protected wetlands would continue to decrease without intervention due to hydrologic changes from climate change, reduction in freshwater flow, build-up of sediment, and the rise of the sea level. Therefore, although no direct physical changes to wetlands would occur under this alternative, the existing ecological conditions would continue to gradually decline reducing the quantity and quality of the protected wetlands.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts on state or federally protected wetlands would be similar under Alternatives 2, 3, and 4.

Construction

Jurisdictional waters and wetlands would be potentially affected by construction during the following activities: removal of the footings and pier walls associated with the existing bridge, construction of the temporary and final bridges, grading activities directly adjacent to wetted and riparian cover areas, installation of the trail alignment that crosses through these areas, and installation of the nearshore nourishment pipeline.

A temporary access road for trucks would be constructed to transport fill material from the west side along the beach in front of the lagoon, up to the paved area east of the lagoon, to transfer fill to the nearshore placement zone at the east end of the cove beach. Placing the material in the nearshore is environmentally beneficial because it allows naturally-driven processes (waves,

longshore drift, and tidal currents) to disperse it to the surrounding littoral zone and beaches, nourishing them with additional sand and pebbles/cobbles, while silts and clays move farther offshore.

All Build Alternatives would result in temporary impacts on jurisdictional areas during construction. The Proposed Project has been designed to avoid or minimize impacts on existing potentially jurisdictional features, and to concentrate Project impacts within areas outside the jurisdictional wetlands and waters. Complete avoidance or minimization is not feasible during construction, and it is determined that impacts on jurisdictional features, for example, up to 0.33 acre of permanent impacts associated with bridge pilings, would occur as a result of Proposed Project implementation.

A summary of potential impacts on wetlands and waters are provided in **Table 3.3-10** through **Table 3.3-13**.

**TABLE 3.3-10
POTENTIAL WATERS OF THE UNITED STATES IMPACTS FOR ALTERNATIVES 2 AND 3**

Aquatic Feature	Wetland Impacts (acres)	Other Non-Wetland Impacts (acres)
Non-Wetland Waters		
Topanga Creek (Drainage 1)	--	0.021
Topanga Lagoon	--	0.142
Drainage 2	--	--
Non-Wetland Waters Total:	--	0.163
Wetland Waters		
Wetland 1	--	--
Wetland 2	--	--
Wetland Waters Total:	--	--
Tidal Waters – CWA		
Tidal Waters – CWA Total:	--	0.004
Tidal Waters – RHA		
Tidal Waters – RHA Total:	--	34.83
TOTAL WOTUS Impacts	--	35.00
NOTES: CWA = Clean Water Act; RHA = Rivers and Harbors Act; WOTUS = waters of the United States		
SOURCE: ESA 2023a		

**TABLE 3.3-11
 POTENTIAL WATERS OF THE UNITED STATES IMPACTS FOR ALTERNATIVE 4**

Aquatic Feature	Wetland Impacts (acres)	Other Non-Wetland Impacts (acres)
Non-Wetland Waters		
Topanga Creek (Drainage 1)	--	0.021
Topanga Lagoon	--	0.142
Drainage 2	--	--
Non-Wetland Waters Total:	--	0.163
Wetland Waters		
Wetland 1	--	--
Wetland 2	--	--
Wetland Waters Total:	--	--
Tidal Waters – CWA		
Tidal Waters – CWA Total:	--	--
Tidal Waters – RHA		
Tidal Waters – RHA Total:	--	34.83
TOTAL WOTUS Impacts	--	34.99

NOTES: CWA = Clean Water Act; RHA = Rivers and Harbors Act; WOTUS = waters of the United States
 SOURCE: ESA 2023a

**TABLE 3.3-12
 POTENTIAL WATERS OF THE STATE IMPACTS FOR ALTERNATIVES 2, 3, AND 4**

Aquatic Feature	Wetland Impacts (acres)	Other Non-Wetland Impacts (acres)
Non-wetland Waters		
Topanga Creek (Drainage1)	--	0.021
Topanga Lagoon	--	0.142
Drainage 2	--	--
Drainage 3	--	--
Drainage 4	--	--
Drainage 5	--	--
Drainage 6	--	--
Drainage 7	--	--
Drainage 8	--	--
Other Waters Total:	--	0.164
Wetland Waters		
Wetland 1	--	--
Wetland 2	--	--
Wetland Waters Total:	--	--
Tidal Waters		
Tidal Waters Total	--	--
Total Potential Waters of the State		0.164

SOURCE: ESA 2023a

**TABLE 3.3-13
CALIFORNIA FISH AND GAME CODE SECTION 1600 RESOURCES/
COASTAL WETLANDS AND WATERS IMPACTS**

Aquatic Features	Alternative 2 Impact (acre)	Alternative 3 Impact (acre)	Alternative 4 Impact (acre)
Drainages 1–5, Topanga Lagoon and Wetland 1 and 2	2.130	1.986	1.904
Drainage 6	--	--	--
Drainage 7	--	--	--
Drainage 8	--	--	--
Tidal Waters – CWA	--	--	--
Tidal Waters – RHA	--	--	--
Total Impacts	2.130	1.986	1.904

NOTES: CWA = Clean Water Act; RHA = Rivers and Harbors Act
SOURCE: ESA 2023a

Alternative 2 would result in greater impacts on jurisdictional areas (ranging from 0.164 acre to 35.00 acres depending on the regulatory agency) compared to other alternatives. All Build Alternatives would remove over 166,000 cubic yards of fill surrounding the lagoon in order to re-contour the new restored lagoon. All or a substantial part of the excavated soil is proposed for beneficial reuse by deposition in nearshore areas once confirmed that the soil is clean and not contaminated.

Short-term construction impacts are required to create long term benefits to jurisdictional waters and wetlands. All Build Alternatives would expand jurisdictional wetlands by creating a more natural topography that can accommodate sea level rise, and by expanding and enhancing the wetland/riparian vegetation along Topanga Lagoon and Creek as part of Project restoration efforts. Alternative 2 would maximize wetted areas by creating an additional channel to the west of the lagoon that would become inundated during higher water levels.

For work within or near Topanga Creek, work would only be permitted to occur in the dry season after special-status species had been excluded at a safe distance from the work area. Impacts could occur due to inadvertent movement of soil, contaminants, construction debris, and materials into jurisdictional areas by way of water, wind, or gradient. However, **Mitigation Measure BIO-7** would require implementation of BMPs such as stockpile management, dust and tracking control measures, and soil stabilization during rain events and periods of inactivity, which would minimize effects of soil erosion and turbidity. In addition, **Mitigation Measure BIO-13** would require obtaining permits from regulatory agencies prior to impacts on wetlands or waters, and restoring or enhancing aquatic habitats within the Project area to pre-Project conditions or better.

Over the long-term, all Build Alternatives would result in a net increase and benefit to jurisdictional waters and wetlands by increasing the acreage and quality of these areas on-site. Alternative 2 would have the greatest net benefit as it maximizes restoration of these areas, followed by Alternative 4, and then Alternative 3. Impacts on wetlands and other aquatic

resources from all Build Alternatives would be significant, but impacts would be reduced to less than significant with **Mitigation Measures BIO-7** and **BIO-13**.

Operation

As discussed in the *Construction* section above, there would be a substantial net benefit to jurisdictional waters and wetlands through their improved quantity and quality for all Build Alternatives that would be most evident upon completion of the construction/restoration phase. As shown in Table 3.3-9, approximately 39 acres of habitat would be restored/enhanced, the majority of which would be jurisdictional waters and wetlands. Alternative 2 would provide the greatest benefit to jurisdictional waters and wetlands as it would maximize restoration acres, especially for aquatic and riparian habitats, followed by Alternative 4 and then Alternative 3.

Operations of the Proposed Project post-construction are not expected to adversely affect waters and wetlands. The bridge and Topanga Beach area improvements are not expected to generate additional pressures on adjacent waters and wetlands under any of the Build Alternatives. Development is generally reduced under Alternative 2 as the Topanga Ranch Motel is restored and most on-site leasee buildings are removed. Development of the interpretive pavilion, limited park facilities, and parking lot improvements are not anticipated to significantly increase human activity and encroachment/environmental damage due to volunteer trails, and unmanaged use is anticipated to decrease. Although Alternatives 3 and 4 provide for the option of overnight accommodations, operational impacts on adjacent waters and wetlands are generally anticipated to be similar to existing conditions as leasee use decreases.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an AOWTS via either Option 2 or Option 3. Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Since Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2 impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above in “Construction.”

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW and would avoid jurisdictional water and wetland areas by being located in upland areas or being elevated along TCB. However, to reduce potentially significant indirect impacts associated with potential Project activities, implementation of **Mitigation Measures BIO-1** through **BIO-11** would be applied and would reduce impacts to less than significant.

Wastewater management Option 3 is anticipated to be limited to paved and disturbed areas within the Caltrans ROW along PCH and is not expected to impact jurisdictional waters and wetlands. In the event the sewer alignment requires movement onto the roadway shoulder or adjacent vegetation, impacts would be less than significant with avoidance of known seep areas and jurisdictional waters and wetlands assessed during preconstruction surveys.

Impacts on wetlands and other aquatic resources from all Build Alternatives and wastewater management options would be significant, but impacts would be reduced to less than significant with **Mitigation Measures BIO-7** and **BIO-13**.

Mitigation Measures

BIO-7: General BMPs for Biological Resources. (See Impact BIO 3.3-1, above.)

BIO-13: Jurisdictional Waters/Wetlands Habitat Restoration and Adaptive Management Plan. Prior to any permanent or temporary impacts on wetlands or waters, State Parks shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, Streambed Alteration Agreement pursuant to under Section 1602 of the CFGC from CDFW, and a CDP from the CCC.

In addition, prior to impacts on wetlands or waters, a Habitat Restoration and Adaptive Management Plan (HRAMP) shall be prepared by State Parks and submitted to the USACE, RWQCB, CDFW, and CCC in support of wetland/waters permit applications. The Jurisdictional Waters/Wetlands HRAMP shall be consistent with and include the monitoring and adaptive management provisions detailed in the Topanga Lagoon CHRAMP. Impacts on wetlands and other waters will be restored/enhanced on-site or within adjacent and equivalent habitat areas within Topanga State Park and Beach at no less than a 2:1 ratio for permanent impacts, with no net loss of wetlands. Areas affected temporarily will be restored to a pre-Project condition or better via removal of invasive species, revegetation with native species, or other appropriate measures. The HRAMP required in **Mitigation Measure BIO-3.3-12** may also satisfy this mitigation measure if wetlands and waters impacts and restored wetlands/waters are incorporated into that plan.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

This Project component under Alternatives 2, 3, and 4 would remain within developed or landscaped areas and would not affect any waters or wetlands. Therefore, no impacts on wetlands or waters would occur, and no mitigation measures required.

Mitigation Measures

None Required

Significance Determination

No Impact

Migratory Wildlife Corridors

BIO 3.3-4: The Project could 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. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

On-site migration and animal movement corridors are primarily associated with the Topanga Creek corridor which connects the BSA to the Pacific Ocean to the south and expansive open space areas to the north associated with Topanga State Park and the SMMNRA. Aquatic species such as steelhead trout, tidewater goby, and arroyo chub are especially dependent upon this narrow, limited corridor. More mobile species utilize the BSA to move between resource patches or travel further distances to reach needed food, shelter and reproductive resources.

Under Alternative 1, existing conditions would remain unchanged and would continue to slowly decline with anticipated degradation to the migration and movement corridors. Operational activities would continue in the BSA including lagoon mouth impacts during emergency response. The Topanga Ranch Motel would continue to deteriorate without restoration, the lifeguard and public restroom building would continue to deteriorate due to coastal erosion, and existing local businesses would remain in current operations but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. All degrading structures are anticipated to increase pollutant movements into adjacent wetland areas unless proactively managed.

Unmanaged human incursion is expected to increase into the wildlife corridor over time and would continue to deteriorate resources values present on-site. Over the past few decades, State Parks and RCDSMM have observed an increase in human waste, creek modification, fires, encampments, and the associated trash and vegetation removal within and directly adjacent to the creek corridor. This trend is expected to increase with the apparent rise in the unhoused and increasing pressures to access open space areas due to population growth trends.

Alternative 1 would not protect or enhance wildlife corridors on-site. The ability of fish and wildlife to use the BSA would decrease without intervention due to hydrologic changes from climate change, reduction in freshwater flow, build-up of sediment, and the sea level rise. Therefore, although no direct physical changes to wildlife corridors would occur under this alternative from Project construction, the existing ecological conditions would continue to gradually decline reducing the quality and refugia provided in movement corridors on-site with significant effects on aquatic species.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts on the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors would be similar under Alternatives 2, 3, and 4. Each Build Alternative features a slightly different hydrologic design, with the goal being to avoid direct impacts on existing wetted areas while providing opportunity for the creek to adjust over time. Natural breach patterns would remain rain driven, but due to the

larger lagoon volume of Alternative 2, it is anticipated that it may take longer for the lagoon to fill and breach than under Alternatives 3 and 4 (ESA 2023c; Appendix M). All Build Alternatives are expected to breach at least as much as Alternative 1, the existing condition.

Construction

The BSA, specifically the lagoon and creek, is known to provide fish passage opportunities for the federally listed endangered steelhead trout. For all Build Alternatives, existing wetted habitat would be protected during bridge removal, construction, and grading by placing coffer dams or other appropriate tools to minimize any disturbance to water level or quality. These activities would occur outside the potential migration window of December through March or as otherwise approved by the regulatory agencies. The goal is for construction activities to improve fish migration through the BSA by reducing high velocity peak flows during storm events, provide flow refugia areas, and afford more time for adult steelhead to migrate into the creek to spawn. Alternative 2 Maximum Lagoon Habitat would provide the largest lagoon footprint, therefore, providing less breach frequency but a greater refugia habitat for steelhead and the tidewater goby. Migratory or resident avian species could be inadvertently affected from construction activities, causing abandonment or destruction of eggs or mortality of chicks.

Operation

As discussed in the *Construction* section above, there would be significant net benefit to fish movement and refugia through the BSA under all Build Alternatives. Alternative 2 would provide the greatest benefit to movement corridors as it would maximize restoration acres within aquatic and riparian habitats and would improve the quality of available resources there. The lagoon may take longer to breach under Alternative 2 but is anticipated to remain connected longer with suitable migration flows.

Operations of the Project post-construction are not expected to adversely affect fish passage (as each alternative provides for at least the same amount of breach potential), wildlife movement, or wildlife corridors. The bridge and Topanga Beach area improvements are not expected to generate additional pressures on movement corridors under any of the Build Alternatives. Development is generally reduced under Alternative 2 as the Topanga Ranch Motel is restored and most on-site leasees are removed. Development of the interpretive pavilion, limited park facilities, and parking lot improvements are not anticipated to significantly increase human activity and encroachment/environmental damage due to volunteer trails, and unmanaged use is anticipated to decrease. Although Alternatives 3 and 4 provide for the option of overnight accommodations, operational impacts on the general creek corridor are generally anticipated to be similar to existing conditions as leasee use decreases.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an AOWTS via either Option 2 or Option 3. Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Since Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2

impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above in “Construction.”

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction activities are not anticipated to significantly impede animal movement, and impacts would be less than significant.

Wastewater management Option 3 is anticipated to be limited to paved and disturbed areas within the Caltrans ROW along PCH and is not expected to impede wildlife movement. The impact area is directly adjacent to a busy highway and the temporary construction of wastewater management Option 3 would not further impede wildlife movement in the area. The existing conditions would remain the same even if the sewer alignment requires movement onto the roadway shoulder or adjacent vegetation. Due to the current highway conditions, impacts would be less than significant without mitigation for migratory wildlife corridors.

Impacts on migratory wildlife corridors from all Build Alternatives and wastewater management options would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

This Project component under Alternatives 2, 3, and 4 would remain within developed or landscaped areas and would not affect fish passage, wildlife movement, or wildlife corridors. Operational impacts are generally anticipated to be similar to existing conditions. Potential impacts on wildlife movement are anticipated to be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Local Policies and Ordinances

BIO 3.3-5: The Project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *Impacts would be less than significant with mitigation incorporated.*

Pursuant to Section 22.44.1870 of the LIP, all new development shall be sited and designed to preserve oak, walnut, sycamore, bay or other individual native trees to the maximum extent

feasible. Native trees include those that have at least one trunk measuring a total of 6 inches or more in diameter, or a combination of any two trunks measuring a total of 8 inches or more in diameter at breast height (i.e., at 4.5 feet above natural grade). Per the LIP, removal of native trees shall be prohibited except where no other feasible alternative exists. Development shall be sited to prevent any encroachment into the protected zone of individual native trees to the maximum extent feasible. The protected zone of a tree is defined as the area within the dripline of the tree and extending at least 5 feet beyond the dripline, or 15 feet from the trunk of the tree, whichever is greater. Removal of native trees, or encroachment in the protected zone, is prohibited for accessory uses or structures. If there is no feasible alternative that can prevent tree removal or encroachment, then the alternative that would result in the fewest or least-significant impacts on native trees shall be selected, and adverse impacts on native trees shall be fully mitigated (with priority given to on-site mitigation).

Of the approximately 292 protected native trees of 12 different species that were identified on or directly adjacent to the BSA, the Project design considered native tree avoidance as well as dripline and/or protected zone encroachment avoidance to be a primary consideration in the overall Project development footprint. However, complete avoidance of all protected native trees of 6 inches or greater in diameter at breast height was not feasible (**Table 3.3-14**).

As described in Section 22.44.1800 et seq. of the LIP, various habitat categories are described as sensitive and require protection in the face of new development within the Coastal Zone. Certain habitats are designated as SERAs, described as H1, H2 and H2 HS habitat types; these take priority during the Project design process under the guidelines of the LCP. Habitats that would otherwise fall into the aforementioned designations if they had not been altered through approved developments or modifications (e.g., grading, fuel modification) are categorized as H3 habitat (non-SERA). Based on the results of the biological surveys, the SERA mapping modify the habitat variations adopted by the County for areas within the BSA (Figure 3.3-6).

Alternative 1 (No Build)

Under Alternative 1, existing conditions would continue to slowly decline with anticipated degradation to biological resources. Operational activities would continue in the BSA including beach grooming and lagoon mouth impacts during emergency response. The Topanga Ranch Motel would continue to deteriorate without restoration, the lifeguard and public restroom building would continue to deteriorate due to coastal erosion, and existing local leasees would remain in current operations but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. All degrading structures are anticipated to increase pollutant movements into adjacent wetland areas unless proactively managed. Unmanaged human incursion is expected to increase into habitats, including SERA habitats, over time and would continue to deteriorate resources values present on-site.

With no Proposed Project implemented, invasive plant species would remain present and would continue to outcompete native plant species and reduce native habitat quality within the BSA, including protected trees and LCP-designated SERA habitats.

**TABLE 3.3-14
SUMMARY OF PROPOSED NATIVE TREE REMOVAL & ENCROACHMENT MITIGATION**

Scientific Name	Common Name	Alternative 1 # of Trees			Alternative 2 # of Trees			Alternative 3 & 4 # of Trees		
		Removed	Encroached	Remain	Removed	Encroached	Remain	Removed	Encroached	Remain
<i>Alnus rhombifolia</i>	White Alder	-	-	4	-	-	4	-	-	4
<i>Cercocarpus betuloides</i>	Mountain Mahogany	-	-	1	1	-	0	-	-	1
<i>Heteromeles arbutifolia</i>	Toyon	-	-	2	-	-	2	-	-	2
<i>Juglans nigra</i>	Black Walnut	-	-	5	-	-	-	-	-	-
<i>Juniperus californicus</i>	Juniper ¹	-	-	4	2	-	2	2	-	2
<i>Malosma laurina</i>	Laurel Sumac	-	-	13	6	1	6	6	1	6
<i>Platanus racemosa</i>	California Sycamore	-	-	46	1	-	45	1	-	45
<i>Populus fremontii</i>	Cottonwood	-	-	2	-	-	2	-	-	2
<i>Quercus agrifolia</i>	Coast Live Oak	-	-	3	-	1	2	-	1	2
<i>Rhus integrifolia</i>	Lemonade Berry	-	-	3	3	-	0	3	-	0
<i>Salix lasiolepis</i>	Arroyo Willow	-	-	142	12	6	124	9	7	126
<i>Salix laevigata</i>	Red Willow	-	-	50	6	5	39	4	5	41
<i>Sambucus nigra</i>	Elderberry	-	-	22	1	1	20	1	1	20
Totals		0	0	297	32	14	246	26	15	251

SOURCE: State Parks 2023; Demirici and Dagit 222

¹ Cultivated landscaping

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts on local policies or ordinances protecting biological resources would be similar under Alternatives 2, 3, and 4.

Construction and Operation

Impacts on protected trees include direct mortality through tree removal or indirect mortality by large machinery or equipment driving over tree roots. To avoid potential significant impacts during construction activities to protected trees as outlined in Table 3.3-14, implementation of **Mitigation Measure BIO-14**, would be required. This measure includes mitigation for protected native tree removal and encroachment from construction activities, protective fence to protect tree roots, detection of invasive beetles within woodlands, and annual monitoring for up to ten years to ensure mitigation occurs if native tree death occurs after construction activities are completed. **Mitigation Measure BIO-15** requires the preparation of a tree management and preservation program, consistent with the County's LCP. With implementation of these mitigation measures, Project construction impacts on protected native trees would be less than significant. Based on the current 30 percent level design, a total of 32 native trees of eight different species would be removed and 14 native trees of five different species would be encroached with the Alternative 2. For both Alternatives 3 and 4, 26 native trees of seven different species would be removed and 15 native trees of five different species would be encroached upon.

Impacts on SERA habitat include vegetation removal during construction activities. Potential indirect impacts would include introduction of non-native plants from construction or personnel equipment onto the BSA and adjacent to SERA habitat. To avoid potential significant impacts during construction activities to SERA habitat, implementation of **Mitigation Measures BIO-12** and **BIO-13** would be required that includes measures to minimize the potential to degrade the resources within a SERA habitat.

The BSA contains both H1 habitat and H2 habitat resources with the potential for impact from construction activities. **Table 3.3-15** summarizes the impacts on SERA resources for Alternative 2. Of the 11.53 acres of H1 habitat on-site, construction within the construction footprint is expected to remove a maximum of 1.63 acres of H1 habitat. Of the 0.27 acre of H2 habitat on-site, construction within the construction footprint is expected to remove a maximum of 0.16 acre of H2 habitat. Of the 3.96 acres of H2HS habitat on-site, construction activities are not expected to remove any acres of H2HS habitat.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an AOWTS via either Option 2 or Option 3. Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Since Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2 impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above in “Construction.”

**TABLE 3.3-15
IMPACTS ON SIGNIFICANT ENVIRONMENTAL RESOURCE AREAS AND OTHER AREAS**

Habitat Categories	Project Area (acres)	BSA (acres)	Alternative 2 ³ Impacts (acres)	Alternative 3 Impacts (acres)	Alternative 4 Impacts (acres)	Wastewater Mgmt Option 2 (acres)	Wastewater Mgmt Option 3 (acres)
Significant Environmental Resource Areas							
H1 Habitat	11.53	23.01	1.63	1.41	1.33	0.37	-
H2 Habitat	0.27	5.51	0.16	0.16	0.16	0.05	-
H2 HS Habitat	3.96	16.29	-	-	-	0.01	-
Other Areas							
H1 Habitat 100-Foot Buffer	N/A	N/A	6.30	5.42	4.84	1.46	0.39
H3 Habitat	39.40	66.09	15.45	13.67	13.22	1.19	-
Uncategorized	34.80	53.10	-	-	-	-	-
Total Impacts¹	90.94	164.00	17.23	15.25	14.71	1.62	-

SOURCES: Data compiled by State Parks in 2023; ESA 2023b

NOTES:

BSA = biological study area

¹ The Total Impacts is the sum of H1, H2, H2 HS, H3 Habitat, and uncategorized acres. H1 Habitat 100-Foot Buffer overlap with areas mapped as either H2 or H3 Habitat.

² Impact acreages may be duplicative based on alternative chosen.

³ Wastewater management Option 1 is included in Alternative 2.

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction activities could potentially impact additional protected trees and SERAs. However, with the implementation of **Mitigation Measures BIO-12** through **BIO-15**, impacts would be reduced to less than significant.

Wastewater management Option 3 is anticipated to be limited to paved and disturbed areas within the Caltrans ROW along PCH and is not expected to impact additional protected trees and SERAs. In the event the sewer alignment requires movement onto the roadway shoulder or adjacent vegetation, **Mitigation Measures BIO-12** through **BIO-15**, would also apply and reduce impacts to less than significant.

Impacts related to local policies and ordinances from all Build Alternatives and wastewater management options would be significant, but impacts would be reduced to less than significant with **Mitigation Measures BIO-12** through **BIO-15**.

Mitigation Measures

BIO-12: Habitat Restoration and Adaptive Management Plan. (See Impact BIO 3.3-2, above.)

BIO-13: Jurisdictional Waters/Wetlands Habitat Restoration and Adaptive Management Plan. (See Impact BIO 3.3-3, above.)

BIO-14: Protected Native Tree Survey and Mitigation. A preconstruction survey of protected native trees shall be conducted once an alternative and wastewater treatment option has been selected and prior to construction. The Project is an extensive restoration project that not only restores natural topography and hydrology followed by extensive planting in a 7.50- to 9.21-acre area, it also provides additional enhancements via weed management and focused planting in a 30.03- to 31.21-acre enhancement area (Table 3.3-9). Due to the significant net benefits of the Project to native trees and habitats, and State Parks/RCDSMM track record of approximately 75 percent survivorship of native tree plantings, protected native trees being removed or affected during construction shall be planted at 5:1 ratio. 15:1 ratio. Protected trees that are encroached upon within 3 feet of the trunk or more than 30 percent of the tree protected zone (TPZ) shall be replaced at a 3:1 ratio. Protected trees that are encroached into 10–30 percent of the TPZ shall be replaced at a 1:1 ratio. Volunteer native seedlings within the BSA can be mapped and used as mitigation trees. No mitigation shall be required for protected native trees if they are encroached by less than 10 percent of the TPZ, but these trees shall be monitored. Annual monitoring of all encroached protected trees shall occur for 5 years post impact and shall require annual reporting to document any tree death. If any replacement trees die during the annual monitoring period, the tree shall be mitigated at a 2:1 ratio. Watering of replacement trees shall be scheduled to have fully removed additional watering by year 4–5 to promote natural survival. Trees shall be preferentially incorporated into appropriate open space habitat areas, but also incorporated into the plant palettes of the developed and transitional areas.

BIO-15: Tree Management and Preservation Program. Prior to the removal of any protected native tree, a Tree Management and Preservation Program shall be prepared by

a certified arborist or qualified biologist for review by CDFW, CCC, and the County. The plan shall include details for protective fencing to be placed at the limits of the tree protected zone (TPZ) of all oak and native trees within or extending into the Biological Study Area that may be affected by or are in close proximity (50 feet) with construction activities. In addition, the plan shall describe the protection and maintenance provisions for all native trees and the replacement trees for those native trees removed and annual reporting requirements.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

This Project component under Alternatives 2, 3, and 4 would remain within developed or landscaped areas and would not affect any local policies or ordinances protecting biological resources. Operational impacts are generally anticipated to be similar to existing conditions. Therefore, no mitigation measures are required because construction and operational impacts are anticipated to be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Habitat Conservation Plan and Natural Community Conservation Plan

BIO 3.3-6: The Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under the Alternative 1, no impacts would occur on HCP, Natural Community Conservation Plan, or other approved state or regional HCPs because there are none in effect for the BSA. However, the Los Angeles County LCP functions as a local HCP and compliance with this plan would continue as permitted with current operations on the beach by DBH, state park lands by State Parks, along PCH by Caltrans, and existing local businesses on the BSA.

However, invasive plant species would remain present and would continue to out compete native plant species and reduce native habitat quality within the BSA, including protected trees. Special-status species and their habitats would continue to be affected by increasing pressures of expanding invasives and increased visitation and unhoused use associated with population growth. Therefore, no physical impacts associated with Project implementation would occur, but existing ecological conditions would continue to have a gradual decline and negatively affect protected trees and habitats.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts related to a HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCPs would be similar under Alternatives 2, 3, and 4.

Construction and Operation

All Build Alternatives would have no impact on HCP, Natural Community Conservation Plan, or other approved state or regional HCPs because there are none in effect for the BSA. The Los Angeles County LCP functions as a local HCP and compliance with this plan is outlined in *Local Policies and Ordinances* which concluded there is no conflict with the LCP because impacts related to the LCP would be reduced to less-than-significant levels with mitigation. With the implementation of **Mitigation Measures BIO-12** through **BIO-15**, impacts would be reduced to less than significant.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Under Alternatives 2–4, redevelopment of the site would require an AOWTS via either Option 2 or Option 3. Options 2 and 3 could support wastewater generation associated with any of the Build Alternatives. Since Option 1 can only support Alternative 2 and the footprint of Option 1 falls completely within the Alternative 2 impact area, Option 1 impacts are considered to be similar to Alternative 2 impacts discussed above in “Construction.”

For wastewater management Option 2, construction activities would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction activities could potentially impact protected trees and SERAs and thus the LCP. However, with the implementation of **Mitigation Measures BIO-12** through **BIO-15**, impacts would be reduced to less than significant.

Wastewater management Option 3 is anticipated to be limited to paved and disturbed areas within the Caltrans ROW along PCH and is not expected to impact protected trees and SERAs and thus the LCP. In the event the sewer alignment requires movement onto the roadway shoulder or adjacent vegetation, **Mitigation Measures BIO-12** through **BIO-15**, would also apply and reduce impacts related to the LCP to less than significant.

Impacts related to the LCP from all Build Alternatives and wastewater management options would be significant, but impacts would be reduced to less than significant with **Mitigation Measures BIO-12** and **BIO-15**.

Mitigation Measures

Implement **Mitigation Measures BIO-12, BIO-13, BIO-14, and BIO-15** (see Impacts BIO 3.3-2, 3.3-3, and 3.3-5, above).

Significance Determination

Less than Significant with Mitigation

Programmatic Topanga State Park Visitor Services

This Project components under Alternatives 2, 3, and 4 would remain within developed or landscaped areas and would not conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP. Operational impacts are generally anticipated to be similar to existing conditions. No Project impacts would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Cumulative Impacts

BIO 3.3-7: The Project could result in cumulatively considerable impacts on biological resources. *Impacts would be less than significant with mitigation incorporated.*

This section presents an analysis of the cumulative effects of the Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts relative to marine resources. Significant cumulative impacts related to biological resources could occur if the incremental impacts of the Project combined with the incremental impacts of one or more of the cumulative projects would be cumulatively considerable. Restoration and enhancement of wetland and terrestrial communities is expected to result in the temporary loss or reduction of habitat.

Species temporarily disturbed by construction are expected to recover relatively quickly; therefore, the Proposed Project would result in less-than-significant impacts related to loss of a wildlife habitat. Implementation of Project mitigation measures would ensure that biological resources are not cumulatively affected by construction. Therefore, when considering the Proposed Project and other cumulative projects in the area, the incremental effect of construction on cumulative biological resources of the proposed projects would not be cumulatively considerable and would not result in a significant cumulative impact on biological resources. Over the long term, the Proposed Project, when operational, would result in a significant net benefit to the availability and quality of lagoon and sensitive habitats, both locally and regionally.

Mitigation Measures

Implement **Mitigation Measures BIO-1** through **BIO-15** (see Impacts BIO 3.3-1, BIO 3.3-2, BIO 3.3-3, and BIO 3.3-5, above) and MAR-1.

Significance Determination

Less than Significant with Mitigation

3.3.4 Summary of Impacts

Table 3.3-16 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to biological resources. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.3-16
SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO BIOLOGICAL RESOURCES**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
BIO 3.3-1: Special-Status Species	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures BIO-1 through BIO-11, BIO-14, and BIO-15	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measures BIO-9 and BIO-10	LTSM
BIO 3.3-2: Sensitive Natural Communities	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measure BIO-12	LTSM
	Programmatic Topanga State Park Visitor Services	None required	NI
BIO 3.3-3: Jurisdictional Waters and Wetlands	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures BIO-7 and BIO-13	LTSM
	Programmatic Topanga State Park Visitor Services	None required	NI
BIO 3.3-4: Migratory Wildlife Corridors	Alternatives 2, 3, and 4 (Build Alternatives)	None required	LTS
	Programmatic Topanga State Park Visitor Services	None required	LTS
BIO 3.3-5: Local Policies and Ordinances	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures BIO-12 through BIO-15	LTSM
	Programmatic Topanga State Park Visitor Services	None required	LTS
BIO 3.3-6: Habitat Conservation Plan and Natural Community Conservation Plan	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures BIO-12 through BIO-15	LTSM
	Programmatic Topanga State Park Visitor Services	None required	NI
BIO 3.3-7: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Mitigation Measures BIO-1 through BIO-15	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant with Mitigation Incorporated

SU = Significant and Unavoidable

3.3.5 References

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3.4 Cultural Resources

This section of the EIR describes and evaluates potential impacts related to cultural resources that could result from the construction and operation of the Proposed Project. The section summarizes the regulations related to cultural resources; describes the existing environmental setting as it pertains to cultural resources; and evaluates the potential impacts related to cultural resources associated with the implementation of the Proposed Project, including cumulative impacts.

The cultural resources described in this section are based on the findings provided in the *Historical Resources Inventory and Evaluation Report for The Topanga Lagoon Restoration Project, Los Angeles County, California* (Tejada 2023) prepared by the State Parks Cultural Resource Program, Angeles District. *Cultural resources* include prehistoric and historic-period archaeological sites, structures, districts, places, and landscapes, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason. For the purposes of this analysis, cultural resources are categorized into the following groups: archaeological resources, historic period-built resources (including architectural/engineering resources), contemporary Native American resources, and human remains.

The Project area consists of the entire mouth of Topanga Creek, including the historic extent of Topanga Lagoon and Topanga Beach as far east as Topanga Canyon Boulevard (TCB), the topographic boundary of the hillside to the west, and the first major curve of Topanga Creek to the north. Also included in the Project area are sections of the highway to the west and east of the canyon mouth to account for highway grading tie-ins, along the highway to the east for potential sewer connections, and areas along the beach and nearshore for potential beneficial reuse sediment placement. The Project area includes areas of both direct and indirect effects from fill removal and bridge reconstruction, and includes the maximum construction footprint for all alternatives, including proposed construction staging areas and access roads.

3.4.1 Regulatory Setting

The Project area is located largely within state lands administered by State Parks or Caltrans, with the beach areas south of the highway under County of Los Angeles Department of Beaches and Harbors (DBH) jurisdiction. Additionally, the Proposed Project would require permitting by the U.S. Army Corps of Engineers (USACE) and could potentially receive federal funding, such as through the Federal Highway Administration (FHWA). As such, numerous cultural resources–related federal and state regulations apply as described below.

Federal

Archaeological and Historic Preservation Act (AHPA)

AHPA applies to all federal agencies, including loan and grant agencies. It requires them to preserve historic and archeological objects and materials that would otherwise be lost or destroyed as a result of their projects or licensed activities or programs.

AHPA provides the Secretary of the Interior with the authority to:

- Assist federal agencies, private organizations, or individuals with meeting the requirements of AHPA if a project is expected to result in the loss or destruction of significant scientific, historical, or archeological data.
- Undertake studies independent of, and in consultation with, the federal agency responsible for the project.
- Consult about the ownership and appropriate repositories for artifacts and other remains uncovered by investigations conducted under AHPA.
- Compile a report to Congress on archeological survey and recovery activities.

Significantly, AHPA authorizes federal agencies to transfer up to 1% of the total amount authorized for the project to the Secretary of the Interior for archeological salvage. In 1980, Section 208 of Public Law 96-515 provided a means by which agencies could obtain a waiver of the 1% limit with the concurrence of the Secretary of the Interior and the notification of Congress. The Departmental Consulting Archeologist is delegated the review and concurrence of any 1% waiver requests for the Secretary (National Park Service 2023).

The NEPA Review Process

As the National Environmental Policy (not Protection) Act, NEPA is not designed to protect all aspects of the environment, but to make sure that the decisions made by Federal agencies are environmentally sound. It is not supposed simply to generate environmental documents.

Contrary to what some historic preservation and cultural resource management specialists tend to think, NEPA does not apply only to a narrow range of Federal projects; its scope is really quite broad.

NEPA encourages early consideration of environmental impacts, in an open manner, with meaningful public participation. Of course, what one group thinks is meaningful may not seem so to another group.

NEPA requires review of the effects of all Federal, federally assisted, and federally licensed actions, not just of those defined as "major" or as having "significant" impacts. The level of review given different kinds of projects varies with the likelihood of serious impact.

The courts have consistently found that while NEPA does not elevate environmental protection over all other aspects of public policy, it does require a "hard look" at environmental impacts and at alternatives. NEPA does not require a particular result; it does not require that the best alternative from an environmental perspective be selected. It does mandate a process for taking that "hard look" at what an action may do to the environment, and what can be done about it.

In general, and as expressed in different ways for different kinds of actions, the NEPA process entails:

- Determining what need must be addressed,
- Identifying alternative ways of meeting the need,
- Analyzing the environmental impacts of each alternative, and
- Armed with the results of this analysis, deciding which alternative to pursue and how to pursue it.

The NEPA regulations, at 40 CFR 1500-1508, are issued by the Council on Environmental Quality (CEQ), in the Executive Office of the President. They are binding on all Executive Branch and independent Federal agencies. They outline the NEPA review process.

The statutory basis for the process is in Section 102 of the Act:

(A) All agencies of the Federal Government shall . . .

(C) include in (all) proposals for . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement . . . NEPA Sec. 102

Under the regulations, the "detailed statement" called for by NEPA is called an Environmental Impact Statement (EIS). It must be prepared on all "major Federal actions significantly affecting the quality of the human environment."

Under the NEPA regulations, agencies may "exclude" certain classes of action from detailed review. These are referred to as "Categorical Exclusions" (CX, CE, CatEx). Even categorically excluded projects should receive some review; however, the regulations require finding out whether or not "extraordinary circumstances" require such a project to be analyzed in more detail.

If a project is not categorically excluded, but also is not obviously a major Federal action significantly affecting the quality of the human environment, it must be subjected to an "Environmental Assessment" (EA). This assessment leads either to the decision to prepare an EIS, or to issuance of a "Finding of No Significant Impact" (FONSI, FoNSI, or FNSI).

The MFASAQHE Myth

A common belief among historic preservationists is that "NEPA applies just to major actions, while Section 106 applies to everything." Based on this perception, preservationists often do not bother to consider NEPA as a tool to use in examining impacts on historic properties.

This perception arises from the following language in NEPA:

(A) All agencies of the Federal Government shall . . .

(C) include in (all) proposals for . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement . . . NEPA Sec. 102 [emphasis added]

But this language doesn't say that NEPA applies only to MFASAQHEs (major federal actions significantly affecting the quality of the human environment). It says that a "detailed statement" of environmental impacts will be prepared for each MFASAQHE. This "detailed statement" is what the NEPA regulations call an Environmental Impact Statement (EIS). In other words, deciding that something is a MFASAQHE is the threshold for preparing an EIS, not for the application of NEPA.

In fact, NEPA applies to all actions carried out, assisted, or licensed by the Federal government. There are levels of NEPA analysis below the level of an EIS, that provide opportunities for – and indeed require – consideration not only of historic properties but of all kinds of cultural resources. These levels are represented by the Environmental Assessment (EA) and the Categorical Exclusion (National Preservation Institute 2023).

National Historic Preservation Act

The principal federal law addressing historic properties is the National Historic Preservation Act (NHPA), as amended (United States Code Title 54, Section 300101 et seq. [54 USC 300101 et seq.]), and its implementing regulations (Code of Federal Regulations Title 36, Part 800 [36 CFR Part 800]). Section 106 of the NHPA requires a federal agency with jurisdiction over a proposed federal action (referred to as an *undertaking* under the NHPA) to take into account the effects of the undertaking on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking.

The term *historic properties* refers to “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register [of Historic Places]” (36 CFR Part 800.16[l][1]). The implementing regulations (36 CFR Part 800) describe the process for identifying and evaluating historic properties; for assessing the potential adverse effects of federal undertakings on historic properties; and for seeking to develop measures to avoid, minimize, or mitigate adverse effects. The Section 106 process does not require the preservation of historic properties; instead, it is a procedural requirement mandating that, prior to project approval, federal agencies must take into account potential effects on historic properties.

The steps of the Section 106 process are accomplished through consultation with the State Historic Preservation Officer (SHPO), federally recognized Native American Tribes, local governments, and other interested parties. The goal of consultation is to identify potentially affected historic properties, assess potential effects on such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement (36 CFR 800.1[a]). Consultation with Native American Tribes regarding issues related to Section 106 and other authorities (such as the National Environmental Policy Act and Executive Order 13007) must recognize the government-to-government relationship between the federal government and Native American Tribes, as set forth in Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000; *Federal Register* Title 65, Pages 67249–67252, November 9, 2000), and the Presidential Memorandum of November 5, 2009.

National Register of Historic Places

The National Register of Historic Places (National Register) was established by the NHPA of 1966 as “an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation’s historic resources and to indicate what properties should be considered for protection from destruction or impairment” (U.S. Department of the Interior 2023). The National Register recognizes a broad range of cultural resources that are significant at the national, state, and local levels and can include districts, buildings, structures, objects, prehistoric archaeological sites, historic-period archaeological sites, traditional cultural properties, and cultural landscapes. As noted above, a resource that is listed in or eligible for listing in the National Register is considered a *historic property* under Section 106 of the NHPA.

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Properties of potential significance must meet one or more of the following four established significance criteria:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history;
- B. Are associated with the lives of persons significant in our past;
- C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Districts, sites, buildings, structures, and objects that are 50 years in age or older must meet one or more of the above criteria and retain integrity of location, design, setting, materials, workmanship, feeling, and association to be eligible for listing.

Within the concept of integrity, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity: Location, Design, Setting, Materials, Workmanship, Feeling, and Association:

To retain historic integrity, a property will always possess most of the aspects described above. Depending upon its significance, retention of specific aspects of integrity may be paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where and when a property is significant. For properties that are considered significant under National Register Criteria A and B, National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation explains, “a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).” In assessing the integrity of properties that are considered significant under National Register Criterion C, National Register Bulletin 15 states, “a property important for illustrating a particular architectural style or construction technique

must retain most of the physical features that constitute that style or technique” (U.S. Department of the Interior 1990, rev. 1991, 1995, 1997).

Under the National Register, alterations to a structure do not necessarily disqualify a property from a potential listing. A property can be significant not only for the way it was originally constructed, but also for the way it was adapted at a later period, or for the way it illustrates changing tastes, attitudes, and uses over a period of time.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- a. A religious property deriving primary significance from architectural or artistic distinction or historical importance;
- b. A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event;
- c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life;
- d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;
- e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived
- f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance;
- g. A property achieving significance within the past 50 years if it is of exceptional importance (U.S. Department of the Interior 1990, rev. 1991, 1995, 1997).

Section 4(f) of the Department of Transportation Act

Section 4(f) of the Department of Transportation Act of 1966, along with the Federal-Aid Highway Act of 1968, requires that federal transportation agencies preserve and protect certain types of resources when approving transportation projects. These Section 4(f) resources include publicly owned public parks; recreational areas of national, state, or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state, or local significance. In this definition, *historic sites* are those properties listed or eligible for inclusion in the National Register. Archaeological sites with significance only under Criterion D for information potential are not protected under Section 4(f).

A transportation project includes a “use” of a Section 4(f) resource when land from a resource is permanently incorporated into a transportation facility or project, when there is a temporary occupancy of a Section 4(f) resource that does not meet five criteria of temporary use (the project is of short duration, the scope is minor, there are no permanent impacts, the area is restored, and there is an agreement with officials having jurisdiction), and/or when there is a constructive use of the Section 4(f) resource. A Section 4(f) resource can only be used in a transportation project if there is no feasible and prudent alternative, and all project planning has taken into account ways to avoid or minimize harm to the resource.

As of the publication of this EIR, no federal transportation funds had been identified for the Proposed Project; however, should such funding sources be identified in the future, a Section 4(f) analysis would be required to consider potential impacts on public parkland, recreation areas, and historic sites.

The Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 USC 32) and associated regulations (43 CFR 10) governs the return of Native American remains, funerary objects, sacred objects, and objects of cultural patrimony to lineal descendants, culturally-affiliated Indian Tribes, and Native Hawaiian organizations.

Through the provisions of NAGPRA, the federal government acts to treat the remains of Native ancestors and their belongings with dignity, and to return them to their communities with respect for their customs, religion, and traditions.

NAGPRA requires federal agencies and institutions that receive federal funds (including museums, universities, state agencies, and local governments) to repatriate or transfer Native American human remains and other cultural items to the appropriate parties by:

- Consulting with lineal descendants, Indian Tribes, and Native Hawaiian organizations on Native American human remains and other cultural items;
- Protecting and planning for Native American human remains and other cultural items that may be removed from federal or Tribal lands;
- Identifying and reporting all Native American human remains and other cultural items in inventories and summaries of holdings or collections; and
- Giving notice prior to repatriating or transferring human remains and other cultural items.

State

California Native American Graves Protection and Repatriation Act

In 2001, the State Legislature passed AB-978, the California Native American Graves Protection and Repatriation Act of 2001 (NAHC, 2024), requiring all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes. The bill also created a Repatriation Oversight Commission with oversight

authority. The intent of the legislation was to cover gaps in the federal Native American Graves Protection and Repatriation Act (NAHC, 2024) specific to the State of California.

Pursuant to Section 8013(a) of the Health and Safety Code, the Commission maintains a list of all California Indian tribes and their respective state aboriginal territories for the purpose of the repatriation of Native American human remains and cultural items. Notice that the Commission maintains such a list was sent out to all covered agencies and museums in December 2020.

California Coastal Commission

Below are excerpts from the California Coastal Act as it pertains to Cultural and Historic resources. Chapter 2, Section 301116 defines “sensitive coastal resource areas.” Article 5 Section 30244 provides information about land resources regarding archaeological and paleontological resources. Article 3 contains Powers and Duties with guidance to coastal resources; components; purpose; production and distribution.

Section 30116 – Sensitive coastal resource areas. “Sensitive coastal resource areas” means those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity. “Sensitive coastal resource areas” include the following: (a) Special marine and land habitat areas, wetlands, lagoons, and estuaries as mapped and designated in Part 4 of the coastal plan. (b) Areas possessing significant recreational value. (c) Highly scenic areas. (d) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer. (e) Special communities or neighborhoods which are significant visitor destination areas. (f) Areas that provide existing coastal housing or recreational opportunities for low- and moderate-income persons. (g) Areas where divisions of land could substantially impair or restrict coastal access.

Section 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.

Section 30344 Guide to coastal resources; components; purpose; production; distribution. (b) The commission shall, not later than July 1, 1984, prepare a guide to coastal resources. The guide shall include, but not be limited to, the following components:

(2) An inventory of manmade resources of cultural, historic, economic, and educational importance to the public. The inventory shall focus on those resources which, by virtue of their location in or near the coastal zone, take on a special character or which, because of their nature, require a coastal location. The inventory shall include a description of the resource and any historic, educational, and technical notes of interest (California Coastal Commission 2023).

California Historical Building Code

The California Historical Building Code is defined in Sections 18950–18961 of Division 13, Part 2.7 of the Health and Safety Code. The California Historical Building Code is intended to save California’s architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing historic buildings. The California Historical Building Code provides alternative building regulations for permitting repairs, alterations, and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use, or

continued use of a “qualified historical building or structure.” Used in conjunction with the Secretary of the Interior Standards, The California Historical Building Code ensures the appropriate rehabilitation and restoration of California’s valuable historical resources such as the Topanga Ranch Motel.

California Environmental Quality Act

CEQA (Public Resources Code [PRC] Section 21000 et seq.) is the principal statute governing environmental review of projects occurring in California. CEQA requires lead agencies to determine whether a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The CEQA Guidelines (California Code of Regulations Title 14, Section 15064.5) recognize that historical resources include all of the following:

- (1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register).
- (2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated as a unique archaeological resource in accordance with the provisions of CEQA Section 21083. As defined in Section 21083.2 of CEQA, a *unique archaeological resource* is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,

- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, the site is to be treated in accordance with the provisions of Section 21083.2. Those provisions state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require that reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1[a]). If preservation in place is not feasible, mitigation measures shall be required. The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5[c][4]).

A significant effect under CEQA would occur if a project would result in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5(a). *Substantial adverse change* is defined as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired” (CEQA Guidelines Section 15064.5[b][1]). According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

- A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* (NPS 2017) is considered to have mitigated its impacts on historical resources to a less-than-significant level (CEQA Guidelines Section 15064.5[b][3]).

California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based on the National Register criteria (PRC Section 5024.1[b]). Certain resources

are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the federal, state, and/or local level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of these criteria of significance and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historical resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- (1) California properties listed on the National Register and those formally determined eligible for the National Register.
- (2) California Registered Historical Landmarks from No. 770 onward.
- (3) Those California Points of Historical Interest that have been evaluated by the California Office of Historic Preservation and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- (1) Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register).
- (2) Individual historical resources.
- (3) Historical resources contributing to historic districts.
- (4) Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone.

Public Resources Code Sections 5024 and 5024.5

California Resources Code 5024.5 below describes the role of state agencies in regard to historical resources.

5024.5. (a) No state agency shall alter the original or significant historical features or fabric, or transfer, relocate, or demolish historical resources on the master list maintained pursuant to subdivision (d) of Section 5024 without, early in the planning processes, first giving notice and a summary of the proposed action to the officer who shall have 30 days after receipt of the notice and summary for review and comment. (b) If the officer determines that a proposed action will have an adverse effect on a listed historical resource, the head of the state agency having jurisdiction over the historical resource and the officer shall adopt prudent and feasible measures that will eliminate or mitigate the adverse effects. The officer shall consult the State Historical Building Safety Board for advice when appropriate. (c) Each state agency shall maintain written documentation of the officer's concurrence with proposed actions which would have an effect on an historical resource on the master list. (d) The officer shall report to the Office of Planning and Research for mediation instances of state agency refusal to propose, to consider, or to adopt prudent and feasible alternatives to eliminate or mitigate adverse effects on historical resources on the master list as specified in subdivision (f) of Section 5024. (e) The officer may monitor the implementation of proposed actions of any state agency. (f) Until such time as a structure is evaluated for possible inclusion in the inventory pursuant to subdivisions (b) and (c) of Section 5024, state agencies shall assure that any structure which might qualify for listing is not inadvertently transferred or unnecessarily altered. (g) The officer may provide local governments with information on methods to preserve their historical resources.

State Agency Consideration of Historical Resources Under Public Resources Code § 5024 and 5024.5: Effective Consultation with the State Historic Preservation Officer

The California Legislature enacted Public Resources Code (PRC) [Sections] 5024 and 5024.5 as part of a larger effort to establish a state program to preserve historical resources. These sections of the code require state agencies act to take a number of actions to ensure preservation of state-owned historical resources under their jurisdictions. These actions include evaluating resources for National Register of Historic Places (National Register) eligibility and California Historical Landmark (California Landmark) eligibility; maintaining an inventory of eligible and listed resources; and managing these historical resources so that that they will retain their historic characteristics.

PRC § 5024 and 5024.5 were passed into legislation prior to the creation of the California Register of Historical Resources (California Register), which was established under PRC § 5024.1. PRC § 5024 and 5024.5 do not apply to state-owned historical resources that are exclusively eligible for or listed in the California Register (i.e., do not meet the criteria for the National Register or California Landmarks). Impacts to all California Register listed or eligible resources are considered under the California Environmental Quality Act (CEQA).

With relation to PRC § 5024 and 5024.5, historical resources are defined as those listed or eligible for listing in the National Register or as a California Landmark. The SHPO encourages state agencies to ensure that evaluations of historical resources are conducted by persons with

expertise in the discipline appropriate to the resource type (State of California Department of Parks and Recreation 2017).

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code states that in the event human remains are discovered, the County Coroner must be contacted to determine the nature of the remains. If the remains are determined to be Native American in origin, the coroner is required to contact the Native American Heritage Commission (NAHC) within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

PRC Section 5097.98, as amended, provides procedures to follow in the event that human remains of Native American origin are discovered during project implementation. Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery be adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires that the NAHC, upon notification by a county coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

If no descendant is identified or the descendant fails to make a recommendation for disposition, or if the landowner rejects the descendant's recommendation, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) authorizes public agencies to withhold information from the public related to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American Tribe and a state or local agency."

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was signed by Governor Edmund G. Brown Jr. on September 25, 2014. This law amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration are filed on or after July 1, 2015. This law was intended to include

California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that requires consideration under CEQA, known as *tribal cultural resources*. Regulations under AB 52 are described more fully in Section 3.15, *Tribal Cultural Resources*.

Regional and Local

Los Angeles County General Plan 2035

A *general plan* is a basic planning document that, alongside the zoning code, governs development in a city or county. The State of California requires each city and county to adopt a general plan with seven mandatory elements—land use, open space, circulation, housing, noise, conservation, and safety—and any number of optional elements as appropriate. In Chapter 9, the Conservation and Natural Resources Element of the *Los Angeles County General Plan 2035*, goals and policies that are relevant to the Proposed Project are described in Section VIII: Historic, Cultural, and Paleontological Resources.

Los Angeles County Santa Monica Mountains Local Coastal Program

The Los Angeles County Santa Monica Mountains Coastal Zone is the unincorporated portion of the Santa Monica Mountains west of the city of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the city of Malibu. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles.

The Santa Monica Mountains Local Coastal Program (LCP), a component of the *Los Angeles County General Plan 2035*, consists of the Land Use Plan (LUP) and implementing actions included in the Local Implementation Program (LIP). The LIP, a series of ordinance sections added to the County's Zoning Ordinance, Title 22 of the County Code, was created to implement the LUP goals and policies. Implementing actions also include a zoning consistency program. The Santa Monica Mountains LCP was certified by the California Coastal Commission (CCC) on October 10, 2014, and was amended on February 9, 2018. The LUP replaced the Malibu Land Use Plan, which was certified by the CCC in 1986.

The LIP establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the LUP. Zoning changes, which included a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LUP. These changes were mandated by state law to eliminate potential conflicts between the LUP and zoning designations.

Archaeological and historic cultural resources are addressed in Section J: Archaeological, Paleontological, and Historic Cultural Resources of Section II, the Conservation and Open Space Element of the LUP.

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of the park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The plan sets aside a number of management zones including the Lower Topanga and Lagoon Zone, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The plan also contains specific proposals to consolidate Topanga State Park's trails by eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012).

Chapter 3 of the Topanga State Park General Plan provides park-wide guidelines potentially relevant to the cultural resources component of the Proposed Project. Cultural resources are especially addressed in the following sections of Chapter 3: Wildfire and Fire Management, Cultural Resources: Archaeological Sites (Prehistoric and Historic), Ethnographic Resources, Historic Resources (Structures, Sites, And Landscapes), Collections, and Interpretation and Education. Cultural resources are addressed further throughout the Area Specific Goals and Guidelines section (Trippet Ranch Area, Topanga Cultural Preserve, Rustic Canyon, Will Rogers Hideaway Cabin Site, Anatol Josepho Ranch Headquarters, Lower Topanga and Lagoon Zones, Watershed Conservation Zone).

3.4.2 Affected Environment

Environmental and Cultural Context

Natural Setting

The Project Area is located within Los Angeles County in the eastern Santa Monica Mountains in Los Angeles County, which is one of the Transverse Ranges of southern California. This area of coastline trends east-west, with the ocean located to the south. Elevations within the Project Area range between sea level at the lagoon mouth to 100 feet above mean sea level (amsl) at a small knoll to the east of the lagoon. Adjacent hillsides rise steeply from the flood plain of Topanga Creek to over more than 1,000 feet above mean sea level (amsl).

Bedrock exposed at the mouth of the canyon consists of the Upper Cretaceous Tuna Canyon Formation (formerly mapped as the Chico Formation), which is comprised of well-cemented marine sandstone, siltstone, and conglomerates. Further into the canyon, this formation is overlain by the fossiliferous sandstone Coal Canyon Formation (Paleocene) and the early Miocene Sespe Formation reddish sandstones and siltstones. Surficial deposits include beach and dune sands, alluvial and deltaic deposits, colluvial (talus/landslide) deposits, and fill placed from highway widening into nearby slopes (Cleveland 1977:171–172; Yerkes and Campbell 1979:E1).

The plant community along the Topanga Creek consists of riparian sycamore and willow dominant species while the surrounding hillslopes are covered by chaparral and coastal sage scrub. The climate in the Santa Monica Mountains ranges from hot and dry during the summer

months to cool and humid in the winter. Current land uses in the mountains are split between private residential and small ranch properties and state and federal parkland.

Ethnographic Setting

The Proposed Project area is located along the western ethnographic boundary of the Gabrielino/Tongva, originally named for native populations surrounding the Mission San Gabriel Arcángel and later identifying by an indigenous placename by modern descendants (Bean and Smith 1978; McCawley 1996:9–10). The mouth of Topanga Canyon was occupied by the coastal community of *Topaa'nga*, translating roughly to “where the water meets the rocks” (Tejada, 2023).

José Zalvidea, a native informant to ethnographer and linguist J.P. Harrington, noted that there was a large cemetery at the village site close to the beach and marked by whale ribs as grave markers. This appears to correspond to the location of the early documentation of archaeological site CA-LAN-133 (P-19-000133). Zalvidea translated *Topaa'nga* as “the point of the mountain range which ends at the sea” and also described a trail through the mountains to San Fernando (McCawley 1996:61). Another informant, Séimo Lopez, thought that *Topaa'nga* was in the Ventureño Chumash language (although the -nga suffix, meaning “place of,” is very common in the Gabrielino language); and mission baptism records from March 6, 1803, appear to list Chumash names for three fathers of children from the village, suggesting a mixed cultural identity and bilingual population at the coastal community (King 2014:165).

Gabrielino/Tongva society is noted to have been one of the wealthiest and most populated cultures in California, and their influence spread throughout Southern California due to extensive trade networks (Bean and Smith 1978:538). Along sheltered coastal areas, such as at Topanga, primary settlements were located at the coast to take advantage of the rich marine resources, with secondary subsistence gathering camps located inland (Bean and Smith 1978:539). The Gabrielino/Tongva used these maritime resources, such as soapstone from Catalina Island (*Pimu*) and shell beads, to trade with inland tribes, even as far as the desert Southwest (Bean and Smith 1978:547–548). The annual mourning ceremony was a key part of Gabrielino ritual, and the practice, involving eight days celebrating those who were deceased in the previous year, spread to surrounding communities (Bean and Smith 1978:545–546).

Pre-Contact Period

Cultural chronologies for the Southern California Bight, the curved stretch of coastline between Point Conception in the north to northern Baja California in the south, have been attempted since the time of David Banks Rogers (Santa Barbara) and Malcolm Rogers (San Diego) in 1929 (Vellanoweth and Altschul 2002:85). These early sequences were largely based on variations in types and styles of material culture, seen as markers to signal shifts in entire cultural regimes.

Although cultural chronologies have been defined and refined by several researchers, King (2014) provides a widely referenced cultural context for the Santa Monica Mountains based on a sequence of changes in styles and frequencies of beads, ornaments, and other artifacts as temporal markers, which may not necessarily equate to wholesale cultural change. Glassow et al. (2007)

provide a recent regional synthesis for the northern portion of the California Bight by refining King's (1990) chronology for the Santa Barbara Channel through patterns observed from increased numbers of radiocarbon dates for the region. Byrd and Raab (2007) give a summary of recent advances in key research themes for the southern portion of the Bight.

Although Terminal Pleistocene and early Holocene maritime or hunting occupations exist from as early as 13,000 before present (BP) from sites on the Channel Islands and around pluvial lakes in the deserts, the earliest dates for occupation of the Santa Monica Mountains are within what King (2014) calls the Early Period within the Middle Holocene. The lack of early Holocene dates in the area could be due to a combination of a lack of very early sites, poor preservation of dateable materials, or inundated coastal occupations from this period. The earliest occupation dates from the Santa Monica Mountains include the Little Sycamore Shell mound (CA-VEN-1) with an early date of 7430 ± 70 BP (Dallas 2000) and the Topanga Tank Site (CA-LAN-1) at 6430 ± 30 BP (Green and Fitzgerald 2019).

The Early Period (8000 – 2700 BP) is the first time that permanent settlements and formal cemeteries are found in the region (King 2014:179-180). Glassow et al. (2007) push back this period into the Early Holocene, beginning about 9000 BP along the Santa Barbara coast. The Early Period is characterized by maritime and hunting adaptations, as well as plant processing subsistence, evident from abundant milling stone caches (Glassow et al. 2007:194–195). Ornamentation, including the development of shell beads from *Callianax (Olivella) biplicata*, varied little; however, usage increased over time, suggesting generally increasing social complexity (King 2014:180). Other defining features for this period include the use of large side-notched points, core tools, and placement of flexed burials beneath rock cairns and “killed” metates.

Generally, King (2014:179) has divided the Early Period into three phases: (Ex, Ey, and Ez). Settlements were initially located defensively at high points with a wide range of view, possibly indicating only loose ties with surrounding groups. Wealth was evenly distributed through cemeteries of this period (King 2014:301). Between approximately 6500 and – 5500 BP, settlements moved to lower elevations but consolidated to form larger communities in valley bottom and shoreline locations above good boat landing areas. Along with the emergence of higher value forms of ornamentation, King (2014:301–302) interprets this change as indicating a shift to a more centralized political system. This shift may have been the result of influence from groups speaking Uto-Aztecan languages who brought more institutionalized social complexity. The increase in large mortar bowls, effigies, and stone pipes indicates a greater role of feast and ritual events that were likely sponsored by political leaders (King 2014:301–302). After about 4500 BP, smaller satellite sites moved back up to more defensible positions around the more centralized settlements.

Kennett et al. (2007) suggest that this movement of Uto-Aztecan groups toward the coast may have been propelled by a severe dry period between 6300 and 4800 cal BP, often called the Altithermal. Raab and Howard (2002) have suggested that the distinctive *Olivella* Grooved

Rectangle (OGR) shell beads found within portions of California and the western Great Basin historically occupied by Uto-Aztecan speakers are indicative of a Middle Holocene cultural interaction sphere that may be related to these population movements.

Glassow et al. (2007:197–200) note changes in technology in the Middle Holocene, with the introduction of the mortar and pestle around 6000 BP along with increasing quantities of projectile points. Between about 4000 to 2000 BP, technology additions and refinements reflected a broadening subsistence strategy, with an increase in the variety and numbers of fishing gear, and correspondingly an increase in fish and sea mammal remains. Increased sedentism is reflected by larger settlements, semisubterranean architecture, and year-round floral assemblages. A wide range of ornamentation and ritual objects suggests changes in social status differentiation (Glassow et al. 2007:200–203).

Based on existing radiocarbon dates, there is an apparent occupation gap at Encino between about 4000 to -2000 BP, during the same period that Glassow et al. (2007) describe broadening fishing technologies. This may reflect a shift in populations closer to the coast during this time.

The Middle Period as defined by King (2014:180) begins about 2750 BP and lasts through five phases to approximately 700 BP. Initially, economic trade was controlled by political leaders who typically inherited control through the family. Ritual specialists began to emerge, as evidenced in mortuary contexts by ritual objects placed with certain individuals separate from those placed with objects exhibiting wealth, such as shell beads (King 2014:301–302). By the late Middle Period, an increase in ornamentation across the population and a reduction in the size of effigies suggest another shift, where the economic system became more independent from centralized political power such that personal accumulation of wealth was possible and ceremony was performed on more of a personal or family level. Bead manufacturing increased substantially by the end of the Middle Period, and differentiation of bead types may have further defined the separation of economic and politico-religious social systems (King 2014:302–303).

The introduction of the plank canoe and the bow and arrow about 1500 BP near the beginning of the Late Holocene created another huge shift in technology with implications for both trade relationships and warfare (Glassow et al. 2007:204). Further cultural shifts may have been driven by the Medieval Climatic Anomaly, another period of drought between 1150 and 600 BP, in some cases leading to partial island abandonment and mainland population aggregation (Jones and Schwitalla 2008).

King's (2014) Late Period (700 – 200 BP), ending at the time of European land expeditions of Alta California, saw increased population, sedentism, specialization, and trade, with central villages surrounded by temporary resource gathering or spiritual sites. There was a general decrease in the number of settlements across the area, as populations consolidated and grew, particularly during the protohistoric period (King 2014:328). A clear separation of economic and political control was in place during the Late Period, and the extensive trade network established via political alliances and the economic system for the acquisition of resources ensured that local

populations would be supported even during periods of low resource productivity. Possibly as a result of population pressures, more energy was expended in the pursuit of food resources with highly variable, yet high energy yields (King 2014:303).

Regional interaction between the Channel Islands coast, and interior continued to expand, with a greater incidence of exotic materials, including the occasional pottery sherd from the Southwest. Status may have been tied to the control of shell-bead production for use as currency and the control of canoe manufacture and use in the Channel trade (King 2014).

Historic Period

The first account of European contact in the region was the 1542 Juan Rodrigues Cabrillo expedition to explore the coastline of Spain's Alta California. The expedition sailed north from what is now the San Diego area into "La Bahia de los Fumos" or the "Bay of Smokes," believed to be San Pedro Bay or Santa Monica Bay and so named for the number of cooking fires, or perhaps vegetation management fires, emanating from indigenous villages. In 1602, the Vizcaino expedition, departing from visiting Gabrielino people on Santa Catalina Island (*Pimu*), was greeted by Chumash people in a canoe from *Muwu* along the Ventura County coast at Point Mugu, although the Europeans did not come ashore to the mainland (King 2014:11). For the next 167 years, there are no additional records of Native American and European interactions (King 2014:12).

In 1769, Gáspar de Portolá and his expedition, on their way to establish Spain's claim to Alta California, set out from San Diego and headed north to Monterey, which had earlier been documented by Vizcaino. On August 2nd of that year, the expedition arrived at a river which they called "El Río de Nuestra Señora La Reina de Los Ángeles de Porciúncula," where they felt a number of earthquakes. The next day, they headed west, coming across swamps of bubbling pitch at today's La Brea Tar Pits. On August 4th, the expedition made it to a spring near the seacoast, which they called "Ojos de Agua del Berrendo," which may have been the Kuruvungna Springs in West Los Angeles. The Santa Monica Mountains along the coast to the north, encompassing the Pacific Palisades and Topanga area coastline, were too steep to pass, so the expedition followed an inland route through the Sepulveda Pass, emerging at a village site (*Siutcanga*) beneath large live oaks (*encinos*) next to a large pool at the south edge of a wide plain they called El Valle de Santa Catalina de Bonesia de los Encinos (Bolton 1927; King 2014:12; Smith and Teggart 1909; Teggart 1911). After a rest, the group headed north across the San Fernando Valley on August 7th and then made their way toward the Santa Clara River, and then west again to the coast. Their return route in 1770 followed roughly the modern route of U.S. Highway 101, through the interior of the western Santa Monica Mountains. Several additional expeditions in the late 1700s provided accounts of the region (King 2014:13-14).

The San Gabriel Mission was founded in the eastern Los Angeles plain in 1771, followed by the San Fernando Mission in 1797. The missions recruited (or forced) converts and workers from nearby village sites, and much of the native population of the Santa Monica Mountains was brought into one of the two missions, as evidenced by the baptismal records which that

documented village names and kinship ties. Only five baptisms were recorded for residents of *Topaa'nga*, the low number possibly a result of settlement abandonment and inland population consolidation during the mission period (King 2014:175).

In addition to the mission, military presidio, and town (pueblo) lands, Spain granted settlement and grazing rights to individuals on large tracts of land known as *ranchos*, including the Topanga Malibu Sequit and Boca de Santa Monica grants in the southern Santa Monica Mountains. In 1804, the Spanish government granted José Bartolomé Tapia cattle grazing rights (*permiso*) 1804 on the Rancho Topanga Malibu Sequit. This rancho was named after three native villages along the coastline, extending from the Topanga Canyon in the east to Point Mugu in the west (King 2014:36–37).

Once Mexico gained independence from Spain in 1821, the missions were secularized, and the mission lands were meant to be granted to former mission Indians. In practice, the lands mostly went to prominent *Californio* citizens, after 1834. In 1838, José Ysidro Reyes and Francisco Marquez, neighbors in the Pueblo de Los Angeles, applied for the 6,656- acre Rancho Boca de Santa Monica. In 1839, they met with surveyors on the beach at Topanga Point, a bluff near the entrance of Topanga Canyon; and proceeded to measure out the boundaries of the rancho and the land was officially granted. The Reyes and Marquez families built their adobe homes on the land in what is now the Pacific Palisades and Santa Monica Canyon, reportedly with roofs made of tules from the mouth of Topanga Canyon and tar from Rancho La Brea. They primarily raised cattle to sell hides and tallow (Marquez 2021).

After Tapia's death in 1824, the Rancho Topanga Malibu Sequit remained in the hands of his widow until 1848—, when she sold her rights in 1848 to her granddaughter's husband, Leon Victor Prudhomme, the year after Mexico lost California to the United States in the Mexican American War. The California Land Act of 1851 required grantees and subsequent owners of Spanish and Mexican land grants to prove their claims, but Prudhomme did not have the necessary documentation when he filed his claim in 1852. Instead, he sold the Rancho Malibu to Matthew “Don Mateo” Keller in 1857. Because of the unclear title transferred by Prudhomme, Keller was not able to get the Rancho Malibu surveyed and officially granted until 1872, after substantial legal wrangling in the courts. In the 1870 final land patent map, the boundaries were set at Las Flores Canyon in the east and the Los Angeles/Ventura County line on the west for a total of some 13,000 acres.

Due to an ongoing boundary dispute with Francisco Sepulveda and his heirs, the Reyes and Marquez and Reyes families had better documentation of their lands, due to an ongoing boundary dispute with Francisco Sepulveda and his heirs and they were able to finally make their way through the courts and got their patent approved in 1881. Unfortunately, droughts in the 1860s and property taxes took their toll on many land grantees, and families who were rich in land yet poor financially had to sell all or a portion of their lands to cover expenses. Ysidro Reyes died in 1863, leaving his portion of Rancho Boca de Santa Monica to his wife, Maria Antonia, who later sold her share to businessman Robert S. Baker in 1873, who then sold his interests to his wife and

Senator John P. Jones. The rancho was partitioned in 1881, with the western portion (including 1,848 acres of lower Topanga Canyon) going to Bonifacio Marquez. After Bonifacio's death in 1891, his second wife Antonia administered the ranch, but she sold it to E.C. Steele in 1899 (Marquez 2021).

After Don Matteo's death in 1881, the Rancho Malibu passed to his son, Henry Keller. In 1892, Henry sold the ranch to wealthy businessman Frederick Hastings Rindge, who purchased additional property to expand the Malibu Rancho to 17,000 acres. Under the Rindge family, the ranch was largely used for cattle and sheep grazing, but agricultural fields were planted within the lower Malibu Creek floodplain.

A dirt wagon road along the coast provided access between Santa Monica and Malibu, including a picturesque path of travel directly through the famous Arch Rock to the east of Topanga Canyon. Frederick and May Rindge initially tolerated the few homesteaders accessing the crude coast route through their Rancho Malibu, but as Los Angeles grew, so did the tourists coming out to visit the beach. The first gate of the Malibu was constructed in 1895 at Las Flores Canyon and was posted with guards, infuriating the homesteaders who called for a public road right-of-way along the coast (Randall 2016). When the Southern Pacific Railroad applied for an easement over the Malibu Ranch in 1904 to connect Santa Monica and Santa Barbara, the family took advantage of an obscure law under the Interstate Commerce Commission preventing condemnation of parallel rights-of-way and began planning their own railroad and shipping pier to avoid outside intrusion on their ranch. When Frederick Rindge died suddenly in 1905, his wife Rhoda May Knight Rindge (May) took over ranch operations, including the 1906 completion of the original Malibu Pier and the 1908 completion of the 15-mile Hueneme, Malibu and Port Los Angeles Railway. As May secured fences and gates on the ranch property, neighboring homesteaders began to sue for access (*Los Angeles Herald* 1906). Although a 1909 court case initially held that the coast route through the Rancho Malibu was public, May Rindge continued her legal fights in both state and federal courts to keep a public road out of the Malibu Ranch (*Los Angeles Herald* 1909).

As beach recreation grew in popularity, and the Southern Pacific Railroad abandoned plans to construct along the coast of the Santa Monica Mountains, the condition of the Malibu Road deteriorated (*Los Angeles Times* 1907). By 1910, work was underway to widen and grade the Old Malibu Road to the mouth of Topanga Canyon (*Los Angeles Times* 1910). The following year, the County began improvements using prison labor on what had previously been a privately funded rudimentary road up into Topanga Canyon for access to various tourist-oriented camps (*Los Angeles Times* 1911). The grand opening of the Topanga Canyon Road, linking the San Fernando Valley to the coast, was held on May 29, 1915, accompanied by a parade of a thousand automobiles, a barbeque, a band, and singers (*Los Angeles Times* 1915).

The county road condemnation process had begun as early as 1916, and after years of court battles, May Rindge ultimately lost in 1921 at the State California Supreme Court in 1921; this ruling was to a county road condemnation process begun as early as 1916 and affirmed in 1923 at

the U.S. Supreme Court in a landmark eminent domain decision. As early as 1918, while the County condemnation process was still being litigated, anticipatory surveys for and even some work on the Coast Road to connect Oxnard with San Juan Capistrano had begun as early as 1918 during the county condemnation process, including paving the dirt road section between Topanga Canyon and the entrance to the Malibu Ranch at Las Flores (*Los Angeles Times* 1919). The County Road alignment became incorporated into plans for a state highway, and construction was authorized to proceed through the Malibu Ranch in 1924. The Roosevelt Highway was completed in 1929, which was the precursor to today's Pacific Coast Highway.

Historic Development of Lower Topanga

The opening of the highway only increased the interest in recreation interest along the coast. The public had begun visiting and camping at Topanga Beach, the last accessible outpost along the coast before the reclusive Malibu Ranch, as early as 1910. By 1919, a beach camp was established by the Cooper brothers, and in 1920, construction had begun on cabins and a dance pavilion constructed beginning in 1920. The paved Coast Road was completed to Las Flores Canyon in 1924, including a concrete bridge across the Topanga Lagoon. After a series of storms and fires, the Cooper brothers left Topanga in 1926, and Scottish widow Lillie Fields took over until 1928 when J. C. McGray began managing it as the Topanga Beach Auto Court. (Capra 2020). Such "auto" and "motor" courts proliferated between 1927 and 1935, providing affordable lodging for tourists and traveling workers, especially important during the Great Depression.

In 1924, the Los Angeles Athletic Club (LAAC) purchased an interest in the 1,800 acres of land at the mouth of Topanga Canyon from owners who had acquired the previous Bonifacio Marquez rancho property. Their goal was to, to establish a yacht harbor and beach club for their members, which constituted a who's who of Los Angeles businessmen. William Randolph Hearst had acquired the remaining interest in the beachfront property, and while planning for a beach hotel, issued leases for 50-foot-wide beach parcels to build weekend homes to produce some income (Austin 2020:58).

As the LAAC began building other projects such as the (Riviera Country Club and the, Maple Ranch Gun Club and had) and become involved in planning for the 1932 Olympics, the yacht harbor concept was scrapped (Capra 2020:76--77).

C.F. Whitney applied for a building permit in 1933 to alter the Topanga Beach Auto Court, reconfiguring some of the original Cooper's Camp single-unit cabins and adding newly constructed multi-unit cabins in a triangular courtyard arrangement with an entrance archway. After World War II, with the increasing popularity of multi-unit linear motor court motels, the Topanga Beach Auto Court was renamed the Topanga Ranch Motel in homage to the area's early ranching era with a nod to more modern tourist conventions. However, the architecture remained solidly within the 1930s tradition.

Plans for the hotel ultimately fell through and the LAAC acquired the entirety of Lower Topanga in 1946 (Austin 2020:58). By then, the leaseholders were fully ensconced in their leased

properties and LAAC was acting as a landlord both for the houses that were now largely occupied full time as well as for, and the local recreation-oriented businesses. In the 1950s, the LAAC began leasing the Topanga Beach Auto Court motel and other Topanga cabins to more long-term residents looking for a bohemian lifestyle, further preserving the original rustic nature of the old Cooper's tent cabins. LAAC was still considering the development of the area when it was sold off Parker Mesa for a housing development in 1957. That same year, the leases with the other tenants were renegotiated to allow for compensation when eventual development occurred.

Ultimately, an agreement was reached between the LAAC and the state in 1971 to sell Topanga Beach for a public recreation site. Although the sale went through in 1973, litigation by the tenants held up the process until the final beachfront homes were razed in early 1979. After financial issues in the 1990s, Topanga State Beach was transferred to Los Angeles County in September 1995.

In 2001, the state acquired the remaining 1,659 acres of Lower Topanga from the LAAC as an addition to Topanga State Park; this, included 10 commercial structures and 60 residential structures, the latter of which were razed by 2012. Cultural Resources Identification

Records Searches

Staff at the Los Angeles District of State Parks conducted a search of cultural resources files pertinent to the Project area. As part of this search, State Parks looked at the records found for previous projects and studies in the area, including records of studies and documented resources for Topanga Beach retrieved in 2013, and records of studies and documented resources for the entirety of the Santa Monica Mountains National Recreation Area retrieved in 2014.

State Parks staff in June 2022 requested a supplemental records search for the Project area and a one-quarter-mile buffer from the California Historical Resources Information System's South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The SCCIC records search results were received by State Parks staff on September 30, 2022. The sources consulted included SCCIC site and survey report records and listings for the National Register, the California Register, California Historical Landmarks, and California Points of Historical Interest. The Built Environment Resources Directory, which is available online through the California Office of Historic Preservation, was also consulted. No local historical registers are available for the Project area.

The State Parks search of the SCCIC records identified a total of 32 previous studies were identified as overlapping the Project area. These were LA-00081, LA-01538, LA-01856, LA-04825, LA-04892, LA-04893, LA-4984, LA-07841, LA-10100, LA-10476, LA-11136, LA-12443, LA-12963, LA-13032, LA-13033, LA-13034, LA-13035, LA-13085, LA-13086, and LA-13087, as well as 12 that do not have SCCIC report number assignments. These studies include cultural resources assessments, surveys, monitoring, and other technical investigations.

The State Parks file search and SCCIC records search identified the following 10 cultural resources within or partially overlapping the Project area:

- Archaeological resources:
 - P-19-000133 (ethnohistoric site).
 - P-19-003756 (historic-period site).
 - P-19-003759 (multicomponent site).
- And seven (7) Historic architectural resources:
 - P-19-192281 (Potter’s Trading Post/Malibu Feed Bin).
 - P-19-192464 (Topanga Ranch Motel).
 - P-19-167515 (Topanga Creek Highway Bridge [Caltrans Bridge Inventory No. 53-0035]).
 - PSI20150813-1 (concrete support structure).
 - Malibu Properties/Cholada Thai Beach Cuisine (no SCCIC identifier).
 - The Money House (no SCCIC identifier).
 - Wylie’s Bait and Tackle (no SCCIC identifier).

The records search identified an additional six cultural resources outside of the Project area but within the one-quarter-mile buffer: three archaeological sites (P-19-000215, P-19-002921, and P-19-004080) and three historic architectural resources (P-19-167242, P-19-188034, and P-19-188035). Because these resources are located outside of the Project area, they will not be addressed any further in this analysis.

Archival Research

Newspaper archives from the California State Library were searched, as well as online archival materials from the California Division of Highways, the precursor to the modern Caltrans agency.

The Wrecks and Obstructions Database, hosted by the National Oceanic and Atmospheric Administration’s Office of Coast Survey, and the California Shipwrecks Database, administered by the California State Lands Commission, were also searched. This was followed by archival newspaper research to confirm information about the recorded wrecks closest to the Project area.

Two shipwrecks have been recorded within approximately 1 mile of the Project Area. The recreational fishing charter *Ameco* sank due to swamping in 1930 approximately three-quarters of a mile southeast of the mouth of Topanga Creek and was never located, although all 16 who perished were recovered (*San Pedro News Pilot* 1930a, 1930b). The Minnie A. Caine fishing barge sank in 1939 due to a parted anchor just off the coast from where Sunset Boulevard meets Pacific Coast Highway (PCH), but later washed ashore and was burned to dispose of the vessel (*San Pedro News Pilot* 1939). Neither of these wrecks are located within the Project area and they will not be addressed any further in this analysis.

Additional archival research, including aerial photos and any available building permit records, was conducted for all built structures within the Project area to determine approximate dates of construction and identify all buildings greater than 45 years of age. Two structures, the DBH lifeguard and public restroom building (1985) (Tejada 2023) and the Reel Inn Restaurant (1986 post-fire reconstruction), are less than 50 years of age and are not addressed further in this analysis.

Cultural Resources Survey

An archaeological reconnaissance survey of the previously unsurveyed portions of the Project area was conducted on October 28, 2021, by State Parks archaeologists Barbara Tejada and Ann Stansell. Additional field reconnaissance of a proposed wastewater treatment area was conducted on July 27, 2023. In addition to the three archaeological resources already identified in the State Parks file search and SCCIC records search (listed above), two previously unrecorded archaeological resources were identified within the Project area as a result of the surveys: Old Coast Road and Old Malibu Road Bridge Footings.

Coastal Resources Management, Inc., conducted habitat surveys in August 2022 within the nearshore environment using sidescan/downscan sonar. This sonar surveyed 28 transects spaced 50 feet apart and recorded a remote video of the seafloor. Subsequent targeted underwater dives did not find any sunken vessels within the Project area (Appendix K??;).

State Parks historian Mark Jones and State Parks archaeologist Barbara Tejada conducted a field visit on January 12, 2023, to visually inspect, photograph, and document the buildings and structures over 45 years of age in the Project area. Environmental Science Associates architectural historians Margarita Jerabek-Bray, Ph.D., and Sonali Gupta-Agarwal, Ph.D., accompanied Mr. Jones and Ms. Tejada. In addition to the seven historic architectural resources already identified in the State Parks file search and SCCIC records search (listed above), this field visit identified one previously unrecorded building, Beach Real Estate/Rosenthal Wine Bar.

Native American Consultation

State Parks submitted a request for a Sacred Lands File check to the NAHC on November 27, 2019, to identify resources within the Project area that may be of traditional and cultural value or sensitivity to Tribes. In a letter dated December 16, 2019, the NAHC reported that the results of the Sacred Lands File check were positive for the presence of sensitive resources in the Project area. State Parks conducted follow-on Native American consultation, which is described in more detail in Section 3.15, *Tribal Cultural Resources*.

Cultural Resource Eligibility

State Parks has made the following determinations regarding the five archaeological resources within or partially overlapping the Project area:

- P-19-000133 (ethnohistoric site) appears to be eligible for listing in the National Register and California Register under Criteria A/1 and D/4 and may also qualify for tribal cultural resource designation.

- The non-historic component of P-19-003759 (multicomponent site) may be a contributor to P-19-000133, while the historic component appears ineligible for listing in the National Register and California Register under Criteria A/1 and D/4.
- P-19-003756 (historic-period site) is eligible for listing in the National Register and California Register under Criteria D/4.
- Old Coast Road and Old Malibu Road Bridge Footings are ineligible for listing in the National Register and California Register.

The following determinations have been made regarding the eight historic architectural resources within the Project area:

- P-19-192464 (Topanga Ranch Motel) was previously determined by the National Parks Service eligible for listing in the National Register under Criteria A and C and is therefore automatically listed in the California Register. It is included on the Master List of State-owned Historical Resources.
- P-19-167515 (Topanga Creek Highway Bridge [Caltrans Bridge Inventory No. 53-0035]) has been determined ineligible by Caltrans and is also not eligible for listing in the National Register or California Register.
- P-19-192281 (Potter’s Trading Post/Malibu Feed Bin), Wylie’s Bait and Tackle, PSI20150813-1 (concrete support structure), Malibu Properties/Cholada Thai Beach Cuisine, The Money House, and Beach Real Estate/Rosenthal Wine Bar have been determined by State Parks to be ineligible for listing in the National Register and California Register.

State Parks has also determined that none of the cultural resources identified qualify for California Historical Landmark status under PRC Section 5024 and 5024.5. **Table 3.4-1** summarizes the cultural resources identified as a result of the file/records searches and surveys.

**TABLE 3.4-1
 SUMMARY OF CULTURAL RESOURCES IDENTIFIED WITHIN THE PROJECT AREA
 AND A ONE-QUARTER-MILE RADIUS**

Site Number	Description	Recorder and Date	National Register Status Code/Eligibility Determination	Within Project Area?
P-19-000133	CA-LAN-133, ethnohistoric village of <i>Topaa'nga</i> ; buried shell midden site, cemetery	Bayler 1905, Nelson c. 1912, Barclay 1977	3S. Appears eligible for National Register/California Register (A/1 and D/4), and tribal cultural resource designation; CHL ineligible	Yes
P-19-000215	CA-LAN-215, occupation site on mesa, flaked core tools, shell, groundstone	Peck 1950, King 1961, Barclay 1977	5N. Likely destroyed by housing development; appears not eligible for National Register/California Register; CHL ineligible	No
P-19-002921	Bee Swarm Site	Mealey et al. 2001	5S3. Appears not eligible for National Register/California Register; CHL ineligible	No
P-19-003756	Knoll Site; c. 1920s historic trash scatter (Yonke Dump)	Smith and Buxton 2007	3S. Appears eligible for National Register/California Register (D/4); CHL ineligible	Yes

Site Number	Description	Recorder and Date	National Register Status Code/Eligibility Determination	Within Project Area?
P-19-003759	Recorded as redeposited midden and historic refuse scatter, may be part of CA-LAN-133	Smith and Buxton 2007	4X. Midden may be contributing feature to P-19-000133; 5S3. Refuse appears not eligible for National Register/California Register (A/1 and D/4); CHL ineligible	Yes
P-19-004080	3727 Rodeo Grounds Lane; wood-lined pit filled with early-20th-century refuse	Smith 2007, 2010	5S3. Appears not eligible for National Register/California Register; CHL ineligible	No
P-19-167242	Villa de Leon, Italian-style residence built 1927	Hatheway 1977	3S. Appears eligible to National Register/California Register; CHL ineligible	No
P-19-167515	Topanga Creek Highway Bridge (53-0035)	Caltrans n.d.	7R. Identified in reconnaissance-level survey. Caltrans determined not eligible for National Register; California Register ineligible; CHL ineligible	Yes
P-19-188034	Contemporary residence constructed in 1957	Taniguchi 2003	6Z. Appears not eligible for National Register/California Register; CHL ineligible	No
P-19-188035	Spanish colonial residence built in 1927	Taniguchi 2003	3S. Appears eligible for National Register/California Register; CHL ineligible	No
P-19-192281	Malibu Feed Bin; 1932–1961, formerly the grocery store Potter’s Trading Post	Bevil 2001, Camacho-Trejo 2021	5S3. Appears not eligible for National Register/California Register; CHL ineligible	Yes
P-19-192464	Topanga Ranch Motel; 1933–1952 vernacular motor court motel	Bevil 2009	4CM. National Register–eligible (Criteria A and C) Added to Master List; CHL ineligible	Yes
PSI20150813-1	Concrete support structure	Webster 2015	6Z. Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	Malibu Properties/Cholada Thai Beach Cuisine	Bevil 2001, Tejada 2023	6Z. Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	The Money House	Bevil 2001, Tejada 2023	6Z: Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	Wylie’s Bait & Tackle	Bevil 2001, Tejada 2023	5D3. Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	Old Coast Road	Tejada and Stansell 2021	6Z: Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	Old Malibu Road Bridge Footings	Tejada and Stansell 2021	6Z: Appears not eligible for National Register/California Register; CHL ineligible	Yes
N/A	Beach Real Estate/Rosenthal Wine Bar	Tejada 2023	6Z: Appears not eligible for National Register/California Register; CHL ineligible	Yes

NOTES: California Register = California Register of Historical Resources; Caltrans = California Department of Transportation; CHL = California Historic Landmarks; N/A = not applicable; National Register = National Register of Historic Places

The eligible resources as determined by State Parks research conducted for the Proposed Project are summarized here:

- *Archaeological Resource*: P-19-000133 (ethnohistoric site) is eligible for listing in the National Register and California Register under Criteria A/1 and D/4 and may also qualify for tribal cultural resources designation (the latter is addressed further in Section 3.15, *Tribal Cultural Resources*, of this EIR).
- *Archaeological Resource*: The non-historic component of P-19-003759 (multicomponent site) is eligible for listing in the National Register and California Register under Criteria A/1 and D/4 and is possibly a contributor to P-19-000133.
- *Archaeological Resource*: P-19-003756 (historic-period site) is eligible for listing in the National Register and California Register under Criterion D/4.
- *Historic Architectural Resource*: P-19-192464 (Topanga Ranch Motel) is eligible for listing in the National Register under Criteria A and C and is automatically listed in the California Register.

3.4.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to cultural resources. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. (Refer to Impact CUL 3.4-1.)
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5. (Refer to Impact CUL 3.4-2.)
- Disturb any human remains, including those interred outside of dedicated cemeteries. (Refer to Impact CUL 3.4-3.)
- Result in cumulatively considerable impacts to cultural resources. (Refer to Impact CUL 3.4-4.)

Historical Resources

CUL 3.4-1: The Project could cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5. Impacts would be significant and unavoidable.

A cultural resource study was conducted by State Parks to identify potential cultural resources within the Project area. Five archaeological resources were identified within or partially overlapping the Project area: State Parks has determined that archaeological resource P-19-000133 (ethnohistoric site) is eligible for listing in the National Register and California Register; that P-19-003756 (historic-period site) is eligible for listing in the National Register and California Register; and that the non-historic component of P-19-003759 (multicomponent site), which is a potential contributor to P-19-000133, is eligible for listing in the National Register and California Register. As such, these three resources qualify as historical resources under CEQA. The other two archaeological resources identified within or partially overlapping the Project area,

have been determined by State Parks to be ineligible for listing in the National Register and California Register and therefore do not qualify as historical resources under CEQA.

The cultural resource study also identified eight historic architectural resources within the Project area.: Resource P-19-192464 (Topanga Ranch Motel) has been determined eligible for listing in the National Register by State Parks (SHPO concurrence 2009) and is therefore automatically listed in the California Register; as such, it qualifies as a historical resource under CEQA. Resource P-19-167515 (Topanga Creek Highway Bridge [Caltrans Bridge Inventory No. 53-0035]) has been determined ineligible by Caltrans and is also not eligible for listing in the National Register or California Register and thus does not qualify as a historical resource under CEQA. Resources P-19-192281 (Potter's Trading Post/Malibu Feed Bin), PSI20150813-1 (concrete support structure), Malibu Properties/Cholada Thai Beach Cuisine, The Money House, Wylie's Bait and Tackle, and Beach Real Estate/Rosenthal Wine Bar have been determined by State Parks to be ineligible for National Register and California Register listing and therefore do not qualify as historical resources under CEQA.

Avoidance, Minimization, and/or Mitigation Measures

If a project will have significant environmental impacts, CEQA requires that an EIR assess alternatives to the project, even if these impacts can be mitigated to a level that is less than significant. Below are alternatives, with impacts analyzed and potential mitigation included.

Alternative 1 (No Build)

Under Alternative 1, the Project would not be implemented; therefore, 0 acres of Topanga Lagoon would be restored and actions to protect the beach from sea level rise would be limited. The functions of existing structures throughout the Project area would remain the same. Over time, the conditions of structures would continue to deteriorate, and emergency reactive measures would be required to maintain public safety and the functionality of the facilities as feasible. Future conditions are assumed to involve a continued decline in the condition of the existing buildings and infrastructure at the site which may require removal. There would also be continued coastal erosion, which may be worsened by future sea level rise, and continued habitat degradation. It is assumed that State Parks, Caltrans, and DBH would each implement emergency or reactive improvements to manage the declining conditions.

No demolition or construction-related ground disturbance would occur under Alternative 1, nor would any operational activities occur. Three archaeological resources (P-19-000133 [ethnohistoric site], P-19-003756 [historic-period site], and P-19-003759 [multicomponent site]) and one historic architectural resource (P-19-192464 [Topanga Ranch Motel]) that qualify as historical resources under CEQA would not be affected by Alternative 1. Furthermore, Alternative 1 does not include any ground-disturbing activities that could potentially affect unknown archaeological resources that may qualify as historical resources. Therefore, Alternative 1 would result in no construction-related or operational impacts on historical resources.

Alternative 2—Construction

Under Alternative 2, all existing structures on the north side of PCH would be removed, including all existing 25 structures of the Topanga Ranch Motel. This alternative would lengthen the Caltrans bridge from 79 feet to approximately 460 feet but would not modify the alignment of PCH. Under Alternative 2, all new State Parks development would be located at the Gateway Corner (intersection of TCB and PCH). The one exception is that a maximum 2,400-square-foot concession could continue to exist at the current location of the Reel Inn restaurant just southeast of the historic motel.

Alternative 2 would result in the removal of historical resource P-19-192464 (Topanga Ranch Motel), and ground-disturbing construction activities could result in impacts on three historical resources: P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site). Furthermore, ground-disturbing activities under Alternative 2 could potentially affect unknown archaeological resources that may qualify as historical resources. Implementation of Mitigation Measures CUL-1 through CUL-5 would minimize impacts of Alternative 2 on historic resources to the extent feasible by requiring the implementation of professional treatment and management procedures. However, impacts would remain significant and unavoidable.

Alternatives 3 and 4—Construction

Under Alternatives 3 and 4, 15–20 of the 25 structures associated with P-19-192464 (Topanga Ranch Motel) would be retained and restored in the future in conformance with *The Secretary of Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* (36 CFR Part 68), taking into account feasibility based on cost, long-term management, and current codes, such that the character, form, and features of the motel would be retained. To stabilize these structures according to current seismic and building codes, several options for foundations may be available, such as mat foundations combined with perimeter retaining structures. To avoid any potential impacts on sensitive archaeological resources, no foundation is expected to penetrate into the historic ground surface underlying the motel. Additional restoration of the buildings would include the removal of lead and mold and replacement of the walls, windows, roof, floor, and interior elements. Historic fabric will be retained or restored to the degree possible or replaced in-kind in conformance with SOI Standards. A 2,400-square-foot concession located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site leases and structures would be removed. Development of the Gateway Corner and lengthening of the Caltrans bridge under Alternatives 3 and 4 would mirror the construction proposed under Alternative 2, except that the proposed employee residence would be shifted to the motel area instead. Construction activities involving ground-disturbing activities could potentially affect three known historical resources—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site)—and unknown archaeological resources that may qualify as historical resources. Implementation of **Mitigation Measures CUL-1 through CUL-5**

would reduce operational impacts on unknown archaeological resources that may qualify as historical resources to a less-than-significant level.

Alternatives 2, 3, and 4 (Build Alternatives)—Operations

Under Alternatives 3 and 4, the remaining structures associated with P-19-192464 (Topanga Ranch Motel) would be used for future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, park offices, interpretive displays, and storage. Maintenance of the retained motel structures would be conducted in conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* thus eliminating impacts. Maintenance activities involving ground-disturbing activities could potentially affect three known historical resources—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site)—and unknown archaeological resources that may qualify as historical resources. Implementation of **Mitigation Measures CUL-1 through CUL-5** would reduce operational impacts on unknown archaeological resources that may qualify as historical resources to a less-than-significant level.

Wastewater Management Options

Improvements to any CDPR visitor services will require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: onsite subsurface drip irrigation (SDI, Option 1), onsite seepage pits (Option 2) or an offsite sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Proposed Project Alternatives (2-4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the project boundary on CDPR property and adjacent to the employee quarters. All construction and operation activities would occur within CDPR property or within Caltrans ROW. Limited lane closures to install a pipeline across Topanga Canyon Boulevard would occur. (insert statement relevant to specific EIR section impacts for SDI or seepage pits).

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH, and onsite pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment.

Improvements to any State Parks visitor services will require upgrading the wastewater management system. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Grading, and other construction activities associated with proposed on-site wastewater systems could potentially impact affect unknown archaeological resources that may qualify as historical resources. Implementation of **Mitigation Measures**

CUL-1 through CUL-5 would reduce impacts on unknown archaeological resources that may qualify as historical resources to a less-than-significant level.

Mitigation Measures

CUL-1: Historical Resources Monitoring and Treatment Plan. After State Parks approval of the Proposed Project and before the start of Project construction activities, a historical resource monitoring and treatment plan (HRMTP) shall be prepared documenting the actions and procedures to be followed to ensure the avoidance or minimization of impacts on archaeological and historic architectural resources that qualify as historical resources under CEQA. Archaeological resources and historic architectural resources may be addressed in one or separate HRMTPs at the discretion of State Parks. General information and procedures to be addressed in the HRMTP shall include but not be limited to the following:

- A listing of Project personnel and contact information, description of roles and responsibilities, reporting relationships, activities requiring notification, and notification procedures and time frames.
- Construction worker cultural resources sensitivity training to be implemented before the start of Project construction activities, consistent with **Mitigation Measure CUL-2** (Cultural Resources Sensitivity Training).

Specific archaeological resources procedures to be addressed in the HRMTP shall include but not be limited to the following:

- Avoidance and preservation in place of three archaeological resources—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and the non-historic component of P-19-003759 (multicomponent site)—to the extent feasible, consistent with **Mitigation Measure CUL-3** (Avoidance and Preservation in Place).
- If avoidance is not feasible, development of treatment options that reduce or minimize impacts on P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and the non-historic component of P-19-003759 (multicomponent site). Such options include implementation of Environmentally Sensitive Areas for portions of resources that can be avoided, archaeological testing and/or data recovery, capping of archaeological deposits, and/or the development of interpretation/educational materials and/or exhibits.
- An archaeological and Native American monitoring plan to be implemented during Project ground-disturbing activities, consistent with **Mitigation Measure CUL-4** (Archaeological and Native American Monitoring). The monitoring component of the HRMTP shall include the detailed locations of monitoring activities and types of construction work requiring monitoring; protocols to be followed during monitoring activities and during discovery situations; roles of archaeological and Native American monitors; communication and notification procedures between the construction contractor, monitors, and State Parks; and archaeological monitor reporting requirements.
- Actions to be taken if archaeological resources are inadvertently discovered during ground-disturbing activities or previously recorded archaeological resources are affected in an unanticipated manner. Such actions include:
 - Redirection of work to avoid the area.

- Establishment of a temporary exclusion zone.
- Inspection of the resource by a qualified archaeologist.
- Development of a research design that provides context for significance evaluation.
- Evaluation of the resource for listing in the National Register and California Register under Criteria A/1 through D/4.
- Development of avoidance and/or treatment protocols such as establishment of an Environmentally Sensitive Area, data recovery, and interpretive/educational or other creative treatment solutions.
- Preparation of a technical report documenting the methods and results of the treatment following Archaeological Resources Management Report guidelines.
- Appropriate curation of all recovered materials.

Specific historic architectural resources procedures to be addressed in the HRMTP shall include but not be limited to the following:

- Avoidance and preservation in place of historic architectural resource (P-19-192464 [Topanga Ranch Motel]) to the extent feasible.
- If avoidance is not feasible, development of treatment options that reduce or minimize impacts on P-19-192464 (Topanga Ranch Motel) such as implementation of Environmentally Sensitive Areas for portions of the resource that can be avoided; Historic Architectural Building Survey documentation before demolition; relocation and restoration of buildings for reuse or interpretive purposes as feasible; and/or the development of interpretation/educational materials and/or exhibits.

CUL-2: Cultural Resources Sensitivity Training. Cultural resources sensitivity training for all construction personnel shall be conducted before the start of Project construction. The sensitivity training shall be led by a qualified archaeologist and shall include restrictions around Environmentally Sensitive Areas; information on how to identify archaeological resources; approved access routes and equipment/foot traffic restrictions for workers; specific procedures to be followed in the event of an inadvertent discovery consistent with the HRMTP (see **Mitigation Measure CUL-1**); safety procedures when working with monitors; and consequences in the event of noncompliance.

CUL-3: Avoidance and Preservation in Place. Project implementation shall be carried out in a way that avoids or minimizes impacts on significant cultural resources to the extent feasible. Avoidance and preservation in place shall be the preferred manner of mitigating impacts on significant historic architectural resources and archaeological resources.

Where State Parks has determined that avoidance will be implemented, the construction area shall be narrowed or otherwise altered to avoid resources. An Environmentally Sensitive Area shall be delineated with protective fencing and/or flagging by a qualified archaeologist, including an adequate buffer to be determined in coordination with State Parks. Protective fencing shall remain in place during construction activity until State Parks authorizes its removal.

CUL-4: Archaeological and Native American Monitoring. Full-time archaeological and Native American monitoring shall be conducted during Project-related ground-disturbing activities consistent with the HRMTP (see **Mitigation Measure CUL-1**) to identify and avoid impacts on archaeological resources. Ground-disturbing activities include but are not limited to demolition, brush clearance, grubbing, excavation, trenching, and grading. The qualified archaeologist shall have the authority to modify monitoring locations and frequencies based on soil observations in coordination with State Parks.

Each archaeological monitor shall have a degree in anthropology, archaeology, or a related field, and experience with the archaeology of the Southern California coastal region. Archaeological monitors shall work under the direct supervision of a qualified archaeologist and shall complete daily monitoring logs. The monitoring logs shall document dates of monitoring and monitoring participants, activities observed, soil types observed, and any archaeological resources encountered.

CUL-5: Inadvertent-Discovery Procedures. In the event that previously unrecorded archaeological resources are inadvertently discovered, or previously recorded archaeological resources are inadvertently affected during ground-disturbing activities, work shall be halted immediately within a 100-foot radius of the resource and temporary protective measures shall be implemented pursuant to provisions of the HRMTP. No work shall occur within 100 feet of the resource until it has been evaluated by a qualified archaeologist and any identified treatment implemented. Consistent with **Mitigation Measure CUL-3** (Avoidance and Preservation in Place), avoidance and preservation in place shall be the preferred manner of mitigating impacts on archaeological resources to maintain the important relationship between artifacts and their archaeological context, to preserve each resource's scientific value, and to preserve the cultural values ascribed to resources by local Native American Tribes.

All resources unearthed by the Project that cannot be avoided shall be evaluated by a qualified archaeologist for listing in the National Register and California Register. If the qualified archaeologist determines the find to constitute a "historical resource" or a "unique archaeological resource" under CEQA, State Parks shall coordinate with the qualified archaeologist and Native American Tribes to develop treatment to reduce or minimize impacts on the resource consistent with **Mitigation Measure CUL-1** (Historical Resources Monitoring and Treatment Plan).

Significance Determination

Alternative 2: Significant and Unavoidable; *Alternatives 3 and 4:* Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Future visitor services, including maintenance activities involving ground-disturbing activities, could potentially affect archaeological resources that may qualify as historical resources.

Implementation of **Mitigation Measures CUL-1 through CUL-5** would reduce impacts on archaeological resources that may qualify as historical resources to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures CUL-1 through CUL-5**

Significance Determination

Less than Significant with Mitigation Incorporated

Unique Archaeological Resources

CUL 3.4-2: The Project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

No demolition or construction-related ground disturbance would occur under Alternative 1, nor would any operational activities occur except those required to respond to continued deterioration of the site. Three archaeological resources that qualify as historical resources under CEQA—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site)—are located within the Project area. Because these three archaeological resources qualify as historical resources under CEQA, they would not be considered or evaluated as unique archaeological resources since they already qualify as significant under CEQA. Furthermore, Alternative 1 does not include any ground-disturbing activities that could potentially affect unknown archaeological resources that may qualify as unique archaeological resources. Therefore, Alternative 1 would result in no construction-related or operational impacts on unknown archaeological resources that would qualify as unique archaeological resources under CEQA.

Alternatives 2, 3, and 4 (Build Alternatives)

Construction and Operation

None of the three known archaeological resources located within the Project area—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site)—qualify as unique archaeological resources under CEQA. However, ground-disturbing activities associated with construction and operations under the Build Alternatives could potentially affect unknown archaeological resources that may qualify as unique archaeological resources. Implementation of **Mitigation Measures CUL-1 through CUL-5** would reduce construction-related and operational impacts on unique archaeological resources to a less-than-significant level. The Proposed Project would retain a soil cap of 2–4 feet above any sensitive resource areas within the proposed grading area; however, disturbance to the area under Alternative 4 could potentially affect some resources. Wastewater Management Options Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Restoration of portions of the Topanga Ranch Motel would require either on-site seepage pits or a sewer connection. All construction and operation activities would occur within State Parks property or within the Caltrans right-of-way. Grading and other construction activities associated with proposed on-site wastewater systems could potentially affect unknown archeological resources that may qualify as unique archaeological resources. Implementation of

Mitigation Measures CUL-1 through CUL-5 would reduce impacts to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures CUL-1 through CUL-5**

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Future visitor services, including maintenance activities involving ground-disturbing activities, could potentially affect unique archaeological resources. Implementation of **Mitigation Measures CUL-1 through CUL-5** would reduce impacts on unique archaeological resources to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures CUL-1 through CUL-5**

Significance Determination

Less than Significant with Mitigation Incorporated

Human Remains

CUL 3.4-3: The Project could disturb human remains, including those interred outside of formal cemeteries. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

No formal cemeteries are located within the Project area. However, one archaeological resource, P-19-000133 (ethnohistoric site), has been reported to contain human remains. Alternative 1 would not involve any ground disturbance during construction or operations. Therefore, Alternative 1 would result in no disturbance to human remains, including those interred outside of formal cemeteries.

Alternatives 2, 3, and 4 (Build Alternatives)

Construction and Operations

One archaeological resource within the Project area, P-19-000133 (ethnohistoric site), has been reported to contain human remains. Furthermore, ground-disturbing activities associated with construction and operations of the Build Alternatives could potentially affect unknown human remains, although grading for the lagoon expansion would include the retention of a soil cap 2–4 feet thick over potential resources to avoid impacts on any sensitive resources. Implementation of **Mitigation Measure CUL-6** as well as **Mitigation Measures CUL-1 through CUL-5** would reduce impacts of construction-related and operational disturbances to human remains, including those interred outside of formal cemeteries, to a less-than-significant level.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Redevelopment of portions of the Topanga Ranch Motel would require either on-site seepage pits or a sewer connection. All construction and operation activities would occur within State Parks property or within the Caltrans right-of-way. Grading and other construction activities associated with proposed on-site wastewater systems could potentially affect unknown human remains. Implementation of **Mitigation Measures CUL-1 through CUL-6** would reduce impacts to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures CUL-1 through CUL-5**.

CUL-6: Human Remains. In the event human remains are encountered, pursuant to California Health and Safety Code Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to PRC Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision about the treatment and disposition has been made. If the County Coroner determines the remains to be Native American, the NAHC must be contacted within 24 hours. The NAHC must then immediately identify the Most Likely Descendant (MLD) upon receiving notification of the discovery. The MLD shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in PRC Section 5097.98 and consistent with **Mitigation Measure CUL-1** (Historical Resources Monitoring and Treatment Plan).

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Future visitor services that would include maintenance activities involving ground-disturbing activities could potentially affect unique archaeological resources. Implementation of **Mitigation Measures CUL-1 through CUL-6** would reduce impacts on unique archaeological resources to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measures CUL-1 through CUL-6**.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

CUL 3.4-4: The Project could result in cumulatively considerable impacts on cultural resources. Impacts would be significant and unavoidable.

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts vary based on the environmental resource under consideration. The geographic scope of analysis for cumulative cultural resources impacts is the Santa Monica Mountains Range.

As described below, the Build Alternatives (Alternatives 2, 3, and 4) would result in significant impacts on historic architectural resources that qualify as historical resources and could potentially result in significant impacts on archaeological resources that qualify as historical resources or unique archaeological resources.

Alternative 2 would result in significant impacts from the removal of the Topanga Ranch Motel (P-19-192464). Mitigation would be implemented to reduce impacts on this resource, but this would nonetheless contribute to a significant cumulative impact on historic architectural resources that qualify as historical resources under CEQA. The cumulative impact would remain significant and unavoidable even with implementation of **Mitigation Measures CUL-1 through CUL-5**.

Under Alternatives 3 and 4, the Topanga Ranch Motel (P-19-192464) would be restored in conformance with *The Secretary of Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* and **Mitigation Measures CUL-1 through CUL-5** would be implemented; therefore, this would not contribute to a significant cumulative impact. Under Alternatives 3 and 4, impacts on known archaeological resources that qualify as historical resources—P-19-000133 (ethnohistoric site), P-19-003756 (historic-period site), and P-19-003759 (multicomponent site)—and unknown archaeological resources that qualify as historical resources or unique archaeological resources would be mitigated through implementation of **Mitigation Measures CUL-1 through CUL-5** and these alternatives would not contribute to a significant cumulative impact. Impacts of potential disturbances to human remains interred outside a formal cemetery would be mitigated through implementation of **Mitigation Measure CUL-6** and these alternatives would not contribute to a significant cumulative impact.

Mitigation Measure

Implement **Mitigation Measures CUL-1 through CUL-5**.

Significance Determination

Alternative 2: Significant and Unavoidable; *Alternatives 3 and 4*: Less than Significant with Mitigation Incorporated

3.4.4 Summary of Impacts

Table 3.4-2 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to cultural resources. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.4-2
SUMMARY OF PROPOSED PROJECT IMPACTS ON CULTURAL RESOURCES**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
3.4-1: Historical Resources	Alternative 1 (No Project/No Build–Managed Decline)	None Required	NI
	Alternative 2 (Maximum Lagoon Habitat)	Mitigation Measures CUL-1 through CUL-5	SU
	Alternative 3 (Limited Lagoon Habitat)	Mitigation Measures CUL-1 through CUL-5	LTSM
	Alternative 4 (Maximum Managed Retreat)	Mitigation Measures CUL-1 through CUL-5	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measures CUL-1 through CUL-5	LTSM
3.4-2: Unique Archaeological Resources	Alternative 1 (No Project/No Build–Managed Decline)	None Required	NI
	Alternative 2 (Maximum Lagoon Habitat)	Mitigation Measures CUL-1 through CUL-5	LTSM
	Alternative 3 (Limited Lagoon Habitat)	Mitigation Measures CUL-1 through CUL-5	LTSM
	Alternative 4 (Maximum Managed Retreat)	Mitigation Measures CUL-1 through CUL-5	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measures CUL-1 through CUL-5	LTSM
3.4-3: Human Remains	Alternative 1 (No Project/No Build–Managed Decline)	None Required	NI
	Build Alternatives (Alternatives 2, 3, and 4)	Mitigation Measures CUL-1 through CUL-6	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measures CUL-1 through CUL-6	LTSM
3.4-4: Cumulative Impacts	Alternative 2	Mitigation Measures CUL-1 through CUL-6	SU
	Alternatives 3 and 4	Mitigation Measures CUL-1 through CUL-6	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

3.4.5 References

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3.5 Energy

This section evaluates the potential for impacts related to energy emitted by construction and operation of the Proposed Project. This section summarizes applicable regulations related to energy, describes existing electricity and energy conditions both regionally and in and around the Project area, and evaluates the potential impacts of the Proposed Project related to energy, including cumulative impacts.

3.5.1 Regulatory Setting

Federal

Energy Policy Act of 1992

The Energy Policy Act of 1992 was enacted to reduce U.S. dependence on foreign petroleum and improve air quality. This law includes several provisions intended to build inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The Energy Policy Act of 1992 requires certain federal, state, and local governments and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. Financial incentives are also included. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Energy Policy Act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

U.S. Department of Transportation, U.S. Department of Energy, and U.S. Environmental Protection Agency

On the federal level, the U.S. Department of Transportation, U.S. Department of Energy, and U.S. Environmental Protection Agency (USEPA) are three agencies with substantial influence over energy policies related to transportation fuels consumption. Generally, federal agencies influence transportation energy consumption by establishing and enforcing fuel economy standards for automobiles and light trucks, and by funding energy-related research and development projects and transportation infrastructure projects.

Established by Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduced energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) (an agency within the U.S. Department of Transportation) and USEPA jointly administered the CAFE standards. Congress has specified that CAFE standards must be set at the “maximum feasible level,” with consideration given to technological feasibility, economic practicality, the effects of other standards on fuel economy, and the need for the nation to conserve energy. The Safer Affordable

Fuel-Efficient (SAFE) Vehicles Rule maintains the 2020 CAFE and carbon dioxide (CO₂) standards for model years 2021–2026 (*Federal Register* [FR] Title 83, pages 42986–43500 [83 FR 42986–43500, August 24, 2018]). In 2019, USEPA published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards, which finalized the SAFE Vehicles Rule (84 FR 51310–51363, September 27, 2019).

On January 20, 2021, President Joe Biden issued Executive Order 13990, “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,” which directed USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the SAFE Vehicles Rule. On December 30, 2021, USEPA finalized the federal greenhouse gas (GHG) emissions standards for passenger and light trucks for model years 2023–2026 (86 FR 74434–74526, December 30, 2021). This rule prompts automakers to use clean technologies available today and incentivizes them to produce vehicles with zero- and near-zero emissions technology. The final rule revised the SAFE rules standards, beginning in model year 2023, and it increases in stringency year over year through model year 2026.

The GHG emissions standards finalized for model year 2026 established the most stringent GHG standards ever set for the light-duty vehicle sector. The final rule set a stringency increase for model year 2023 of almost 10 percent (compared to the SAFE rule standards of model year 2022), followed by stringency increases of 5 percent for model year 2024, 6.6 percent for model year 2025, and 10 percent for model year 2026. USEPA projects that the final standards will result in a reduction of 3.1 billion tons of GHG emissions by 2050 and will also reduce emissions of some criteria pollutants and air toxics. Refer to Section 3.7, *Greenhouse Gas Emissions/Climate Change*, of this Draft EIR for additional information.

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. In August 2016, USEPA and NHTSA finalized Phase 2 standards for medium- and heavy-duty vehicles through model year 2027 to improve fuel efficiency and cut carbon pollution. The Phase 2 heavy-duty truck standards require the phase-in of a 5 to 25 percent reduction in fuel consumptions over the 2017 baseline, depending on the compliance year and vehicle type.

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective to restore wetlands/lagoons and estuaries in the “Actions Common to All Alternatives” section, and it specifically mentions Topanga Creek and Lagoon (National Park Service 2002).

State

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that

constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. The following policies are relevant to the Proposed Project:

Section 30253 Minimization of adverse impacts. New development shall do all of the following: ... (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development and (4) Minimize energy consumption and vehicle miles traveled.

California Building Standards Code (Title 24, Parts 6, 8, and 11)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR] Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (known as the “Title 24 standards”) are the 2022 Title 24 standards, which became effective in January 2023. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more (CEC 2022a).

The California Historical Building Code (CCR Title 24, Part 8) applies to qualified historical buildings and structures. The purpose of the California Historical Building Code is to provide regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historical Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide access for persons with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

The California Green Building Standards Code (CCR Title 24, Part 11) is commonly referred to as the “CALGreen Code.” The 2022 CALGreen Code, which became effective January 1, 2023, includes mandatory measures for new residential and nonresidential development related to site development, energy efficiency, water efficiency, and conservation; material conservation and resource efficiency; and environmental quality (CBSC 2022). For example, several definitions related to energy that were added or revised affect electric vehicle (EV) chargers and charging, and hot water recirculation systems. For new multifamily dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification. For nonresidential mandatory measures, Table 5.106.5.3.3 of the CALGreen Code, identifying the number of required EV charging spaces, has been revised in its entirety (CBSC 2022).

California Historical Building Code

The California Historical Building Code is defined in Sections 18950–18961 of Division 13, Part 2.7 of the Health and Safety Code. The California Historical Building Code is intended to save California’s architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing historic buildings. The California Historical Building Code

provides alternative building regulations for permitting repairs, alterations, and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use, or continued use of a “qualified historical building or structure.” Used in conjunction with the Secretary of the Interior Standards, The California Historical Building Code ensures the appropriate rehabilitation and restoration of California’s valuable historical resources such as the Topanga Ranch Motel.

California Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations (20 CCR Sections 1601–1608) took effect February 13, 2013. The regulations include standards for both federally regulated and non-federally regulated appliances.

Renewables Portfolio Standard

The State of California has adopted regulations to increase the proportion of electricity from renewable sources. In 2008, Executive Order S-14-08 expanded the state’s Renewable Portfolio Standard (RPS) goal to 33 percent renewable power by 2020. In 2009, Executive Order S-21-09 directed the California Air Resources Board (CARB) (under its Assembly Bill [AB] 32 authority; refer to Section 3.2, *Air Quality*) to enact regulations to help the state meet the 2020 goal of 33 percent renewable energy. The RPS goal of 33 percent by 2020 was codified with the passage of Senate Bill (SB) X1-2. This new RPS applied to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. SB 350 (Chapter 547, Statutes of 2015) further increased the RPS to 50 percent by 2030, including interim targets of 40 percent by 2024 and 45 percent by 2027.

SB 100, enacted in 2018, increased California’s RPS still further. SB 100 requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030. It also requires that CARB plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS program. CPUC’s responsibilities are to:

- (1) Determine annual procurement targets and enforce compliance.
- (2) Review and approve each investor-owned utility’s renewable energy procurement plan.
- (3) Review contracts for RPS-eligible energy.
- (4) Establish the standard terms and conditions used in contracts for eligible renewable energy.

Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state’s electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies;

enhance the state's economy; and protect public health and safety (Public Resources Code Section 25301[a]). The Integrated Energy Policy Report provides the results of the CEC's assessments related to energy sector trends, building decarbonization and energy efficiency, zero-emissions vehicles (ZEVs), energy equity, climate change adaptation, electricity reliability in Southern California, natural gas assessment, and forecasts of electricity, natural gas, and transportation energy demands.

Assembly Bill 1493

In response to the transportation sector's large share of California's CO₂ emissions, AB 1493 (commonly referred to as the "Pavley Standards"), enacted on July 22, 2002, required CARB to set GHG emission standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is noncommercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025 (CARB 2022a) (USEPA and NHTSA 2012).

As discussed above, in September 2019, USEPA published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards, which finalized the SAFE Vehicles Rule (84 FR 51310–51363, September 27, 2019) to maintain the vehicle miles per gallon standards applicable in model year 2020 for model years 2021–2026. In November 2019, California and 23 other states and environmental groups filed a petition in U.S. District Court in Washington, D.C., for USEPA to reconsider the published rule. In response, the newly inaugurated President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis" (January 20, 2021).

California Air Resources Board

Advanced Clean Cars Program

In 2012, CARB adopted the Advanced Clean Cars emissions control program, which is closely associated with the emissions standards for passenger vehicles and light-duty trucks discussed above (CARB 2022a). The program requires an increase in the number of ZEV models for years 2015–2025 to control smog, soot, and GHG emissions. By 2025, ZEVs must be 22 percent of large-volume manufacturers' overall production (CARB 2022b). This program includes the Low-Emissions Vehicle regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell EVs) with the provision to produce plug-in hybrid electric vehicles between 2018 and 2025.

Advanced Clean Trucks Program

The Advanced Clean Trucks regulations were approved on June 25, 2020. These regulations require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to reduce emissions of oxides of nitrogen (NO_x) and GHGs through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, "Promoting the

development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, SB 350, and AB 32” (CARB 2022c).

The percentage of zero-emissions truck sales is required to increase every year until 2035, when sales will need to be 55 percent of sales of Classes 2b–3 trucks (light/medium- and medium-duty trucks), 75 percent of sales of Classes 4–8 straight trucks (medium- to heavy-duty trucks), and 40 percent of sales of truck tractors (heavy-duty trucks weighing 33,001 pounds or greater). Additionally, large fleet operators (with 50 or more trucks) will be required to report information about shipments and services and their existing fleet operations.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (13 CCR Section 2485 and 17 CCR Section 93115). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. Although the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

Sustainable Communities Strategy

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for developing regional targets to reduce passenger-vehicle GHG emissions, was enacted on September 30, 2008. SB 375 required CARB, in consultation with the state’s metropolitan planning organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for the Southern California Association of Governments (SCAG), the metropolitan planning organization for the region in which Los Angeles County is located (SCAG 2022). Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and Low Carbon Fuel Standard regulations.

Under SB 375, the reduction target must be incorporated within each region’s regional transportation plan (RTP), which is used for long-term transportation planning, in a sustainable community’s strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plans and zoning codes) are not required to be consistent with either the RTP or SCS. See the detailed discussion of SCAG’s latest RTP/SCS below.

Sustainable Freight Action Plan

Executive Order B-32-15 directed the State of California to establish targets to improve freight efficiency, transition to zero-emissions technologies, and increase the competitiveness of California's freight transport system, including warehouses and distribution centers. The targets are not mandates, but rather aspirational measures of progress toward sustainability for the state to meet and try to exceed. The targets include:

- (1) **System Efficiency Target:** Improve freight system efficiency by 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030.
- (2) **Transition to Zero-Emissions Technology Target:** Deploy over 100,000 freight vehicles and equipment capable of zero-emissions operation and maximize near-zero-emissions freight vehicles and equipment powered by renewable energy by 2030.
- (3) **Increased Competitiveness and Economic Growth Targets:** Establish a target or targets for increased state competitiveness and future economic growth within the freight and goods movement industry based on a suite of common-sense economic competitiveness and growth metrics and models developed by a working group composed of economists, experts, and industry. These targets and tools will support flexibility, efficiency, investment, and best business practices through state policies and programs that create a positive environment for growing freight volumes and jobs, while working with industry to mitigate potential negative economic impacts. The targets and tools will also help evaluate the strategies proposed under the Action Plan to ensure consideration of the impacts of actions on economic growth and competitiveness throughout the development and implementation process.

Regional and Local

Southern California Association of Governments

Los Angeles County is located within the planning jurisdiction of SCAG. Pursuant to SB 375, SCAG prepared its first-ever SCS, which was included in the 2012–2035 RTP/SCS that was adopted by SCAG in April 2012. The goals and policies of that SCS demonstrated a reduction in per capita vehicle miles traveled (VMT) (and a corresponding decrease in per capita transportation-related fuel consumption). They focused on transportation and land use planning strategies that included encouraging infill projects, locating residents closer to where they work and play, and designing communities with access to high-quality transit services. In April 2016, SCAG adopted the 2016–2040 RTP/SCS, which furthered the goals of the 2012–2035 RTP/SCS.

On September 3, 2020, SCAG's Regional Council formally adopted the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy* (2045 RTP/SCS) also known as "Connect SoCal," which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020). The 2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving reductions in per capita transportation GHG emissions of 8 percent by 2020 and 19 percent by 2035 compared to the 2005 level (SCAG 2020). Compliance with and implementation of the 2045 RTP/SCS policies and strategies would have the co-benefits of reducing per capita emissions of criteria air pollutants (e.g., nitrogen dioxide, carbon monoxide) associated with reduced per capita VMT and corresponding decreases

in per capita transportation-related fuel consumption. Information regarding the applicable RTP/SCS for the region in which the Project area is located is provided below.

South Coast Air Quality Management District

As discussed in Section 3.2, *Air Quality*, of this Draft EIR, SCAQMD is responsible for air quality planning in the South Coast Air Basin (where Los Angeles County is located) and for developing rules and regulations to bring the South Coast Air Basin into attainment of the ambient air quality standards. As part of its efforts to reduce local air pollution, SCAQMD has developed programs to promote energy conservation, low-carbon fuel technologies (natural gas vehicles and electric-hybrid, hydraulic-hybrid, and battery-electric vehicles), renewable energy, VMT reduction programs, and market incentive programs.

Clean Cities Program

The U.S. Department of Energy's Clean Cities Program promotes voluntary, locally based government/industry partnerships to expand the use of alternatives to gasoline and diesel fuel by accelerating the deployment of alternative fuel vehicles, or AFVs, and building a local AFV refueling infrastructure. The mission of the Clean Cities Program is to advance the nation's economic, environmental, and energy security by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption. The Clean Cities Program carries out this mission through a network of more than 80 volunteer coalitions, which develop public/private partnerships to promote alternative fuels and vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction (DOE 2022).

The Southern California/SCAG Clean Cities Coalition was first designated by the U.S. Department of Energy on March 1, 1996. SCAG directly administers the SCAG Clean Cities Program. This coalition supports government and industry partnerships to expand AFVs and infrastructure throughout the SCAG region.

Unincorporated Los Angeles County Community Climate Action Plan (CCAP) 2020

The *Unincorporated Los Angeles County Community Climate Action Plan 2020* (2020 CCAP), adopted in 2015, was a component of the Air Quality Element of the County's General Plan until it expired in 2020. To reduce impacts of climate change, the 2020 CCAP set a target to reduce GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020 (LACDRP 2015).

The 2020 CCAP contained 26 local actions related to green buildings and energy; land use and transportation; water conservation and wastewater; waste reduction, reuse, and recycling; and land conservation and tree planting. It also included 17 reduction strategies from the following areas: transportation; stationary energy; waste; industrial process and product use; and agriculture, forestry, and other land use. These actions would reduce unincorporated Los Angeles County's GHG emissions but would also reduce energy consumption.

Draft 2045 Climate Action Plan—Los Angeles County

In April 2022, the County released a Draft 2045 Climate Action Plan (CAP). The plan has not yet been adopted. The Draft 2045 CAP, an update to the 2020 CCAP, sets new GHG emissions reduction targets for 2030 and 2035 consistent with state goals, and sets a long-term aspirational goal of carbon neutrality by 2045 (County of Los Angeles 2022). The Draft 2045 CAP also provides a GHG emissions inventory from community-wide activities in unincorporated Los Angeles County. The Draft 2045 CAP includes 10 strategies and 25 measures that, when combined, put the unincorporated county on the path toward carbon neutrality. The five categories for GHG emissions reduction are (1) energy supply, (2) transportation, (3) building energy and water, (4) waste, and (5) agriculture, forestry, and other land uses. Under these categories, there are 10 strategies:

- (1) Decarbonize the energy supply.
- (2) Increase densities and diversity of land uses near transit.
- (3) Reduce single-occupancy vehicle trips.
- (4) Institutionalize low-carbon transportation.
- (5) Decarbonize buildings.
- (6) Improve the efficiency of existing building energy use.
- (7) Conserve water.
- (8) Minimize waste and recover energy and materials from waste stream.
- (9) Conserve forests and working lands.
- (10) Sequester carbon and implement sustainable agriculture.

These 10 categories are broken down further into measures and actions that will achieve the GHG emissions reductions outlined in the Draft 2045 CAP. Although these actions would reduce the county's GHG emissions, they would also reduce energy consumption.

Los Angeles Countywide Sustainability Plan

The *Los Angeles Countywide Sustainability Plan*, also named “OurCounty,” is a regional sustainability plan for Los Angeles that includes the following goals relevant to the Proposed Project (LACSO 2019):

Goal 2: Buildings and infrastructure that support human health and resilience.

Goal 7: A fossil fuel-free LA County.

Goal 8: A convenient, safe, clean, and affordable transportation system that enhances mobility while reducing car dependency.

Goal 9: Sustainable production and consumption of resources.

Los Angeles County Green Building Standards

In April 2016, the County amended the County Code to include Title 31, the Green Building Standards Code. The Green Building Standards Code incorporates by reference standards from

the CALGreen Code (described above) and supersedes the green building ordinance and the drought tolerant landscaping ordinance in Title 22 of the County Code. The Green Building Standards Code includes mandatory residential and nonresidential measures related to low impact development, EV charging infrastructure, cool roof installations, and construction waste management practices (County Code Title 31, Chapters 4 and 5).

Topanga State Park General Plan

The Proposed Project falls under the Topanga State Park General Plan (State Parks 2012), which discusses alternative vehicles. The general plan has the following Parking/Public Transportation Guidelines to reduce VMT:

1. Work cooperatively with SMMC/MRCA [Santa Monica Mountains Conservancy/Mountains Recreation and Conservation Authority], Los Angeles Beaches and Harbors [DBH], and Caltrans to explore joint parking facilities, and to ensure adequate parking is provided for both the Park and beach use, especially along the Park boundary that abuts to Pacific Coast Highway.
2. Encourage public and group transportation through educational and signage programs at the Park's main access points.
 - a. If a public transportation route or bus stop does not exist near a proposed visitor-use area, but a major public route exists, [State Parks] should work cooperatively with [SCAG], which functions as a regional transportation planning agency in the Los Angeles region along with the City/County of Los Angeles, to establish a route or stop.
 - b. With public funding limited, the preceding goal may not be feasible in the near future, and as such, the aspect of public/private partnerships of public transportation proposals should be explored, such as demonstration or pilot shuttle bus programs.
3. When feasible, provide electrical vehicle recharging stations by working cooperatively with the appropriate power agencies.

Santa Monica Mountains Local Coastal Program

The Project area is located within the California Coastal Zone, and all developments are subject to the regulations of the Santa Monica Mountains Local Coastal Program (LCP). The LCP was certified by the California Coastal Commission (CCC) in 2014 and grants the County authority to review and approve coastal development permits at the local level. The County's LCP includes a Land Use Plan (LUP) to regulate land use and a Local Implementation Plan for zoning (County of Los Angeles 2018). Development within a coastal zone may not commence until a coastal development permit has been issued by the CCC or a local government that has a CCC-certified LCP. The LUP identifies the following goals and policies that pertain to energy by reducing VMT and are relevant to the Proposed Project:

Goal CI-1: A transportation system consistent with the area's rural and scenic qualities and environmental threshold carrying capacities.

CI-7 Emphasize other transportation system management solutions, including improved public transit and non-motorized transportation, such as bicycles.

Goal CI-3: Alternative travel modes to the single-occupant automobile for local, commuter, and recreational trips.

CI-23 Encourage transportation alternatives, including public transit service, staging areas, and park-and-ride lots, both within the region and from metropolitan Los Angeles to the area's major parks and recreation areas.

CI-24 The extension of public transit facilities and services, including shuttle programs, to maximize public access and recreation opportunities shall be encouraged, where feasible.

CI-25 Augment the system of beach buses to ensure that opportunities are available year-round to access both beach and inland recreational sites and parks as demand increases.

CI-26 Encourage the use of locally based contractors, service providers, and laborers rather than those that need to travel long distances to work sites in the LUP area.

CI-27 Assist local employers in transporting employees from homes and worksites in the Santa Monica Mountains, thereby reducing the need for additional vehicle trips.

CI-28 Work with surrounding cities and transit service providers to offer commuter bus services between inland communities and the City of Malibu.

CI-29 Require new development to provide for public transportation needs on existing roadways, where appropriate, when acquisition and improvement activities occur. Cooperate with adjacent jurisdictions to develop and incorporate this and other public transit-friendly design features into new projects and other discretionary project applications.

CI-30 Incorporate bike lanes and/or bike use signage into local road designs wherever feasible and safe.

CI-31 Ensure that improvements to any roadway or trail containing a bikeway and/or trail do not adversely affect the provision of bicycle or trail use.

CI-32 Support the region-wide expansion of alternative transportation methods, including rail lines, transitways, bike paths, and rapid bus systems, where consistent with the policies of this LUP.

3.5.2 Affected Environment

Existing Conditions

Electricity

Electricity, a consumptive utility, is a human-made resource. The production of electricity requires the consumption or conversion of energy resources, such as water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a *power grid*.

Energy capacity, or electrical power, is generally measured in watts, while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 watts, the energy

required to keep the bulb on for one hour would be 100 watt-hours. If 10 100-watt bulbs were on for one hour, the energy required would be 1,000 watt-hours or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million watts, while energy usage is measured in megawatt-hours (MWh) or in gigawatt-hours, which is one billion watt-hours.

Electricity is provided to the Project site by Southern California Edison (SCE). SCE provides electrical service to approximately 15 million people, 15 counties, 180 incorporated cities, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area across Central and Southern California, an area bounded by Mono County to the north, Ventura County to the west, San Bernardino County to the east, and Orange County to the south (SCE 2022). SCE produces and purchases energy from a mix of conventional and renewable generating sources.

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW); coal; gas; nuclear; and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. The annual electricity sale to customers in 2021 was approximately 82,048,000 MWh (Edison and SCE 2021).

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs; however, California relies upon out-of-state imports for nearly 90 percent of its natural gas supply (CEC 2022b). A majority of natural gas consumed in California is for electricity generation, followed by industrial, residential, and commercial use (CEC 2022c). Among the energy commodities consumed in California, natural gas accounts for one-third of total primary energy consumption in terms of British thermal units (BTU) (CEC 2022b). Natural gas is typically measured in terms of cubic feet or BTU.

Natural gas is provided to the Project site by Southern California Gas Company (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.8 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout Central and Southern California, from the city of Visalia to the Mexican border (SoCal Gas 2022).

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and western Canada as well as local California supplies (California Gas and Electric Utilities 2020). The traditional, southwestern U.S. sources of natural gas supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport (California Gas and Electric Utilities 2020).

The annual natural gas sale to customers in 2020 was approximately 888,775 million cubic feet (California Gas and Electric Utilities 2021).

Transportation Energy

According to the CEC, on a carbon dioxide equivalent basis, transportation and fuel production accounted for about 51 percent of California's total GHG emissions in 2018 (CEC 2021a). In 2020 (the most recent year for which data are available), California consumed 12.6 billion gallons of gasoline and 3.6 billion gallons of diesel fuel (CEC 2021b). Petroleum-based fuels account for more than 90 percent of California's transportation fuel use (CEC 2016). However, the state is now working on developing flexible strategies to reduce petroleum use. California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT. The CEC predicts that the demand for gasoline and transportation fossil fuels in general will continue to decline over the next 10 years, primarily as a result of improvements in fuel efficiency and increased electrification (CEC 2021a). According to fuel sales data from the CEC, fuel consumption in Los Angeles County in 2020 was approximately 2.8 billion gallons of gasoline and 0.61 billion gallons of diesel fuel (CEC 2021b).

Existing Site Energy Demand

The Project area includes Topanga Creek, Topanga Lagoon, the existing PCH bridge, and visitor services such as parking, a lifeguard and public restroom building, a State Parks staff residence, restaurants, and other business leases. Everyday operational activities at these businesses result in the use of transportation energy from vehicle trips and landscaping equipment, on-site combustion of natural gas for heating and cooking, and on-site electrical usage from lights and appliances. However, data are not obtainable for the exact activity level (i.e., utility consumption, trip generation) and building energy standards for each business use. Therefore, existing energy usage estimates were not modeled.

3.5.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to energy. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. (Refer to Impact ENERGY 3.7-1.)
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Refer to Impact ENERGY 3.7-2.)
- Result in cumulatively considerable impacts to energy. (Refer to Impact ENERGY 3.7-3.)

Methodology

This analysis addresses the Proposed Project's potential energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation of the Proposed Project is assessed. Specific analysis methodologies are discussed below. Energy calculations are provided in **Appendix N** of this Draft EIR and are based on the same assumptions used in Section 3.2, *Air Quality*, and Section 3.7, *Greenhouse Gas Emissions/Climate Change*, of this Draft EIR.

Alternative 4 and certain elements of Alternative 2 were chosen for a quantitative construction analysis because they would utilize the most equipment that would operate simultaneously and would have the most overlapping construction phases. As shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 has the greatest amount of Topanga Lagoon grading acreage and Topanga Beach expansion acreage and the largest total number of parking spaces and would relocate PCH slightly to the north. As shown in Table 6-1, Alternative 2 has the greatest amount of Topanga Lagoon fill removal volume and debris volume, from the proposed removal of all 25 Topanga Ranch Motel structures. Therefore, Alternative 4 and the Alternative 2 elements discussed above were combined to identify a worst-case scenario. Alternative 3 has considerably less fill removal volume than either Alternative 2 or Alternative 4. As discussed in Chapter 2, *Project Description*, removal of the existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the three Build Alternatives. Thus, the analysis of the Build Alternatives accounts for the beneficial reuse options.

As discussed in Chapter 2, *Project Description*, the Build Alternatives (Alternatives 2, 3, and 4) include options for supporting wastewater needs. Once a final preferred alternative is selected, only one of the wastewater options would be carried forward to final design. For the purposes of this analysis, Option 1 (subsurface drip irrigation [SDI]) is accounted for in the Build Alternatives impact analysis. Option 2 (seepage pits) and Option 3 (sewer) are also analyzed to determine whether selecting either of these options would result in energy impacts.

Construction

For purposes of the analysis of energy use, as discussed above and as shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 combined with certain elements of Alternative 2 was modeled as a "worst-case" scenario and to represent the maximum impacts of the Build Alternatives. This scenario would have the greatest level of on-site construction activity and would provide the greatest amount of haul truck VMT from transporting the greatest amount of material.

As discussed in Chapter 2, *Project Description*, Alternative 4 would increase the lagoon restoration area to 7.6 wetted acres and would increase the beach from 4.18 acres to 4.56 acres. This Build Alternative would move the alignment of PCH north, would increase the bridge length to 460 feet, and would include 760 feet of 4- to 12-foot-high retaining walls along the northern shoulder of PCH. The existing lifeguard and public restroom building would be relocated upslope of its current location and north of the existing access road. The helipad and new parking garage would be relocated adjacent to it on the west. The Topanga Beach parking lot would be modified

to reduce spaces in the existing paved lot on the west end, expand spaces on the east end, and slightly shift the orientation of the lot shape to accommodate a new access road to the beach, lifeguard building, garage, Americans with Disabilities Act parking, and helipad. Additional parking spaces would be added on the west edge of the Project site where there are no spaces currently. The total graded area would be 14.4 acres. Additionally, a 91-foot-long, 4- to 6-foot-tall concrete masonry unit (CMU) retaining wall would be needed on the south side of the bridge to support the slopes on the east side.

Aerially deposited lead (ADL) may be present in shallow soil along the shoulders of the roads due to the historical use as an automotive thoroughfare. For analysis purposes, it was assumed that the top 3 feet of soil below the pavement approaches to the bridge is ADL-contaminated soil. An estimated 26,000 cubic yards (CY) would be removed and replaced down to a depth of 3 feet based on the initial ADL evaluation data. Should lead be found to be present, these soils would be disposed of at a hazardous materials landfill. Soils removed below a depth of 3 feet in the roadway excavation are assumed to be clean based on soil characterization studies and do not require any special handling. The analysis assumes that these soils would be taken to the Kettleman City Landfill in the San Joaquin Valley.

Under Alternative 2, approximately 256,000 CY of soil would be removed from the existing fill areas to contour the new lagoon. All existing 25 structures of the Topanga Ranch Motel and all other buildings on State Parks property would be fully removed, generating an estimated 10,810 CY of debris that would need to be trucked away. Assuming the potential for asbestos, the energy analysis used this worst-case scenario with additional metrics from Alternative 4 to analyze the total energy demand. The future visitor services would be located at the Gateway Corner at the intersection of TCB and PCH. The one exception is that a maximum 2,400-square-foot (sf) lease could continue to exist at the current location of the Reel Inn restaurant just southeast of the historic motel. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. This assumes that development would be limited to roughly 5,500 sf of one-story structures: approximately 1,600 sf for an outdoor interpretive pavilion and approximately 2,900 sf of park facilities (such as park office/employee housing/maintenance storage). A small picnic area, a trailhead, and day-use parking would also be included. Additional day-use parking would be developed to the north on a 500-foot-long section along the western shoulder of TCB. This area was previously developed and would be located on existing fill.

As discussed in Chapter 2, *Project Description*, to ensure that the bridge and lagoon restoration portion of the Proposed Project would not constrain traffic during construction, a temporary bridge would be constructed on the coastal side of the existing bridge. The temporary bridge would accommodate two lanes of traffic while the new bridge is under construction. (Note: It may be possible to develop alternative strategies for maintaining access at all times for all four lanes in the later design development phase once a preferred alternative is selected.)

Construction of the Proposed Project would likely start in 2027 and last for up to five years. If, for site planning, financial, or other reasons, the onset of construction is delayed to a later date than

assumed in the modeling analysis, construction impacts would be similar to or less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is because state regulations require construction equipment fleet operators to phase in less-polluting heavy-duty equipment and trucks over time.

During construction, energy would be consumed primarily through the use of transportation fuels (e.g., diesel and gasoline) for haul trucks and heavy-duty construction equipment, and for travel by construction workers to and from the Project site. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the Project site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources. This analysis is based on estimated maximum construction activities; thus, for each phase of construction, it was assumed that all vehicles and equipment that could be used for that phase would be in simultaneous use all day and on every day of the phase.

Construction activities associated with wastewater Option 1 and Option 2 would occur at the same time as construction of the Build Alternatives; thus, construction activities would overlap. Option 3 would occur after completion of the Build Alternatives; thus, construction activities would not overlap. Wastewater Option 2 would require approximately three to six months and approximately 1,000 CY of excess fill material would be generated. All work and staging areas would be located on State Parks property. Wastewater Option 3 would require approximately one year, with the sewer alignment anticipated to run within the median of PCH between Coastline Drive and TCB and then cross PCH to shift to the north or south shoulder of PCH to connect to DBH and State Parks facilities. Approximately 1,000 CY of excess excavated material is anticipated.

For modeling purposes, the Proposed Project was analyzed to export approximately 283,000 CY of soil (combining elements from Alternative 4 and Alternative 2) and approximately 10,810 CY of demolition debris (asphalt, bridge, and general construction debris) from Alternative 2 for off-site disposal. Of the total excavation volume, it is assumed that the Proposed Project would haul approximately 26,000 CY of ADL-contaminated hazardous material and 10,810 CY of demolition debris from the site to a hazardous material disposal site located in Kettleman City, approximately 183 miles from the Project site.

Approximately 1,200 CY of the remaining material would be transported to either the Calabasas, Sunshine, or Scholl Canyon Landfill. Of these landfills, the Scholl Canyon Landfill is located the farthest from the Project site, at approximately 36.5 miles away. The remaining 256,000 CY of material would be transported to a nearshore placement site approximately 0.5 mile from the Project site. For the purposes of energy modeling, export trucks for 256,000 CY of material were assumed to travel to the Scholl Canyon Landfill, which would result in the greatest truck VMT and associated energy demand.

Electricity

Construction electricity was estimated for a temporary construction office, for construction equipment that would use electricity as an alternative to diesel fuel, and for water usage from dust control. The construction office was assumed to be a 1,000-sf trailer and was modeled using the California Emissions Estimator Model (CalEEMod). In addition, electricity from water conveyance for dust control was calculated based on the estimated exposed area and water needs to cover the area during construction activity. Default CalEEMod water electricity intensity factors were used to convert the volume of water needed to electricity demand from water conveyance.

Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas is not expected to be consumed in large quantities during Proposed Project construction. Therefore, natural gas associated with construction activities was not calculated.¹

Transportation Fuels

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in **Appendix N** of this Draft EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour from CARB's off-road emissions factor (OFFROAD) model. Fuel consumption from on-road construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the emissions modeling worksheets and CalEEMod construction output files. Total VMT for these on-road vehicles were then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC2021 model. EMFAC provides the total annual VMT, and fuel consumed for each vehicle type. CalEEMod assumed that trip lengths were used for worker commutes while vendor, management visits, concrete, and haul truck trips were taken from emissions modeling worksheets that used EMFAC2021 emission factors. CalEEMod Version 2022.1 was the version, construction worker trips were assumed to include a mix of light-duty gasoline automobiles and light-duty gasoline trucks. Construction vendor trucks were assumed to be a mix of medium-heavy-duty and heavy-duty diesel trucks and concrete and haul trucks were assumed to be heavy-duty diesel trucks. Refer to **Appendix N** of this Draft EIR for detailed energy calculations.

The energy usage required for construction has been estimated based on the number and types of construction equipment that would be used during Proposed Project construction by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). Energy for construction worker commute trips has been estimated based on the predicted number of workers for the various construction phases and the estimated VMT based on the conservative

¹ In general, natural gas would not be expected to be used, and this energy analysis assumes heavy-duty construction equipment is diesel-fueled, as is typically the case. However, natural gas-fueled heavy-duty construction equipment could be used to replace some diesel-fueled heavy-duty construction equipment. If this does occur, diesel fuel demand would be reduced slightly and replaced by a small amount of temporary natural gas demand. This would not substantially affect the energy analysis or conclusions provided herein.

values in the CalEEMod and EMFAC2021 models. The assessment also includes a discussion of the Proposed Project's compliance with relevant energy-related regulatory requirements that would minimize the amount of energy usage during construction. These measures are also discussed in Chapter 2, *Project Description*; in Section 3.2, *Air Quality*; and in Section 3.7, *Greenhouse Gas Emissions/Climate Change*, of this Draft EIR.

The construction equipment and haul trucks would likely be diesel-fueled, while the construction worker commute vehicles would primarily be gasoline-fueled. This assessment conservatively assumes that all heavy-duty construction equipment and haul trucks would be diesel-fueled. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB OFFROAD emissions model, which is a state-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC emissions model, which is a state-approved model for estimating emissions for on-road vehicles and trucks. Both OFFROAD and EMFAC are incorporated into CalEEMod. However, fuel consumption for worker, vendor, and concrete/haul trucks was calculated outside of CalEEMod using emission factors from EMFAC2021 to provide a more detailed and accurate account of truck fuel consumption.

Operation

Operation of the Proposed Project would require energy in the form of electricity and natural gas for building space and water heating, cooling, cooking, lighting, potable water, wastewater treatment, consumer electronics, and other energy needs. The Proposed Project would also require transportation fuels, primarily gasoline, for on-site landscaping equipment and vehicles traveling to and from the Project site. Operational energy impacts were assessed qualitatively based on the increase in energy demand compared to existing conditions.

Energy Resources

ENERGY 3.7-1: The Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, existing functions and conditions throughout the Project area would remain the same. Alternative 1 would not involve any construction or new operation that would consume energy resources. Alternative 1 would not involve any construction activities or operational changes to the existing PCH bridge, Topanga Lagoon, Topanga Beach, or visitor services. Thus, there would be no change to the lagoon footprint or habitat quality, and no new bridge would be constructed. Damage to the lifeguard and public restroom building from coastal erosion would continue to occur; the currently dilapidated Topanga Ranch Motel structures would continue to deteriorate without restoration; and existing nonconforming business leases and septic systems would remain in current operation but may be subject to future restriction or cessation of use through enforcement of recent statewide wastewater policies. No improvements to habitat would

occur. Sea level rise and coastal erosion would continue to reduce the available beach area, further damage existing facilities, and reduce available habitat for fish and wildlife. Therefore, Alternative 1 would have no impact or improvement with respect to the wasteful, inefficient, or unnecessary consumption of energy resources. Continued operational use of energy by existing facilities would be more than for any Build Alternative (Alternative 2, 3, or 4) because of the less efficient use of energy by the existing facilities.

There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel) and the eroding lifeguard and public restroom building, and potential advanced on-site wastewater treatment systems (AOWTS) upgrades. These activities would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than under any of the Build Alternatives. Impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources for construction would be less under Alternative 1 than under the Build Alternatives (Alternatives 2, 3, and 4).

Alternatives 2, 3, and 4 (Build Alternatives)

The Proposed Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity, natural gas, and transportation fuels (diesel and gasoline). For the purposes of analysis, Proposed Project maintenance would include activities such as repair of structures, landscaping, and architectural coatings. Energy usage related to Proposed Project maintenance activities are assumed to be included as part of Project operations.

Construction

During construction under Alternative 2, 3, or 4, energy would be consumed in the form of electricity on a limited basis to power lights and electronic equipment, and to convey water for dust control. Project construction would also consume energy in the form of petroleum-based fuels for the use of off-road construction vehicles and equipment on the Project site, travel by construction workers to and from the Project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and placement facilities).

Alternative 2 and Alternative 3 would require grading of a total of 13.6 acres and 12.8 acres, respectively, compared to 14.4 acres under Alternative 4. Under all Build Alternatives, Topanga Beach would be expanded from its current 4.18 acres. Alternatives 2 and 3 would expand the beach to 4.39 acres and 4.42 acres, respectively, compared to 4.56 acres for Alternative 4. All Build Alternatives would expand Topanga Lagoon. Alternative 2 would have the largest expansion of the lagoon wetted area, 9.5 acres, compared to 7.7 acres for Alternative 3 and 7.6 acres for Build Alternative 4. As such, Build Alternative 2 would also require the most fill removal and disposal, and Alternative 3 would require the least. Fill material would be either hauled by truck to the nearest accepting landfill or placed for nearshore disposal pending approval by the U.S. Army Corps of Engineers (USACE). If nearshore deposition is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse. The

volume of fill material removed to restore the lagoon would range from 256,000 CY for Alternative 2 to 166,000 CY for Alternative 4, and to a low of 210,000 CY for Alternative 3.

Alternatives 2 and 3 would lengthen the bridge to 460 feet and keep the alignment of PCH. Alternative 4 would change the alignment of PCH to the north, lengthen the bridge to 460 feet, and include construction of retaining walls. Under the Build Alternatives, approximately 10,810 CY (Alternative 2), 8,250 CY (Alternative 3), or 8,810 CY (Alternative 4) of construction debris from demolition of the bridge and structures including the Topanga Ranch Motel would be hauled off-site for placement. Removal of ADL-contaminated material to be transported to the Kettleman City Landfill would total 23,000 CY for Alternatives 2 and 3 and 26,000 CY for Alternative 4.

Fill material would be either hauled by truck to the nearest accepting landfill or placed for nearshore disposal pending approval by USACE. If nearshore placement is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse.

Alternatives 2 and 4 would demolish the lifeguard and public restroom building and relocate it directly upslope of its current location. The helipad and new two-car parking garage would be relocated adjacent to the lifeguard and public restroom building on the west. The existing parking lots would be modified. Alternative 3 would relocate the lifeguard and public restroom building directly upslope and to the east of its current location. The helipad would be relocated to the western edge of the parking lot and the new two-car parking garage would be located under the helipad at the beach access road level. Retaining walls would be needed to support the helipad on top of the garage (92 feet of CMU wall 8–10 feet tall underneath the south side, and 72 feet on the north side of the helipad) and a 192-foot-long, 4- to 6-foot-high wall to shore up the fill material supporting the remaining Topanga Ranch Motel units. Existing parking lots would be modified.

As discussed above under *Methodology*, Alternative 4 and certain elements of Alternative 2 were chosen for a quantitative construction analysis because they would use the most equipment operating simultaneously and would have the most overlapping construction phases. Although Alternative 4 would have less fill removal than Alternative 2, Alternative 2 would require moving more construction debris a longer distance; therefore, total truck trips were calculated using this worst-case scenario. Alternative 3 would have considerably less fill and debris removal than either Alternative 2 or Alternative 4, and thus, would have less construction energy demand.

Table 3.5-1 summarizes the annual average electricity, gasoline fuel, and diesel fuel estimated to be consumed during construction of the Proposed Project. As specified earlier, these figures represent a highly conservative estimate in that they assume the maximum volume of on-road and off-road construction equipment usage every day for each phase of construction.

**TABLE 3.5-1
SUMMARY OF ENERGY USE DURING PROJECT CONSTRUCTION**

Energy Type	Total Quantity	Annual Average Quantity during Construction
Electricity (kWh)		
Water Consumption	8,454	2,114
Lighting, Electric Equipment, and Other Construction Equipment Necessitating Electrical Power	163,857	40,936
Total Electricity	172,311	43,050
Gasoline (gallons)		
On-Road Construction Equipment	43,596	10,899
Off-Road Construction Equipment	0	0
Total Gasoline	43,596	10,899
Diesel (gallons)		
On-Road Construction Equipment	583,824	145,956
Off-Road Construction Equipment	142,736	35,684
Total Diesel	726,560	181,640
NOTES:		
kWh = kilowatt-hours		
^a Detailed calculations are provided in Appendix N of this Draft EIR.		
SOURCE: Data compiled by Environmental Science Associates in 2022 (refer to energy calculations provided in Appendix N of this Draft EIR).		

Table 3.5-2 summarizes the annual average electricity, gasoline fuel, and diesel fuel estimated to be consumed during construction of the Proposed Project. As specified earlier, these figures represent a highly conservative estimate in that they assume the maximum volume of on-road and off-road construction equipment usage every day for each phase of construction.

**TABLE 3.5-2
SUMMARY OF ENERGY USE DURING PROJECT CONSTRUCTION WITH WASTEWATER OPTION 2 OR OPTION 3**

Energy Type	Total Quantity	Annual Average Quantity During Construction
Electricity (kWh)		
Build Alternative (from Table 3.5-1)	172,199	43,050
<i>Wastewater Option 2</i>	<i>2,185</i>	<i>2,185</i>
<i>Wastewater Option 3</i>	<i>42,182</i>	<i>42,185</i>
Total Electricity (Max of Option 2 or Option 3)	214,381	85,232
Gasoline (gallons)		
Build Alternative (from Table 3.5-1)	43,596	10,899
<i>Wastewater Option 2</i>	<i>6,293</i>	<i>6,293</i>
<i>Wastewater Option 3</i>	<i>9,052</i>	<i>9,052</i>
Total Gasoline (Max of Option 2 or Option 3)	52,648	19,951

Energy Type	Total Quantity	Annual Average Quantity During Construction
Diesel (gallons)		
Build Alternative (from Table 3.5-1)	726,560	181,640
<i>Wastewater Option 2</i>	<i>9,108</i>	<i>9,108</i>
<i>Wastewater Option 3</i>	<i>35,419</i>	<i>35,419</i>
Total Diesel (Max of Option 2 or Option 3)	761,978	217,059

NOTES:

kWh = kilowatt-hours

^a Detailed calculations are provided in Appendix N of this Draft EIR.

SOURCE: Data compiled by Environmental Science Associates in 2023 (refer to energy calculations provided in Appendix N of this Draft EIR).

Electricity

During construction of the Proposed Project, electricity would be used to power lighting and electric equipment, and to supply and convey water for dust control and an on-site construction trailer. Electricity would be supplied to the Project site by SCE and would be obtained from the existing electrical lines in the area.

As shown in Table 3.5-1, annual average construction electricity usage would be approximately 43,050 kWh and would be within SCE's supply and infrastructure capabilities. As shown in Table 3.5-2, annual average construction electricity usage with either wastewater Option 2 or Option 3 would be up to approximately 42,185 kWh and would not be substantially different than the Build Alternatives with Option 1 and would be within SCE's supply and infrastructure capabilities.

The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short term and limited to working hours, would be reserved for necessary construction-related activities, and would end when the construction is over. When not in use, electrical equipment would be powered off to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related air pollutant and GHG emissions from more traditional construction-related energy in the form of diesel fuel. Therefore, impacts from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Natural Gas

Construction activities, including construction of the proposed bridge, typically do not involve the consumption of natural gas. Accordingly, natural gas would generally not be supplied to support construction activities; thus, no natural gas demand is expected to be generated by construction of the Proposed Project. However, should natural gas be required for any construction activities, it would be used in limited amounts and on a temporary basis, and would specifically be used to replace or offset diesel-fueled equipment; therefore, it would not result in a substantial ongoing

demand. Therefore, the impact from construction natural gas demand under Alternatives 2, 3, and 4 would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Transportation Energy

Table 3.5-1 reports the estimated amount of petroleum-based transportation energy that is expected to be consumed during Project construction. Energy calculations are provided in **Appendix N** of this Draft EIR. During construction of the Build Alternatives, maximum on- and off-road vehicles would consume an estimated annual average of approximately 10,899 gallons of gasoline and approximately 181,640 gallons of diesel. Project construction activities would last for approximately five years. For comparison purposes only, and not for the purpose of determining significance, fuel usage during construction of the Build Alternatives would represent approximately 0.0003 percent of the 2019 annual on-road gasoline-related energy consumption of approximately 3,559,000,000 gallons and 0.03 percent of the 2019 annual diesel fuel-related energy consumption of approximately 610,204,082 gallons in Los Angeles County (CEC 2021b). As shown in Table 3.5-2, annual average construction electricity usage with either wastewater Option 2 or Option 3 would be up to approximately 9,052 gallons of gasoline and approximately 35,419 gallons of diesel and would not be substantially different than the Build Alternatives with Option 1.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be extracted in the United States or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption (BP Global 2018).

Construction of the Proposed Project would utilize fuel-efficient equipment consistent with federal and state regulations, such as the fuel efficiency regulations in accordance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards and Advanced Clean Trucks Program, which would result in more efficient use of and subsequent lower consumption of transportation fuels. Construction equipment and vehicles would also be required to comply with anti-idling regulations in accordance with 13 CCR Section 2485, and fuel requirements in accordance with 17 CCR Section 93115. As such, construction of the Proposed Project would comply with regulatory measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While some of these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Based on the analysis above, construction of the Proposed Project would use energy only for necessary on-site activities and to transport construction materials and demolition debris to, from, and within the county. Idling restrictions and the use of cleaner, energy-efficient equipment and fuels would result in less fuel combustion and energy consumption, and thus would minimize construction-related energy use. Therefore, construction would not result in the wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

Operation

During operation of the Proposed Project, energy would be consumed for multiple purposes, such as on-road mobile sources (transportation fuel), area sources (landscape maintenance equipment and natural gas heating), energy (electricity and natural gas), water conveyance and wastewater treatment, and solid waste. Existing operations at the Project site including the lifeguard and public restroom building would be relocated, as would the helipad. All of the Build Alternatives would remove Topanga Ranch Motel structures (Alternative 2 would remove all 25 buildings; Alternative 3 would remove five buildings, and Alternative 4 would remove 10 buildings). All Build Alternatives would replace the existing lifeguard and public restroom building with new buildings of the same size, improving building energy efficiency. The future visitor services would be located at the Gateway Corner at the intersection of TCB and PCH, except that one concession could continue to exist at the current location of the Reel Inn restaurant just southeast of the historic motel. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. Although visitor services at the Gateway Corner and the proposed structures would require energy that is not currently being used, the uses would not be large, and the new structures would not use a significant amount of energy. The five operating businesses would be shut down, except for a concession facility located at the site of the current Reel Inn that could be kept under all Build Alternatives; therefore, Proposed Project energy usage would be less than existing usage. Because Proposed Project energy usage would be less than existing energy usage at the Project site, a qualitative analysis was conducted for operational energy use.

Electricity

Operation of the Proposed Project would generate demand for electricity resources, including electricity for water supply, conveyance, distribution, and treatment. Development of the Project may minimally increase existing demand for electricity service in the Project area, as some Proposed Project facilities would be new/restored development, but other currently operating businesses would no longer operate. Most existing services would continue under the Proposed Project but would just be relocated. SCE accounts for an increase in employment and housing to project electricity consumption. Existing buildings in the Project area that use electricity are already accounted for in SCE's projections. Because most of these uses would be relocated or removed, the Proposed Project is not expected to utilize a significant amount of new electricity.

SCE was required to procure at least 33 percent of its energy portfolio from renewable sources by 2020. With the passage of SB 100 in September 2018, SCE will be required to update its long-term plans to demonstrate compliance including providing 60 percent of its energy portfolio from renewable sources by December 31, 2030, and ultimately planning for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. SCE's current sources include biomass and biowaste, geothermal, eligible hydroelectric, solar, wind, large hydroelectric, nuclear, other, unspecified, and natural gas sources. Of these sources, SCE procured 43 percent of its overall energy mix from carbon-free sources and 35.3 percent from Renewable Portfolio Standard-eligible resources in 2020 (SCE 2021). These sources represent

the available renewable sources of energy that SCE would use to meet the Proposed Project's slight increase in operational energy demand.

The Proposed Project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance, which may include greater use of energy and water-efficient fixtures and fittings, energy-efficient mechanical systems, light pollution reduction, site development best practices, sub-metering, water-efficient landscapes, recycling, and superior weather resistance and moisture management. Compliance with this code would make the relocated facilities more energy and water efficient than they were previously, which would reduce the electrical demand of these facilities over existing conditions.

Natural Gas

The Proposed Project would not significantly increase the demand for natural gas resources over existing demand. The Proposed Project would comply with applicable Title 24 standards and CALGreen Code requirements. SoCalGas accounts for an increase in employment and housing to project natural gas consumption. Existing buildings in the Project area that use natural gas are already accounted for in SoCalGas projections. Because most of these uses would be relocated, the Proposed Project is not expected to use a significant amount of new natural gas. As would be the case for electricity, the Proposed Project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. As such, the Proposed Project would minimize its natural gas energy demand. Therefore, with the incorporation of these measures and features, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas.

Transportation Energy

During operation, Project-related vehicles traveling to and from the Project site would consume petroleum-based fuels. A majority of the vehicle fleet that would be used by Project visitors and employees would consist of light-duty automobiles and light-duty trucks, which are subject to fuel efficiency standards. The number of employees and visitors to the Project site is anticipated to be similar to the number of employees and visitors who currently use the existing facilities. The Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area, and they would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). In addition, EV supply equipment is proposed by SCE for the DBH beach lot, which would encourage the use of fuel-efficient (e.g., electric-powered) transportation vehicles.

The Proposed Project would benefit from fuel and automotive manufacturers' compliance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also indirectly benefit from the Pavley Standards, which are designed to reduce vehicular GHG emissions by mandating increasingly stringent emissions standards on new vehicles but would also result in fuel savings from more efficient engines.

Based on the above, the Proposed Project would minimize operational transportation fuel demand consistent with state, regional, and County goals. Therefore, operation of the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of transportation energy.

Wastewater Management Options

Both wastewater Option 1 (SDI) and Option 2 (seepage pits) would require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Implementation of either Option 1 or Option 2 would require the use of a pump system. Connection to the public sewer (Option 3) would involve the construction of an extension of the LACSD public sewer from existing facilities and would take a year to construct. The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible.

As stated above, the Proposed Project's construction and operational electric demand would not be significantly different than the existing electric demand because compliance with Title 24 standards and applicable CALGreen Code requirements for energy and water conservation measures would reduce energy usage and minimize energy demand over existing energy use. Therefore, with the incorporation of these measures and features, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction

During construction of future visitor services development, including the Gateway Corner, under Alternative 2, all 25 structures of the Topanga Ranch Motel and all other buildings on State Parks property would be demolished and removed. A 2,400-square-foot concession could be located at the location of the Reel Inn. Development of the Gateway Corner would potentially include 5,500 sf of one-story development: a 1,600-sf restroom/outdoor interpretive pavilion, a 1,000-sf employee residence, and a 2,900-sf maintenance/office facility. A small picnic area, a trailhead to the on-site loop trail, and day-use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. Alternatives 3 and 4 both include a 2,400-sf concession, located at the site of the current Reel Inn restaurant, that would be kept. All other on-site concessions and structures would be removed, and some minor development would be moved to Gateway Corner. Development at the Gateway Corner would be limited in size

and scale and could include an outdoor interpretive pavilion/restroom, a maintenance facility, a small picnic area, trailhead access, and day-use parking.

For purposes of analysis, as discussed above and as shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 combined with certain elements of Alternative 2 was modeled as a worst-case scenario and to represent the maximum impacts of the Build Alternatives. Table 3.5-1, above, summarizes estimated annual-average electricity, gasoline, and diesel fuel consumption during construction of the Proposed Project and future visitor services development. As specified earlier, these figures represent a highly conservative estimate in that they assume the maximum volume of on-road and off-road construction equipment usage every day for each phase of construction.

Electricity

During construction of the future visitor services development, which includes the Gateway Corner, electricity would be consumed on a limited basis to power lighting, electric equipment, and supply and convey water for dust control and for an on-site construction trailer. Electricity would be supplied to the future visitor services development site by SCE and would be obtained from the existing electrical lines in the area.

As shown in Table 3.5-1, annual-average electricity usage for construction of the Proposed Project and future visitor services development would be approximately 43,050 kWh and would be within SCE's supply and infrastructure capabilities. As shown in Table 3.5-2, annual-average construction electricity usage with either wastewater Option 2 (seepage pits) or Option 3 (sewer) would use up to approximately 42,185 kWh and would not be substantially different than usage under the Build Alternatives with Option 1 (SDI) and would be within SCE's supply and infrastructure capabilities. The electricity demand at any given time would vary throughout the construction period based on the activities performed and would cease upon completion of construction. Electricity use from construction would be short term and limited to working hours, would be reserved for necessary construction-related activities, and would end when the construction is over. When not in use, electric equipment would be powered off to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related emissions of air pollutants and GHGs from more traditional construction-related energy in the form of diesel fuel. Therefore, impacts from construction electrical demand for future visitor services development under the Build Alternatives would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Natural Gas

Construction activities typically do not involve the consumption of natural gas. Accordingly, natural gas would generally not be supplied to support Project construction activities; thus, construction of the future visitor services development is not expected to generate demand for natural gas. However, if natural gas is required for any construction activities, it would be used in limited amounts and on a temporary basis, specifically to replace or offset diesel-fueled equipment, and as such would not result in a substantial ongoing demand. Therefore, the impact from construction

natural gas demand for the future visitor services development would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Transportation Energy

Table 3.5-1 reports the estimated amount of petroleum-based transportation energy expected to be consumed during construction of the Build Alternatives with future visitor services development, which includes the Gateway Corner. Energy calculations are provided in **Appendix N** of this Draft EIR. During construction of the Build Alternatives with future visitor services development, on- and off-road vehicles would consume an estimated annual average of approximately 10,899 gallons of gasoline and approximately 181,640 gallons of diesel. Project construction activities would last for approximately five years. For comparison purposes only, and not for the purpose of determining significance, fuel usage during construction of the Build Alternatives would represent approximately 0.0003 percent of the 2019 annual on-road gasoline-related energy consumption of approximately 3,559,000,000 gallons and 0.03 percent of the 2019 annual diesel fuel-related energy consumption of approximately 610,204,082 gallons in Los Angeles County (CEC 2021b). As shown in Table 3.5-2, annual-average construction electricity usage with either wastewater Option 2 or Option 3 would total up to approximately 9,052 gallons of gasoline and approximately 35,419 gallons of diesel and would not be substantially different than the Build Alternatives with Option 1.

Construction of the future visitor services development would use fuel-efficient equipment consistent with federal and state regulations, such as the fuel efficiency regulations in accordance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards and Advanced Clean Trucks Program, which would result in more efficient use of transportation fuels (lower consumption). Construction equipment and vehicles would also be required to comply with anti-idling regulations in accordance with 13 CCR Section 2485, and with fuel requirements in accordance with 17 CCR Section 93115. As such, construction of the future visitor services development would comply with regulatory measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. Some of these regulations are intended to reduce construction emissions; however, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Based on the analysis above, construction of the future visitor services development would use energy only for necessary on-site activities and to transport construction materials and demolition debris to, from, and within the county. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment and fuels would result in less fuel combustion and energy consumption, and thus would minimize construction-related energy use. Therefore, construction of the future visitor services development under the Build Alternatives would not result in the wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

Operation

Electricity

Operation of the future visitor services development, which includes the Gateway Center, would result in demand for electricity resources including for water supply, conveyance, distribution, and treatment. SCE accounts for an increase in employment and housing to project electricity consumption. Existing buildings in the Project area that use electricity are already accounted for in SCE's projections. Depending on the alternative chosen, some existing facilities would be shut down and moved to the future visitor services development at Gateway Corner or kept in the renovated Topanga Ranch Motel buildings. New services could be located at either the Topanga Ranch Motel site or the Gateway Corner site. New services could include a small outdoor interpretive pavilion/restroom, a small picnic area, overnight accommodations, employee housing, park offices, maintenance, and a storage building. None of these services are growth inducing or would utilize a significant amount of electricity. As stated before, the five existing concession buildings would cease to operate, except that a concession facility located at the site of the current Reel Inn could be kept under all Build Alternatives, so the new facilities would use less electricity than they are already using. Thus, the future visitor services development is not expected to use a significant amount of new electricity.

Additionally, the future visitor services development would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance, which may include greater use of energy and water-efficient fixtures and fittings, energy-efficient mechanical systems, light pollution reduction, site development best practices, sub-metering, water-efficient landscapes, recycling, and superior weather resistance and moisture management. Compliance with this code would make the relocated/new facilities more energy and water efficient than the current facilities located on the Project site.

As stated above, operational electricity demand for the future visitor services development would not be significantly different than existing operational electricity demand because compliance with applicable Title 24 standards and CALGreen Code requirements for energy and water conservation measures would reduce energy usage and minimize energy demand. Therefore, with the incorporation of these measures and features, operation of the future visitor services development would not result in the wasteful, inefficient, or unnecessary consumption of electricity.

Natural Gas

The future visitor services development, which includes the Gateway Corner, would not significantly increase demand for natural gas resources over existing demand. The future visitor services development would comply with applicable Title 24 standards and CALGreen Code requirements. SoCalGas accounts for an increase in employment and housing to project natural gas consumption. Existing buildings in the Project area that use natural gas are already accounted for in SoCalGas' projections. The five existing concession buildings would be shut down and new services would be located in the future visitor services development either at the Topanga Ranch Motel site or at the new Gateway Corner. These new services are not expected to use a

significant amount of new natural gas. The future visitor services development would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. As such, the future visitor services development would minimize its natural gas energy demand. Therefore, with the incorporation of these measures and features, operation of the future visitor services development would not result in the wasteful, inefficient, or unnecessary consumption of natural gas.

Transportation Energy

During operation, vehicles traveling to and from the future visitor services development site would consume petroleum-based fuels. A majority of the vehicle fleet that would be used by future visitors and employees would consist of light-duty automobiles and light-duty trucks, which are subject to fuel efficiency standards. The number of employees and visitors to the future visitor services development is anticipated to be similar to the number of employees and visitors who currently use the existing facilities. The Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area, and they would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). In addition, EV supply equipment has been proposed by SCE for the DBH beach lot, which would encourage the use of fuel-efficient (e.g., electric-powered) transportation vehicles.

The future visitor services development would benefit from fuel and automotive manufacturers' compliance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, which would result in more efficient use of transportation fuels (lower consumption). Future visitor services development related vehicle trips would also indirectly benefit from the Pavley Standards, which are designed to reduce vehicular GHG emissions by mandating increasingly stringent emissions standards on new vehicles but would also result in fuel savings from more efficient engines.

Mitigation Measures

None Required

Significance Determination

Less than Significant

State or Local Plans

ENERGY 3.7-2: The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the Topanga Lagoon footprint or habitat quality, and no new PCH bridge would be constructed. This alternative would not involve substantial

construction or operation that would consume energy resources. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel) and eroding lifeguard and public restroom building, and potential AOWTS upgrades. These activities would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than under any of the Build Alternatives.

However, the existing buildings are old and do not currently meet regulatory plans for energy efficiency. Continued operational use of energy by existing facilities would be more than for any Build Alternative, given the less efficient use of energy by the existing facilities. Therefore, although Alternative 1 would have no impact or improvement with respect to conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency, impacts would be greater under Alternative 1 than under the Build Alternatives (Alternatives 2, 3, and 4).

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for a conflict with or obstruction of a state or local plan for renewable energy or energy efficiency adverse effects would be similar under all Build Alternatives, as described in the following sections.

Construction

As discussed below, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. With respect to truck fleet operators, the USEPA and NHTSA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles and were phased in for model years 2014–2018 to reduce fuel consumption 6–23 percent over the 2010 baseline, depending on the vehicle type (USEPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which were to be phased in during model years 2021–2027 and require the phase-in of a 5–25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (81 FR 73478–74274, October 25, 2016).

The energy modeling for trucks does not consider specific fuel reductions from these regulations, because they would apply to fleets as they incorporate newer trucks meeting the regulatory standards. However, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards. In addition, construction equipment and trucks must comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location, and with regulations phasing in off-road emission standards intended to increase energy savings through reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Based on the above, Proposed Project construction activities under all Build Alternatives would not conflict with energy conservation plans and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Operation

A detailed discussion comparing the Proposed Project with the applicable actions and strategies in the Los Angeles County Sustainability Plan is provided in Section 3.9, *Greenhouse Gas Emissions*. As discussed, the Proposed Project is designed in a manner that is consistent with and not in conflict with relevant energy conservation plans that are intended to encourage development that would result in the efficient use of energy resources. The Proposed Project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the Title 24 standards and the CALGreen Code, which have been incorporated into the County's Green Building Code as amended by the County.

Electricity and natural gas usage during Proposed Project operations would be minimized through incorporation of applicable Title 24 standards, applicable CALGreen Code requirements, and the Los Angeles County Green Building Code. The Proposed Project would also be consistent with and would not conflict with regional planning strategies that address energy conservation. With respect to operational transportation-related fuel usage, the Proposed Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption by private automobiles. The Project would also benefit from fuel and automotive manufacturers' compliance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also indirectly benefit from the Pavley Standards, which are designed to reduce vehicular GHG emissions by mandating increasingly stringent emissions standards on new vehicles but would also result in fuel savings from more efficient engines.

Wastewater Management Options

Wastewater Option 1 (SDI) and Option 2 (seepage pits) would require the excavation of approximately 1,000 CY of excess fill material and would be constructed concurrently with other Project elements over a three- to six-month period. Implementation of either Option 1 or 2 would require the use of a pump system. Connection to the public sewer (Option 3) would involve the construction of an extension of the LACSD public sewer from existing facilities and would take a year to construct. The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible.

The Proposed Project's design would comply with existing energy standards to reduce energy consumption. Therefore, the Proposed Project's Build Alternatives would not conflict with energy conservation plans and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction

Under Alternative 2, all 25 structures associated with the Topanga Ranch Motel would be removed. Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. As discussed below, the future visitor services development would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

With respect to truck fleet operators, USEPA and the NHTSA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles and were phased in for model years 2014–2018 to reduce fuel consumption 6–23 percent over the 2010 baseline, depending on the vehicle type (USEPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which were to be phased in during model years 2021–2027 and require the phase-in of a 5–25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (81 FR 73478–74274, October 25, 2016).

The energy modeling for trucks does not consider specific fuel reductions from these regulations, because they would apply to fleets as they incorporate newer trucks meeting the regulatory standards. However, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards. In addition, construction equipment and trucks must comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location, and with regulations phasing in off-road emission standards intended to increase energy savings through reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Based on the above, construction activities for future visitor services development under all Build Alternatives would not conflict with energy conservation plans and impacts would be less than significant.

Operation

A detailed discussion comparing the future visitor services development with the applicable actions and strategies in the Los Angeles County Sustainability Plan is provided in Section 3.9, *Greenhouse Gas Emissions/Climate Change*. As discussed, the future visitor services development is designed in a manner that is consistent with and not in conflict with relevant energy conservation plans that are intended to encourage development that would result in the efficient use of energy resources. The future visitor services development would comply with applicable regulatory requirements for the design of new buildings, including the provisions set

forth in the Title 24 standards and the CALGreen Code, which have been incorporated into the County's Green Building Code as amended by the County.

Electricity and natural gas usage during operations of the future visitor services development would be minimized through incorporation of applicable Title 24 standards, applicable CALGreen Code requirements, and the Los Angeles County Green Building Code. The future visitor services development would also be consistent with and would not conflict with regional planning strategies that address energy conservation. With respect to operational transportation-related fuel usage, the future visitor services development would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption by private automobiles. The future visitor services development would also benefit from fuel and automotive manufacturers' compliance with the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels. The future Topanga State Park Visitor Services design would comply with existing energy standards to reduce energy consumption. Therefore, the future visitor services development under all Build Alternatives would not conflict with energy conservation plans and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Cumulative Impacts

ENERGY 3.7-3: The Project would not result in cumulatively considerable impacts to energy. *Impacts would be less than significant.*

Cumulative effects could result when considering the effects of the Proposed Project in combination with the effects of other projects in the area. For this Draft EIR analysis, other past, present, and reasonably foreseeable future projects have been identified as shown in Table 3-1 of Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*. As described in Table 3-1, multiple projects are being constructed in the vicinity of the Project area. However, only one minor project is being constructed near the Project area, the PCH Signal System Improvements Project. The projects to be considered cumulatively with this Project are identified in **Chapter 3**. Based on available information, the nearest related project, Related Project No. 1, would have limited construction activities (e.g., adding cameras, replacing poles, completing street improvements).

Electricity

As described above, the Build Alternatives (Alternatives 2, 3, and 4) including future Topanga State Park visitor services would result in a less-than-significant impact related to electrical energy usage during construction and operation. Thus, although the Build Alternatives, including

future visitor services development, would result in the use of renewable and nonrenewable electricity resources during construction and operation, the Proposed Project's use of such resources would be on a relatively small scale and would be reduced by measures rendering the Proposed Project more energy efficient. The identified related projects are also not expected to increase electrical usage significantly because they are primarily construction projects, such as paving, signage, signal improvements, and shoring. Additionally, the related projects, like the Proposed Project, would be required to evaluate energy impacts during construction and operation related to the wasteful, inefficient, or unnecessary use of electricity; incorporate energy conservation features; comply with applicable regulations including the County's Green Building Code, the Title 24 standards, and the CALGreen Code; and incorporate mitigation measures as necessary under CEQA. Therefore, the Build Alternatives, including the future visitor services development and related projects, would comply with the energy conservation plans and efficiency standards required to ensure efficient energy use.

As described above, the Build Alternatives, including the future visitor services development, would result in a less-than-significant impact related to electrical energy usage during construction and operation, and the related projects would also not be expected to significantly increase the amount of electricity usage in the Project area. As such, the Proposed Project's impact, when considered together with the related projects, would not be cumulatively considerable and would not result in cumulatively significant impacts related to the wasteful, inefficient, or unnecessary use of electricity.

Natural Gas

As described above, the Build Alternatives, including the future visitor services development, would result in a less-than-significant impact related to natural gas energy usage during construction and operation. Buildout of the Proposed Project, including the future visitor services development, related projects, and additional forecasted growth in SoCalGas' service area, would cumulatively increase the demand for natural gas supplies and infrastructure capacity.

Although the Build Alternatives, including the future visitor services development, would result in the use of natural gas resources, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Proposed Project (including the future visitor services development) more energy-efficient, and would be consistent with regional and local growth expectations. The identified related projects are also not expected to increase natural gas usage significantly because they are primarily construction projects, such as paving, signage, signal improvements, and shoring. The related projects, like the Build Alternatives including the future visitor services development, would be required to evaluate natural gas impacts during construction and operation related to the wasteful, inefficient, or unnecessary use of natural gas; incorporate energy conservation features; comply with applicable regulations including the Los Angeles County Green Building Code, the Title 24 standards, and the CALGreen Code; and incorporate mitigation measures as necessary under CEQA.

For these reasons, the Build Alternatives, including the future visitor services development impacts, when considered together with the related projects, would not be cumulatively considerable and would not result in cumulatively significant impacts related to the wasteful, inefficient, or unnecessary use of natural gas.

Transportation Energy

Buildout of the Proposed Project, including the future visitor services development, related projects, and additional forecasted growth, would cumulatively increase the demand for transportation-related fuel in the state and region. Petroleum currently accounts for 90 percent of California’s transportation energy sources; however, over the last decade, the state has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT, which would reduce reliance on petroleum fuels.

As described above, the Build Alternatives, including the future visitor services development, would result in a less-than-significant impact related to transportation energy usage during construction and operation. The Build Alternatives would not provide new recreational facilities or substantial additional beach area that would cause additional visitors to travel to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). In addition, EV supply equipment is proposed by SCE for the DBH beach lot, which would encourage the use of fuel-efficient (e.g., electric-powered) transportation vehicles. The related projects would not be expected to significantly increase transportation energy usage because they are primarily construction projects, such as paving, signage, signal improvements, and shoring, which would not use transportation energy after construction.

For these reasons, the Build Alternatives, including the future visitor services development impacts, when considered together with the related projects, would not be cumulatively considerable and would not result in cumulatively significant impacts related to the wasteful, inefficient, or unnecessary use of transportation energy.

Mitigation Measures

None Required

Significance Determination

Less than Significant

3.5.4 Summary of Impacts

**TABLE 3.5-3
SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO ENERGY**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
ENERGY 3.5-1: Energy Resources	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
ENERGY 3.5-2: State or Local Plans	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
ENERGY 3.5-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	None Required	LTS

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less-than-Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

3.5.5 References

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3.6 Geology, Soils, Seismicity, Topography, and Paleontology

This section addresses potential impacts related to the geology, soils, and paleontological resources associated with construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to geology and soil hazards and paleontological resources; a description of the existing geology, soils, and paleontological resource conditions within the Project area; and an evaluation of the potential impacts of the Proposed Project related to geology, soils, and paleontological resources in the Project area and in the surrounding area, including cumulative impacts.

3.6.1 Regulatory Setting

Federal

National Pollutant Discharge Elimination System Construction General Permit

The National Pollutant Discharge Elimination System Construction General Permit (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ) regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires the development and implementation of a storm water pollution prevention plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from entering stormwater and moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

In the Project area, the Construction General Permit is implemented and enforced by the Los Angeles Regional Water Quality Control Board (RWQCB), which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the RWQCB of violations or incidents of non-compliance and submit annual reports identifying deficiencies in the BMPs and explaining how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and

implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

Federal Antiquities Act

A variety of federal statutes specifically address paleontological resources. They are generally applicable to a project if that project includes federally owned or federally managed lands or involves a federal agency license, permit, approval, or funding. The first of these is the Antiquities Act of 1906 (United States Code Title 54, Sections 320301–320303 [54 USC 320301–320303] and 18 USC 1866[b]), which calls for protection of historic landmarks, historic and prehistoric structures, as well as other objects of historic or scientific interest on federally administered lands, the latter of which would include fossils. The Antiquities Act both establishes a permit system for the disturbance of any object of antiquity on federal land and sets criminal sanctions for violation of these requirements. The Antiquities Act was extended to specifically apply to paleontological resources by the Federal-Aid Highways Act of 1958.

More recent federal statutes that address the preservation of paleontological resources include the National Environmental Policy Act (NEPA), which requires the consideration of important natural aspects of national heritage when assessing the environmental impacts of a project (Public Law 91-190, 31 Stat. 852, 42 USC 4321–4327). The Federal Land Policy Management Act of 1976 (Public Law 94-579; 90 Stat. 2743, 43 USC 1701–1782) requires that public lands be managed in a manner that will protect the quality of their scientific values, while Code of Federal Regulations Title 40, Section 1508.2 identifies paleontological resources as a subset of scientific resources. The Paleontological Resources Preservation Act (Title VI, Subtitle D of the Omnibus Land Management Act of 2009) furthers the protection of paleontological resources on federal lands by criminalizing the unauthorized removal of fossils.

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan states that excavation activities in paleontological sensitive areas requires a qualified paleontological monitor during construction and to avoid construction of new facilities in geologic hazard zones. (National Park Service 2002).

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was enacted in 1972 to provide a mechanism for reducing losses from surface fault rupture on a statewide basis. The main intent of the Alquist-Priolo Act is to ensure public safety by preventing the construction of buildings used for human occupancy on the surface trace of active faults. The Alquist-Priolo Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The law requires the State Geologist to establish regulatory zones, known as Earthquake Fault Zones, around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and

controlling new or renewed construction. Local agencies must regulate most development projects within the zones.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was enacted in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. For projects that would locate structures for human occupancy within designated Zones of Required Investigation, the Seismic Hazards Mapping Act requires project applicants to perform a site-specific geotechnical investigation to identify the potential site-specific seismic hazards and corrective measures, as appropriate, prior to receiving building permits. The California Geological Survey (CGS) *Guidelines for Evaluating and Mitigating Seismic Hazards* (Special Publication 117A) provides guidance for evaluating and mitigating seismic hazards (CGS 2008).

California Historical Building Code

The California Historical Building Code (CHBC) is defined in Sections 18950–18961 of Division 13, Part 2.7 of the Health and Safety Code. The CHBC is intended to save California’s architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing historic buildings. The CHBC provides alternative building regulations for permitting repairs, alterations and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use, or continued use of a “qualified historical building or structure.”

California Building Code

The California Building Code (CBC) (California Code of Regulations Title 24, Part 2) was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress to facilities (entering and exiting), and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction.

Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures throughout California.

The 2019 CBC provides requirements for general structural design and includes means for determining earthquake loads¹ as well as other loads (such as wind loads) for inclusion into building codes. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and

¹ A *load* is the overall force to which a structure is subjected in supporting a weight or mass, or in resisting externally applied forces. Excess load or overloading may cause structural failure.

live loads of the structure, which the structure then must be designed to withstand. The prescribed lateral forces are generally smaller than the actual peak forces that would be associated with a major earthquake. Consequently, structures should be able to:

- (1) Resist minor earthquakes without damage.
- (2) Resist moderate earthquakes without structural damage but with some nonstructural damage.
- (3) Resist major earthquakes without collapse, but with some structural as well as nonstructural damage.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. The following policy is relevant to the Proposed Project:

Section 30253 Minimization of adverse impacts. New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard, (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Public Resources Code Sections 5097.5 and 30244

California Public Resources Code Sections 5097.5 and 30244 specify state requirements for paleontological resource management. Section 5097.5 states that:

[A] person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

Section 5097.5 also states that “a violation of this section is a misdemeanor, punishable by a fine not exceeding ten thousand dollars (\$10,000), or by imprisonment in a county jail not to exceed one year, or by both that fine and imprisonment.” This section defines *public lands* as “lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.”

Section 30244 states that “where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.”

In general, for project sites that are underlain by paleontologically sensitive geologic units, the greater the amount of ground disturbance, the higher the potential for significant impacts on paleontological resources.

California Public Resources Code Section 5097.98

PRC Section 5097.98, as amended, provides procedures to follow in the event that human remains of Native American origin are discovered during project implementation. Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery be adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires that the NAHC, upon notification by a county coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

If no descendant is identified or the descendant fails to make a recommendation for disposition, or if the landowner rejects the descendant's recommendation, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Code of Regulations. General Provisions. CCR Title 14 Section 4307. Geological Features.

No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features, or features of caves except rockhounding may be permitted as defined and delineated in Sections 4610 through 4610.10.

Regional and Local

Los Angeles County General Plan 2035

The following goals and policies in the Conservation and Natural Resources and Safety Elements of the *Los Angeles County General Plan 2035* are potentially relevant to the Proposed Project (County of Los Angeles 2015):

Goal C/NR 14: Protected historic, cultural, and paleontological resources.

Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Goal S 1: An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of Topanga State Park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The plan sets aside a number of management zones including the Lower Topanga and Lagoon Zone, Wildlands Zone, Cultural

Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The plan also contains specific proposals to consolidate Topanga State Park's trails by eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012). The Topanga State Park General Plan provides the following goals and guidelines potentially relevant to the Proposed Project:

Goal: Protect and preserve the unique geological resources and features of the Park while protecting human life and property.

Guideline 2: Recognize and accordingly mitigate negative impacts to fragile geological features as part of management plans and decisions with respect to facilities development, visitor access, and recreation.

Goal: Restore, maintain and protect the lagoon/estuarine ecosystem and allow for scientific research as needed to reach these goals.

Guideline 1: Develop a scientifically based lagoon restoration plan to create a properly functioning natural estuarine system at the mouth of Topanga Creek.

a. Restoration should take into consideration factors such as watershed size and characteristics, geology and geological processes influencing estuary development, sea level change, sediment loads, various coastal processes, and other pertinent processes.

Goal: Identify, document, and evaluate the paleontological resources in the Park.

Guideline 1: Develop a program for paleontological survey, site recordation and evaluation, GPS mapping, and preparation of records and reports for fossil specimens in the Park.

Goal: Protect, stabilize, and preserve the paleontological resources within Topanga State Park.

Guideline 1: Carefully plan all undertakings, including routine maintenance and new facility development, within areas know to contain or with the potential to contain fossil specimens in order to avoid or minimize significant impacts to paleontological resources within the Park.

Topanga Creek Watershed Management Plan

The Topanga Creek Watershed Management Plan provides voluntary guidelines for implementing a variety of preventive planning and BMPs that reflect current understanding of the interrelationships and connections of the physical, chemical, biological, economic, and social aspects of the Topanga Creek watershed (Topanga Creek Watershed Committee 2002). Section 5 of the plan includes goals and actions related to reducing grading and erosion control impacts.

Santa Monica Mountains General Management Plan

The Project area is located within the Santa Monica Mountains National Recreation Area. The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area establishes goals for the protection of paleontological resources and provisions for discovery and recovery of paleontological resources during construction and grading activities within Topanga State Park (NPS 2002).

3.6.2 Affected Environment

This section is based on geotechnical studies conducted between 2003 and 2022 prepared by consultants Far Western Inc., Geocon West, Inc., GeoPentech, EPD Consultants, and Moffatt & Nichol. Refer to the appendices for the aforementioned geotechnical studies.

Geologic Conditions

Regional Geology

Coastal Southern California includes parts of three geomorphic provinces: Coast Ranges, Transverse Ranges, and Peninsular Ranges.² The western parts of all three provinces are submerged below the Pacific Ocean. The Coast Ranges province, which extends north from the Transverse Ranges province into Central and Northern California, and the Peninsular Ranges province, which extends south into Baja California, have conspicuous northwest trends and are transected by the east-trending ridges and valleys of the Transverse Ranges province (City of Los Angeles 2021).

The Project area is in California's Transverse Ranges geomorphic province, which is characterized by east-west trending mountains, oblique to the northwesterly trending coastline and mountains of the adjacent Coast Ranges and Peninsular Ranges geomorphic provinces.

The Project area is located at the southern base of Topanga Canyon in the Santa Monica Mountains along the shoreline adjacent to the Pacific Ocean. Elevations in the Project area range from approximately 210 feet above mean sea level in the western portion of the Project area to sea level in the southern portion of the Project area. The south side of the Project area slopes down to Topanga Beach and the Pacific Ocean, and the northern portion slopes up into the Santa Monica Mountains. The existing Pacific Coast Highway (PCH) bridge spans Topanga Lagoon at the mouth of Topanga Creek. Up to about 35 vertical feet of locally derived fill material was placed across the historic 30-acre Topanga Lagoon in the early 1930s to construct PCH.

The Project area is underlain by Holocene-age surficial sediments, including active stream channel deposits (Qg), beach sand (Qs), and alluvium (Qa). The surficial sediments generally consist of native sand, gravel, silt, and clay as well as imported fill, as noted above. The surficial sediments in the Project area are underlain by upper Cretaceous-age sedimentary rocks of the Tuna Canyon formation (Kss, Ksh, and Kcg). The Tuna Canyon Formation consists of marine and nonmarine sandstone with shale and conglomerate beds. Miocene-age intrusive rocks (db) generally consisting of diabase and basalt have also been mapped in the Project area (GeoPentech 2022a 2022b).

Soils

The Project area is made up primarily of artificial fill and beach deposits. Imported fill exists from the ground surface to depths between about 8 and 30 feet below ground surface (bgs). The majority of this fill is planned to be removed from the Project area as part of the Topanga Lagoon restoration. The fill is undocumented, and there are no known construction records indicating

² *Geomorphic provinces* are distinctive, generally easy-to-recognize natural regions in which the geologic record, types of landforms, pattern of landscape features, and climate in all parts are similar.

how the fill was placed, although there is a record that the material came from surrounding hillslopes (California Department of Public Works 1935). The fill generally consists of medium dense to very dense, moist, silty sand with gravel (SM) to silty/clayey sand with gravel (SM/SC). The observed gravel predominantly consists of fine to coarse fragments of sandstone and shale. Occasional sandy gravel (GM) and stiff to hard silt (ML) and clay (CL, CH) zones, generally a few feet thick, are also present (GeoPentech 2022a 2022b).

Beach deposits exist below the fill to a maximum depth of about 51 feet bgs. The beach deposits predominantly consist of medium dense to dense sand (SM, SC, SP-SC, SP) with occasional silt (ML) and gravel layers (GM, GC). An approximately 2-foot-thick layer of loose, silty sand (SM) exists at the top of the beach deposits in the northwestern portion of the Project area near the Rosenthal Winery. In addition, bedrock consisting of hard shale exists below the fill at a depth of approximately 30 feet bgs in the northwestern portion of the Project area on undeveloped land north of the Rosenthal Winery (GeoPentech 2022a 2022b).

The corrosion potential of on-site soils is unknown. As discussed above, the Project area is predominantly underlain by sands and gravels near the beach, and the interstitial space of these materials is filled with salty water. Therefore, the soils of the Project area are considered corrosive based on the proximity to the beach and associated salty water.

Seismic and Geologic Hazards

Seismic and geologic hazards include fault rupture and groundshaking, liquefaction, landslides, subsidence, collapse and settlement, and expansive soil. These seismic and geologic hazards are discussed below and evaluated for their potential to occur in the Project area. Geologic hazards in the Project area are described below.

Fault Rupture and Groundshaking

Faults are planar features within the earth's crust that have formed to release strain caused by the dynamic movements of the earth's tectonic plates. An earthquake on a fault is produced when these strains overcome the inherent strength of the earth's crust, and the rock ruptures. The rupture causes seismic waves that propagate through the earth's crust, producing the groundshaking effect known as an earthquake. The rupture also causes variable amounts of slip along the fault, which may or may not be visible at the earth's surface. The perceived intensity of such an event depends on the causative fault and the distance to the epicenter, the magnitude, the duration of shaking, and the nature of the geologic materials on which the Project components would be constructed.

Seismic activity and associated ground rupture are more likely along historically active faults. The state has established *Alquist-Priolo Zones*, which are buffers around active faults that have been determined to be especially prone to surface fault rupture. CGS defines an *active fault* as one that has had surface displacement within Holocene time. (CGS defines this as within the last 11,700 years; the U.S. Geological Survey [USGS] uses within the last 15,000 years.)

The PCH bridge site is in a seismically active region of Southern California, as evidenced by the 1812 estimated magnitude 7.1–7.5 Ventura earthquake, the 1925 estimated magnitude 6.5–6.8

Santa Barbara earthquake, the 1987 magnitude 6.0 Whittier earthquake, and the 1994 magnitude 6.7 Northridge earthquake, among others.

Figure 9 in the *Structures Preliminary Geotechnical Report (Appendix O)* prepared for the Proposed Project shows the Project area relative to mapped active faults in the region identified by CGS (GeoPentech 2022b). As shown on Figure 9, significant faults near the Project area include the Holocene active Santa Monica fault (approximately 0.5 mile to the south), the late Quaternary active Anacapa-Dune fault (approximately 1.9 miles to the south), the late Quaternary active Malibu Coast fault (approximately 4.0 miles to the east), the Holocene active Newport-Inglewood fault (approximately 9.3 miles to the east), and the Holocene active Hollywood fault (approximately 9.9 miles to the east) (GeoPentech 2022b).

Based on the seismic setting, the Project area is susceptible to strong seismic shaking. Based on a review of the Earthquake Zones of Required Investigation for the Topanga Quadrangle, the Project area is not located within a currently established Alquist-Priolo Earthquake Fault Zone. Additionally, the Project area is not located within 1,000 feet of a mapped Holocene-active fault based on a review of mapping by CGS. Therefore, the Project area is not considered susceptible to surface fault rupture hazards.

Liquefaction and Lateral Spreading

Liquefaction occurs when relatively loose, saturated, non-cohesive soils undergo a temporary loss of stiffness and strength in response to strong ground shaking. Liquefaction potential is greatest where the groundwater level is shallow, and submerged, loose, fine sands occur within a depth of about 50 feet bgs or less. Liquefaction potential decreases as clay and gravel content increases. Also, higher ground accelerations and shaking durations during earthquakes increase the liquefaction potential.

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of foundations due to ground settlement. *Dynamic settlement* (i.e., pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. *Lateral spreading* can move blocks of soil, placing strain on levees and roads that can lead to ground failure.

According to the CGS Earthquake Zones of Required Investigation Map, a majority of the Project area is in an area identified as having a potential for liquefaction (CGS 2021). As noted previously, the portions of the artificial fill currently present in the Project area would be removed down to the underlying beach deposits as part of the proposed Topanga Lagoon restoration. Based on subsurface data collected during the 2002 and 2021 field investigations, groundwater was encountered within the beach deposits and is shallower than 50 feet bgs (i.e., beach deposits between about elevation +10 feet and +3½ feet mean sea level). Additionally, the beach deposits are Holocene-age and were found to be predominantly composed of sands and silty sands with local layers of finer grained silts and clays. The sandy soils below the upper limit of the groundwater appear to be predominantly medium dense to dense; however, an approximately 2-

foot-thick layer of loose, silty sand (SM) exists at the top of the beach deposits in the northwestern portion of the Project area near the existing Rosenthal Winery concession building. The beach deposits include finer grained clays and silts that would not be expected to be susceptible to liquefaction.

Lateral spreading occurs when soils liquefy and slide or flow downhill, or when they breach an open slope face, resulting in permanent ground deformation. Thus, open slope faces composed of materials susceptible to liquefaction are also potentially susceptible to lateral spreading. As discussed above, liquefaction potential exists in the Project area, and the Project area contains open slope faces. Therefore, lateral spreading potential exists in the Project area.

Landslides

Landslides are defined as the movement of rock, debris, or earth masses down a slope. Landslides are a form of *mass wasting*, which refers to any downslope movement of soil and rock under the direct influence of gravity (USGS 2004). Landslide events include rock falls, topples, slides, spreads, and debris flows. Causes of landslides include rainfall, earthquakes, volcanic activity, groundwater changes, and alteration of a slope by construction activities.

The south side of the Project area slopes down to Topanga Beach and the Pacific Ocean, and the northern portion slopes up into the Santa Monica Mountains. According to the CGS Earthquake Zones of Required Investigation Map, a small portion of the Project area north of PCH and the area adjacent to the Project's northwestern boundary are located in an area identified as having potential for landslides (CGS 2021). Therefore, the potential for landslides exists at this Project location.

Subsidence

Subsidence of the ground surface can occur under static conditions (i.e., due to consolidation settlement from overlying load or long-term groundwater extraction) but can also be accelerated and accentuated by earthquakes and tectonic activity. Subsidence of loose, unconsolidated soils generally occurs slowly but can cause significant structural damage. USGS does not identify the Project area as an area known to experience ground subsidence due to the withdrawal of groundwater, peat loss, or oil extraction activities (USGS 2022).

Expansive and Collapsible Soil

Expansive soils are subject to volume changes from changes in moisture content such as swelling with increases in moisture or shrinkage with decreases in moisture. The shrinking and swelling can damage foundations and other infrastructure. Expansive soils consist of certain clays and some silts.

Based on currently available subsurface data, expansive soils and collapsible soils are not considered hazards in the Project area.

Paleontological Setting

The Society of Vertebrate Paleontology (SVP) has established standard guidelines (SVP 2010) that outline professional protocols and practices for conducting paleontological resource

assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state and local regulatory agencies accept and use the professional standards set forth by the SVP.

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Non-renewable Palaeontologic Resources," the SVP (2010) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential, and makes recommendations for the level of monitoring for each.

Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates (animals with backbones such as mammals, birds, and fish), invertebrates (animals without backbones such as starfish, clams, and coral), and microscopic plants and animals (microfossils). They are valuable, nonrenewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the area in which they are exposed. The geologic environments within which the plants or animals became fossilized usually were quite different from the present environments in which the geologic formations now exist.

1. **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rock units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcanoclastic formations (e.g., ashes or tephras), and some low-grade metamorphic rocks that contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e.g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones).
2. **Low Potential.** Reports in paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e.g., basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.

3. **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine whether these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically locating excavations into subsurface stratigraphy.
4. **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

For geologic units with high potential, full-time paleontological monitoring is generally recommended during any ground disturbance. For geologic units with low potential, monitoring will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist or observations of excavations should be conducted to specifically determine the paleontological potential of the rock units present within the study area.

Geologic Map Review

The Project area lies along the coastal front of the east-west trending Transverse Ranges. These mountains were rotated 110 degrees clockwise and uplifted as a consequence of the northern migration of the San Andreas Fault zone approximately 19 million years ago (summarized in Sylvester and O'Black Gans 2016). Bedrock of the Western Transverse Ranges, locally, consists of tilted marine sediments of Cretaceous age with limited terrestrial sediments. As noted below in the literature review, these Cretaceous shallow to deep marine sediments are given different names throughout Southern California, but they are defined locally as the Trabuco and Tuna Canyon formations (Yerkes and Campbell 1979; Shapiro et al. 2001). East of the Project area, the bedrock of the Santa Monica Mountains shifts to younger, Paleogene sediments that were deposited in a combination of marine and terrestrial settings (Dibblee 1992). The Project area itself lies at the mouth of Topanga Canyon, one of the major river systems draining the Transverse Ranges. A combination of sea level changes and tectonic uplift has resulted in the valley being infilled with a variety of alluvial facies since the Pleistocene.

Regional mapping by Dibblee (1992) provided limited information on the valley fill, noting that the majority is young Quaternary alluvium (Qa) with some regions of gravel (Qg) and landslides (Ql) along the steep valley walls. An older map by Yerkes et al. (1964) at a higher resolution of 1:12,000 distinguishes regions of older alluvium (Qalo) as well as terraces (Qt) and abundant artificial fill (af).

Literature Review

Environmental Science Associates conducted a literature review of published sources to determine whether paleontological resources have been identified in the particular geologic units that are mapped within the Project area. The only fossiliferous units that crop out in the Project area are the

fine-grained Upper Cretaceous marine layers. These formations were originally assigned to the “Chico” or “Martinez” formations by Hoots (1931). To a modern reader, these assignments lumped together all shallow marine Upper Cretaceous sediments regardless of facies, geographic location, or age. More recently, the local units have been segregated into a basal Trabuco Formation that is primarily conglomeratic and an overlying Tuna Canyon Formation that has yielded diverse fossils (Yerkes and Campbell 1979; Shapiro et al. 2001). All of the recorded fossils are marine invertebrates (e.g., Popenoe 1942; Saul and Alderson 2001; Albi 2002; Squires and Saul 2006). A search through multiple literature databases did not yield any information on Pleistocene fossils from the region. However, there is a rich record of marine vertebrates from the Topanga Formation, but this formation is older (Miocene) and not affected in the Project area. Similarly, a search of the Neotoma database (<http://neotomadb.org>) did not reveal any fossils near the Project area.

Natural History Museum of Los Angeles County

A paleontological resources database search was conducted by the Natural History Museum of Los Angeles County (LACM) on August 20, 2022 (Bell 2022). The search entailed an examination of current geologic maps and known fossil localities within the Project area and vicinity. The purpose of the records search was to (1) determine whether any previously recorded fossil localities occur in the Project area or vicinity; (2) assess the potential for disturbance of these localities during construction; and (3) assist in evaluating the paleontological sensitivity of the Project area.

The results of the paleontological resources database search indicate that some fossil localities lie within or near the boundaries of the Project area, while others are located in the general vicinity (**Table 3.6-1**) (Bell 2022).

**TABLE 3.6-1
NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY FOSSIL LOCALITIES**

Locality Number	Location	Formation	Taxa	Depth
LACM VP 3785	East side of Santa Ynez Canyon in float at base of cliff 1.3 miles north on Palisades Drive from junction with Sunset Boulevard	Chico Formation (coquina bed)	Invertebrates (mostly bivalves); Chondrichthyes	Surface
LACM VP 4533; LACM IP 26582, 26310, 5854	North side of Alt. Hwy 101 approximately 0.45 mile west of the junction of Topanga Canyon Road and U.S. Highway 101	Tuna Canyon Formation (limey, mollusc-rich coquina-like sandstone)	Fish (<i>Chondrichthyes</i> ; <i>Osteichthyes</i>); invertebrates (<i>Yaadia</i> , <i>Atira</i> , and others)	Surface, in slide scarp
LACM VP 4973; LACM IP 4819	West side of Palisades Drive; Santa Ynez Canyon	Tuna Canyon Formation	Neoselachia; invertebrates	Surface
LACM VP 5163	Glenview, Topanga Canyon	Tuna Canyon Formation	Belonidae (?)	Surface
LACM IP 25986	±500 feet west of mouth of Topanga Canyon	Tuna Canyon Formation	Invertebrates	Surface
14 localities	Along Palisades Drive, Santa Ynez Canyon	Tuna Canyon Formation (yellowish coarse-grained sandstone)	Invertebrates (dense shell beds, mollusc-rich)	Surface

VP: Vertebrate Paleontology
IP: Invertebrate Paleontology

Locality LACM VP 3785 is situated approximately 2 miles from the Project area and has yielded invertebrates (mostly bivalves) and fish (Chondrichthyes) specimens within the coquina bed of the Chico Formation (now called “Tuna Canyon Formation”) at the surface. Localities LACM VP 4533/LACM IP 26582, 26310, and 5854 are located approximately 9 miles from the Project area and produced specimens of fish (Chondrichthyes and Osteichthyes) and invertebrates (*Yaardia*, *Atira*, and others) within the Tuna Canyon Formation at the surface. Localities LACM VP 4973/LACM IP 4819 are situated approximately 1.75 miles from the Project area and produced specimens of cartilaginous fish (*Neoselachia*) and unspecified invertebrates within the Tuna Canyon Formation at the surface. LACM IP 25986 is located approximately 500 feet west of the mouth of Topanga Canyon and produced unspecified invertebrates within the Tuna Canyon Formation. Locality LACM VP 5163 is situated approximately 5.5 miles from the Project area and yielded unknown specimens of the family Belonidae within the Tuna Canyon Formation at the surface (Bell 2022).

Paleontological Sensitivity Analysis

The review of the geologic mapping, scientific literature, and database search results from the LACM and the University of California Museum of Paleontology were used to assign paleontological sensitivity ratings to the geologic units present at the surface and in the subsurface of the Project area, following the guidelines of the SVP (2010). These are as follows:

Younger Quaternary Alluvium (Qa), older Quaternary Alluvium (Qalo), and Quaternary Terraces (Qt) – These units have not produced fossils in the immediate area and are infilling an active river channel. It is unlikely that shallow excavation will uncover older fossiliferous beds. This is based on the review of the geological maps, online databases, published literature, and the records of the LACM. Therefore, the Quaternary units are designated as “low potential.”

Tuna Canyon Formation (Cretaceous) (Kt) – The Tuna Canyon Formation has yielded important invertebrate fossils useful for dating and correlation. More critically, there have been vertebrates (fish) recovered from the Tuna Canyon in close proximity to the Project area. It should be noted that older maps do not designate the units as “Tuna Canyon” but rather Cretaceous sediments. The map by Yerkes and Campbell (1980) notes the formation locally as the Tuna Canyon. Based on the evidence, the Kt is designated as “high potential” for paleontological resources.

Additional units such as “artificial fill” are not considered as having any fossil potential and will not be further discussed.

3.6.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to geology, soils, seismicity, topography, and paleontology. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section.

Accordingly, the Project would have a significant adverse environmental impact if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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. (Refer to **Impact GEO 3.6-1.**)
- Strong seismic ground shaking. (Refer to **Impact GEO 3.6-1.**)
 - Seismic-related ground failure, including liquefaction. (Refer to **Impact 3.6-1.**)
 - Landslide. (Refer to **Impact GEO 3.6-1.**)
 - Result in substantial soil erosion or the loss of topsoil. (Refer to **Impact GEO 3.6-2.**)
 - 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. (Refer to **Impact GEO 3.6-3.**)
 - Be located on expansive soil creating substantial direct or indirect risks to life or property.³ (Refer to **Impact GEO 3.6-4.**)
 - Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (Refer to **Impact GEO 3.6-5.**)
 - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Refer to **Impact GEO 3.6-6.**)
 - Result in cumulatively considerable impacts to geology, soils, seismicity, topography, and paleontology. (Refer to **Impact GEO 3.6-7.**)

Seismic Hazard

GEO 3.6-1: The Project would indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides. Impacts would be less than significant with mitigation incorporated.

The Project area is not located on an active or potentially active surface fault, and therefore would not be subject to seismic-related ground surface ruptures. The most substantial geologic hazard in the Project area is the potential for moderate to strong ground shaking resulting from major earthquakes generated on the faults within the region. Human loss, injury, or death would most likely occur during strong ground shaking events in buildings or within facilities that were not in compliance with current building criteria for structures in California, including bridges. Other potential indirect impacts as a result of a major earthquake include liquefaction and lateral spreading, landslides, and slope instabilities.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the lagoon and no new bridge would be constructed. Existing DBH facilities would continue to be at risk from the eroding beach due to sea level rise. The historic Topanga Ranch Motel and west bank area would continue to be uninhabitable and experience significant erosion. Concessions located on State Parks land would continue to operate non-conforming wastewater disposal systems. The existing four-lane PCH

³ The CBC, based on the International Building Code and the now-defunct Uniform Building Code, no longer includes a Table 18-1-B. Instead, CBC Section 1803.5.3 describes the criteria for analyzing expansive soils.

bridge would continue to be susceptible to seismic hazards. The risk of loss, injury, or death from seismic-related events would be the same as under current conditions.

Alternatives 2, 3, and 4 (Build Alternatives)

Risk of loss, injury, or death involving seismic-related events would be similar under all Build Alternatives, as described in the following sections.

Construction

Final designs of the Proposed Project would be subject to the California Historical Building Code (CHBC) and CBC design standards as appropriate to ensure seismic considerations are addressed.

Mitigation Measure GEO-1 would be implemented to help ensure that State Parks prepares a geotechnical report and that the final design incorporates any recommendations. Through compliance with regulatory requirements and implementation of geotechnical design recommendations, impacts of implementing the Proposed Project related to direct and indirect seismically induced events during construction and operation are expected to be reduced compared to existing conditions.

Construction activities associated with the Build Alternatives could be affected by strong ground shaking and possibly other indirect effects during a major earthquake. Excavation of fill material at depths of up to 30 feet could result in human loss, injury, or death if excavators and other heavy equipment were to topple during a major earthquake. Implementation of safe construction practices and compliance with Caltrans and California Occupational Safety and Health Administration (Cal/OSHA) requirements would reduce the impacts of these conditions. In addition, implementation of **Mitigation Measure GEO-2** would also reduce impacts by ensuring that observation, monitoring, and testing of geologic site conditions are conducted during the construction phase. Compliance with standard Caltrans and Cal/OSHA requirements and implementation of **Mitigation Measure GEO-2** would reduce potential impacts to less than significant.

Further, before completion of the final design, the geotechnical engineer would prepare a design-level geotechnical report required under **Mitigation Measure GEO-1**. This report would document soil-related constraints and hazards such as slope instability, settlement liquefaction, or related secondary seismic impacts that may be present. The report would also include recommendations regarding construction procedures and/or design criteria to reduce the effect of soil-related constraints and hazards. With implementation of **Mitigation Measures GEO-1 and GEO-2**, impacts from Project construction would be less than significant.

Operation

The final grading plan for the lagoon would accommodate slope stability requirements of the surrounding landscape and abutment infrastructure. The design includes installation of concrete retaining walls along the banks of the expanded lagoon. Approximately 356 linear feet of retaining wall would be implemented under Alternative 3, and 591 linear feet would be implemented under Alternative 4. The new retaining walls would be designed to code and would protect surrounding infrastructure in the event of an earthquake.

The existing PCH bridge was built in 1933, before the establishment of the Caltrans Seismic Design Criteria. No seismic upgrades to the bridge have occurred since. The new PCH bridge would be constructed using the Caltrans Seismic Design Criteria and is therefore expected to be safer and more reliable than the existing bridge.

The lifeguard and public restroom building, and helipad facilities managed by DBH were constructed in the mid-1980s and do not meet current CBC seismicity requirements. New facilities would be constructed using current CBC seismicity-related building standards and materials. Therefore, the new DBH facilities are expected to be safer and more reliable than the existing structures.

Existing concessions on State Parks land, as well as the historic Topanga Ranch Motel, were constructed before the establishment of the CBC building standards. The existing concessions require upgrades to meet current building code standards, including the existing pump-out septic systems. Because of the age and poor condition of the wood structures at the Topanga Ranch Motel, these structures could collapse during a major earthquake. Restoring the Topanga Ranch Motel and other existing structures on-site would reduce seismic hazards to park staff and visitors.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along Topanga Canyon Boulevard (TCB). All construction and operation activities would occur within State Parks property or within the Caltrans right-of-way (ROW). Limited lane closures to install a pipeline across TCB would occur. Field testing of on-site soils in 2023 identified them to be appropriate for advanced on-site wastewater treatment systems (AOWTS). Approval by the County Department of Public Health would be required for development of wastewater management Option 1 or 2.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. Additional geotechnical studies will be required if this option is selected. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction. Los Angeles County Sanitation Districts (LACSD), the County Department of Public Works Sewer Maintenance District, and Caltrans would all require review and approval of wastewater management Option 3 if it is selected.

Through compliance with regulatory requirements and implementation of geotechnical design recommendations and **Mitigation Measures GEO-1 and GEO-2**, potential impacts from direct and indirect seismically induced events would be reduced to less-than-significant levels.

Mitigation Measure

GEO-1: A soils report and geotechnical investigation report shall be prepared by a California licensed geotechnical engineer for the Project area including Topanga State Park, Topanga Lagoon, the PCH bridge area, and Topanga Beach. These reports shall evaluate various geotechnical characteristics including existing liquefaction risk and soil stability. The reports shall provide recommendations for facility design per these findings. These recommendations shall be incorporated into facility design.

GEO-2: During final design, State Parks/DBH will prepare a quality assurance/quality control plan that will be maintained during construction. The plan will include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will periodically prepare reports while grading excavation and construction activities are underway.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Construction

Under Alternative 2, development would be restricted to the Gateway Corner area, which would include at most approximately 5,500 square feet (sf) of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area as well as day use parking would also be included. Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. Future concessions and motel structures that would be retained would be upgraded to meet current seismic standards under relevant codes, including the CHBC.

Implementation of safe construction practices and compliance with Caltrans and Cal/OSHA requirements during future visitor services redevelopment would reduce potential impacts of strong ground shaking. In addition, implementation of **Mitigation Measure GEO-1** would reduce impacts by ensuring that observation, monitoring, and testing of geologic site conditions are conducted during the duration of the construction phase. Compliance with standard Caltrans and Cal/OSHA requirements and implementation of **Mitigation Measure GEO-1** would reduce potential impacts. Further, before completion of the final design, the geotechnical engineer would prepare a design-level geotechnical report that would include recommendations regarding construction procedures and/or design criteria to reduce the effect of soil-related constraints and hazards.

Operation

Future concessions and motel structures that would be retained would be required to either install an AOWTS via SDI (Option 1) or seepage pits (Option 2) or to connect into the LACSD system via a sewer line extension (Option 3). The design of all visitor services facilities and systems would be subject to CBC and CBHC design standards to ensure that seismic considerations are addressed. **Mitigation Measure GEO-2** would ensure that State Parks prepares a geotechnical report and that the final design incorporates the recommendations.

Mitigation Measures

Implement **Mitigation Measures GEO-1 and GEO-2**

Significance Determination

Less than Significant with Mitigation Incorporated

Soil Erosion

GEO 3.6-2: The Project would not result in substantial soil erosion and loss of topsoil. Impacts would be less than significant.

The Proposed Project involves excavation and grading of soils to re-contour the Project area and construct the new PCH bridge. An estimated range of 190,000–280,000 CY of excavated soils would be removed or trucked off-site for disposal or reuse at the appropriate regulated landfill or within the nearshore Project area (Figure 2-1). In addition, the substantial grading proposed for the Project would expose bare soils that would be subject to erosion before the establishment of emergent vegetation. Substantial soil erosion could occur if exposed soils are subjected to heavy rain.

Alternative 1 (No Build)

Under Alternative 1, excavation or grading of soils to re-contour the lagoon would not occur. Existing DBH facilities would continue to be at risk from the eroding beach due to sea level rise.

Alternatives 2, 3, and 4 (Build Alternatives)

The estimated amount of soil and proposed acres of grading vary slightly between all Build Alternatives (**Table 3.6-2**). However, the potential for soil erosion would be similar under all Build Alternatives, as described in the following sections.

**TABLE 3.6-2
ESTIMATED VOLUME OF SOIL EXCAVATED AND GRADING AREA
FOR EACH BUILD ALTERNATIVE**

Alternative	Soil Excavation Volume	Grading Acreage
2	280,000	15.89
3	190,200	15.25
4	237,200	14.71

Construction

Construction activities in the Project area would involve excavation of fill material to a depth of up to 30 feet, leaving soils exposed to wind and rain. Grading activities for construction of the Proposed Project would involve earthmoving, excavation, and stockpiling, all of which could expose soils to erosion. The potential extent of erosion would vary depending on slope steepness and stability and weather conditions. To prevent water and wind erosion during the construction period, a SWPPP as required to comply with the NPDES permit would be developed and implemented for the Proposed Project. The Construction General Permit requires the preparation and implementation of a SWPPP that would specify BMPs both to prevent construction pollutants, including eroded soils (such as topsoil), from moving off-site and to provide erosion control measures to protect the topsoil. The SWPPP also requires that stockpiled soils be watered and/or covered to prevent loss due to wind erosion.

Operation

The Proposed Project would incorporate extensive stormwater drainage and capture facilities not currently present in the Project area. The grading contours of the lagoon, the new bridge, and the beach structures would each be subject to municipal separate storm sewer system (MS4) development standards designed to protect water quality. The Proposed Project would comply with the MS4 standards to ensure that uncontrolled erosion would not occur. Impacts would be less than significant.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Field testing of on-site soils in 2023 identified them to be appropriate for AOWTS. Approval by the County Department of Public Health would be required for development of wastewater management Option 1 or 2.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH as well as on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction. LACSD, the County Department of Public Works Sewer Maintenance District, and Caltrans would all require review and approval of wastewater management Option 3 if it is selected.

Through compliance with regulatory requirements of the NPDES permit, implementation of BMPs, and agency review and implementation of their permit requirements, impacts of implementing the Proposed Project related to erosion and topsoil loss would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, the existing non-conforming tanks would be removed and replaced with either Option 1 (SDI) or Option 2 (seepage pits) to accommodate wastewater generated by the single remaining concession and the development at the Gateway Corner. The Gateway Corner development is anticipated to include at most approximately 5,500 sf of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area as well as day use parking would also be included.

Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage.

Grading activities associated with the construction or modification of visitor services facilities could expose soils to erosion processes. To prevent water and wind erosion during the construction period, a SWPPP as required to comply with the NPDES permit would be developed and implemented. Any grading required for future visitor services facilities would be subject to MS4 development standards and requirements of the regulatory agencies designed to protect water quality.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Unstable Soils

GEO 3.6-3: The Project could 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. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to Topanga Lagoon and Beach or the PCH bridge. Further, the Topanga Ranch Motel and all existing concessions in the Project area would remain in their existing conditions where they would be subject to continued deterioration. Alternative 1 would not alter the Project area in any way that could result in additional on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse, although existing slope erosion will continue.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential impacts of on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse due to unstable soils would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

Non-seismically induced geologic hazards such as landslides, lateral spreading, settlement, and slope failure can be caused by unstable soils. Subsidence of the ground surface occurs under static conditions (i.e., due to consolidation settlement from overlying load or long-term water or mineral extraction) but can also be accelerated and accentuated by earthquakes. The Project area is not located in an area of known ground subsidence due to the withdrawal of subsurface fluids (USGS 2022). Therefore, no impacts related to subsidence are anticipated with implementation of the Proposed Project.

As described above in Section 3.6.2, *Affected Environment*, the Project area is subject to liquefaction and collapsible soils. Because the Project area is subject to liquefaction, there is also a potential for lateral spreading. Similarly, landslides could occur in a small northwestern portion of the Project area. Because of the characteristics of the on-site soils and geology, the Project area could be exposed to liquefaction, collapsible soils, lateral spreading, and unstable soils.

However, as detailed above, all proposed facilities would be constructed in accordance with the CBC and CBHC, as applicable. Additionally, implementation of **Mitigation Measure GEO-2** would reduce impacts by ensuring that observation, monitoring, and testing of geologic site conditions are conducted during the construction phase. Further, before completion of the final design, the Project's geotechnical engineer would prepare a design-level geotechnical report that would recommend construction procedures and/or design criteria to reduce the potential effect of building on top of unstable soils (**Mitigation Measure GEO-1**). All of this would inform the design and the location of facilities to safeguard the public and reduce potential impacts due to unstable soils. The Proposed Project would incorporate engineering design features to remediate potential significant impacts associated with liquefaction, collapsible soils, and lateral spreading.

Once construction is complete, the Proposed Project would not include any facilities or operations that would result in changes to soil or geologic units that would cause landside, subsidence, lateral spreading, liquefaction, or collapse.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Field testing of on-site soils in 2023 identified them to be appropriate for AOWTS. Approval by the County Department of Public Health would be required for development of wastewater management Options 1 or 2.

Construction of wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction. LACSD, the County Department of Public Works Sewer Maintenance District, and Caltrans would all require review and approval of wastewater management Option 3 if it is selected.

Through compliance with regulatory requirements and implementation of geotechnical design recommendations and mitigation measures, potential impacts due to unstable soils would be reduced to less-than-significant levels.

Mitigation Measures

Implement **Mitigation Measures GEO-1 and GEO-2**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Project Alternatives 2, 3, and 4, all future visitor services facilities would be built to CBC or CBHC regulations, as applicable. Furthermore, **Mitigation Measures GEO-1 and GEO-2** would be implemented to ensure that Project designs comply with geotechnical recommendations.

Mitigation Measures

Implement **Mitigation Measures GEO-1 and GEO-2**

Significance Determination

Less than Significant with Mitigation Incorporated

Expansive Soils

GEO 3.6-4: The Project would not be located on expansive soil creating substantial direct or indirect risks to life or property. *No impact would occur.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to Topanga Lagoon, Topanga Beach, or the PCH bridge. Further, the Topanga Ranch Motel and all existing concessions in the Project area would remain in their existing condition, where they are subject to continued deterioration. Therefore, Alternative 1 would not alter the Project area in any way as to result in indirect risks to life or property due to expansive soils.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential impacts of risks to life or property due to expansive soils would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

When expansive soils swell, the change in volume can exert significant pressures on loads placed on them, such as loads resulting from structure foundations or underground utilities and can result in structural distress and/or damage. The presence of expansive soils could decrease the structural stability of structures, which could result in structural or operational failure or threaten the health and safety of on-site workers. However, as described above in Section 3.6.2, *Affected Environment*, the soils in the Project area are not considered expansive.

Wastewater Management Options

As described above, the underlying soils are not considered expansive. Therefore, no impact would occur due to any of the wastewater options. Regulatory approvals would address this in the event that unforeseen expansive soil types are encountered during the development of wastewater management options.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Future visitor services facilities that may be located in the Project area would not be subject to the risk of life or property because underlying soils are not considered expansive. No impacts would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Septic Tanks

GEO 3.6-5: The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to Topanga Lagoon and Beach or the PCH bridge. Further, the Topanga Ranch Motel and all existing concessions in the Project area would remain the same as under existing conditions, including ongoing deterioration. The existing wastewater systems that include pump-out septic would remain in place. Analysis of site conditions found that the Project area has limited ability to support use of septic systems or alternative wastewater disposal systems to support existing facilities (EPD Consultants 2022). Therefore, Alternative 1 would not result in the installation of new septic systems.

Alternatives 2, 3, and 4 (Build Alternatives)

Existing DBH facilities at Topanga Beach are supported by an AOWTS. The existing wastewater management systems for State Parks, however, are outdated. The State Parks concessions rely upon pumping, while the Topanga Ranch Motel is limited to a single closed tank supporting the on-site employee residence. Improvements to any State Parks visitor services would require upgrading the wastewater management systems to meet current standards. Potential impacts due to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would be similar under all Build Alternatives, as described in the following sections.

Construction

During construction, no temporary septic systems would be installed. Wastewater collection during construction would be provided by portable pump-out systems pursuant to Occupational Safety and Health Administration requirements. No impacts on the Project area from temporary septic systems would occur during construction. The selected new wastewater management system (Options 1–3) would be constructed but would not be in use until after construction.

Operation/Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2 because SDI field site capacity is estimated at 8,000 gallons per

day, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4) (EPD Consultants 2022).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Field testing of on-site soils in 2023 identified them to be appropriate for AOWTS. Approval by the County Department of Public Health would be required for development of wastewater management Option 1 or 2. Either AOWTS option would not be permitted to exceed the capacity of the soils on-site, and either would provide a significant improvement to existing State Parks on-site systems.

Construction of Wastewater Option 3 (sewer), if selected, would not involve construction of AOWTS, so no impacts associated with AOWTS would occur.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, the existing non-conforming tanks would be removed and replaced with either Option 1 (SDI) or Option 2 (seepage pits) to accommodate wastewater generated by the single remaining concession and the development at the Gateway Corner. Gateway Corner is anticipated to include at most approximately 5,500 sf of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. These facilities would replace and modernize structures on-site to meet building code requirements. Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Paleontological Resources and Unique Geologic Features

GEO 3.6-6: The Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to Topanga Lagoon and Beach or the PCH bridge. Further, the Topanga Ranch Motel and all existing concessions in the Project area would remain the same as under existing conditions. Therefore, Alternative 1 would not alter the Project area in any way as to result in a significant impact on a unique paleontological resource or site or unique geologic feature.

Alternatives 2, 3, and 4 (Build Alternatives)

Construction

The Proposed Project involves excavation and grading of soils to recontour the Project area and construct the new PCH bridge. There are slight variations in the amount of soil removed and acres of grading required between all Build Alternatives. The Quaternary alluvium underlying the fill materials in the Project area is of low paleontological sensitivity and it is unlikely that excavation would uncover significant fossils. Similarly, removal of the artificial fill itself would not affect fossil resources, as any fossil recovered from the fill would be out of context and not useful for scientific studies. Excavation at any depth could affect paleontological resources in the Tuna Canyon Formation (Kt) and the Marine Terrace Deposits (Qtm). With implementation of **Mitigation Measures GEO-3** through **GEO-6**, direct or indirect impacts on a unique paleontological resource or site or unique geologic feature would be reduced to a less-than-significant level.

Operation

Once the Proposed Project is constructed, there will be no further ground-disturbing activities. No new soil would be disturbed. Therefore, no impact related to a unique paleontological resource or site, or unique geologic feature would occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2.

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots,

As described above, excavation at any depth could affect paleontological resources in the Project area. However, with implementation of **Mitigation Measures GEO-3** through **GEO-6**, direct or indirect impacts on a unique paleontological resource or site or unique geologic feature would be reduced to a less-than-significant level.

Mitigation Measures

Mitigation Measure GEO-3: State Parks shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP 2010) definition for Qualified Professional Paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources. Before the start of ground-disturbing activities that would affect the Tuna Canyon Formation and the Marine Terrace Deposits (Qtm), the Qualified Paleontologist or their designee shall provide paleontological resources sensitivity training to all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. State Parks and the relevant land managers shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

Mitigation Measure GEO-4: Paleontological monitoring shall be conducted during ground-disturbing activities in the Cretaceous Tuna Canyon Formation and the Marine Terrace Deposits. The formation crops out along the valley walls in the southeast Project area. Monitoring shall be conducted by a qualified paleontological monitor (SVP 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.

Mitigation Measure GEO-5: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the monitor's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at an accredited repository.

If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described in this measure.

Mitigation Measure GEO-6: At the conclusion of paleontological monitoring, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring, any salvage efforts, and the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to State Parks, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and required mitigation measures.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

The Quaternary alluvium underlying the Project area is of low paleontological sensitivity and it is unlikely that excavation would uncover significant fossils. Similarly, removal of the artificial fill itself would not affect fossil resources, as any fossil recovered from the fill would be out of context and not useful for scientific studies. Excavation at any depth could affect paleontological resources in the Tuna Canyon Formation (Kt) and the Marine Terrace Deposits (Qtm). Therefore, implementation of future visitor services facilities under Build Alternatives 3 and 4 could result in potential impacts on paleontological resources.

Mitigation Measures

Implement **Mitigation Measures GEO-3 through GEO-6**

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

GEO 3.6-7: The Project would not result in cumulatively considerable impacts to geology, soils, seismicity, topography, and paleontology. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative geologic impacts encompasses the Project area and its immediately adjacent area. This is because impacts relative to geologic hazards and paleontological resources are generally site-specific. For example, the effect of erosion would tend to be limited to the localized area of a project and could only be cumulative if erosion would occur as a result of two or more adjacent projects that overlapped spatially.

The time frame during which the Proposed Project could contribute to cumulative geologic hazards includes the construction and operations phases. For the Proposed Project, the operations phase would be permanent. However, similar to the geographic limitations discussed above, it should be noted that impacts relative to geologic hazards are generally time specific. Geologic hazards could only be cumulative if two or more geologic hazards were to occur at the same time and overlap at the same location.

Significant cumulative impacts related to geologic hazards could occur if the incremental impacts of the Proposed Project would combine with the incremental impacts of one or more of the cumulative projects identified in Table 3-1 to substantially increase the risk that people, or the environment would be exposed to geologic hazards.

Seismically induced groundshaking, landslides, liquefaction, and lateral spreading could cause structural or earthen damage. State and local building regulations and standards, described in Section 3.6.1, *Regulatory Setting*, have been established to address and reduce the potential for such impacts. The Proposed Project and potential cumulative projects in the area would be required to comply with applicable provisions of these laws and regulations. Compliance with these requirements would reduce the potential for impacts. Therefore, based on compliance with these requirements, the incremental impacts of the Proposed Project combined with impacts of other projects in the area would not cause a significant cumulative impact related to the risk of loss, injury, or death from seismically induced groundshaking, landslides, or liquefaction. The Proposed Project's contribution to cumulative effects would not be cumulatively considerable, and this impact would be less than significant.

Furthermore, the state Construction General Permit would require that other future projects in the area prepare and implement a SWPPP if more than 1 acre of soil would be disturbed. The SWPPPs would prescribe BMPs to control runoff and prevent erosion for each project. Compliance with this requirement would reduce the potential for erosion impacts. The Construction General Permit has been developed to address cumulative conditions arising from construction throughout the state and is intended to maintain cumulative effects of projects subject to this requirement below levels that would be considered significant.

Cumulative projects occurring immediately adjacent to the Project area could include excavation activities at sites that are conducive to retaining paleontological resources if the sites are underlain with older Quaternary alluvium. Therefore, the potential exists to uncover significant paleontological resources depending on the construction site and the site's sensitivity for paleontological resources. However, in association with CEQA review, and depending on the depth of excavation and sensitivity of respective sites, mitigation measures would be required on a case-by-case basis for projects that have the potential to cause significant impacts on undiscovered resources. These measures would include a monitoring program and treatment/curation of discovered fossils. Implementation of these measures would reduce the potential for adverse effects on fossil resources individually and cumulatively and would preserve and maximize the potential of these resources to contribute to the body of scientific knowledge. Therefore, the cumulative effects would be less than significant.

Once the Proposed Project and any cumulative projects have completed construction, no further potential to encounter paleontological resources would exist. There would be no potential cumulative impacts associated with paleontological resources during Project operation.

Mitigation Measures

Implement **Mitigation Measures GEO-1 through GEO-6**

Significance Determination

Less than Significant with Mitigation Incorporated

3.6.4 Summary of Impacts

Table 3.6-3 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to geology, soils, seismicity, topography, and paleontology. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.6-3
SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO GEOLOGY, SOILS, SEISMICITY, TOPOGRAPHY,
AND PALEONTOLOGY**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
GEO 3.6-1: Seismic Hazard	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures GEO-1 and GEO-2.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures GEO-1 and GEO-2.	LTSM
GEO 3.6-2: Soil Erosion	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
GEO 3.6-3: Unstable Soils	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures GEO-1 and GEO-2.	LTS
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures GEO-1 and GEO-2.	LTS
GEO 3.6-4: Expansive Soils	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
GEO 3.6-5: Septic Tanks	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
GEO 3.6-6: Paleontological Resources and Unique Geologic Features	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures GEO-3 through GEO-6.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures GEO-3 through GEO-6.	LTSM
GEO 3.6-7: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures GEO-1 through GEO-6.	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

3.6.5 References

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3.7 Greenhouse Gas Emissions/Climate Change

This section evaluates the potential for greenhouse gas (GHG) and climate change impacts that may result from construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to global climate change; existing climate conditions and global climate change; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to GHG emissions.

3.7.1 Regulatory Setting

Federal

The U.S. Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-carbon dioxide (CO₂) gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Energy Star labeling system for energy-efficient products) encourage voluntary reductions by large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the U.S. Supreme Court held in April of 2007 that USEPA has statutory authority under Section 202 of the federal Clean Air Act to regulate GHGs. The court did not hold that USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. USEPA adopted a Final Endangerment Finding for the six defined GHGs: CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the Clean Air Act consistently with the United States Supreme Court decision. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020.
- While superseded by USEPA and National Highway Traffic Safety Administration (NHTSA) actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of the act address energy savings in government and public institutions, promote research for alternative energy, promote additional research in carbon capture, promote international energy programs, and promote the creation of green jobs.¹

Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President George W. Bush signed Executive Order 13432 on May 14, 2007, directing USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

On May 19, 2009, President Barack Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. In August 2012, standards were adopted for model year 2017 through 2025 passenger cars and light-duty trucks. By 2020, new vehicles were projected to achieve 41.7 miles per gallon (mpg) (if GHG reductions are achieved exclusively through fuel economy improvements) and 213 grams of CO₂ per mile (Phase II standards). By 2025, vehicles will achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO₂ per mile. According to USEPA, under these standards, a model year 2025 vehicle would emit one-half of the GHG emissions as a

¹ A green job, as defined by the U.S. Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

model year 2010 vehicle (USEPA and NHTSA 2012). In 2017, USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022–2025.

In August 2018, USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would, if adopted, maintain the CAFE and CO₂ standards applicable in model year 2020 for model years 2021–2026. The estimated CAFE and CO₂ standards for model year 2020 were 43.7 mpg and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The proposal, if adopted, would also exclude CO₂-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020 (*Federal Register* [FR] Title 83, pages 42986–43500 [83 FR 42986–43500, August 24, 2018]). The proposed SAFE Vehicles Rule’s public comment period was extended to October 26, 2018 (NHTSA 2020). As of March 31, 2020, the SAFE Vehicles Rule, issued by NHTSA and USEPA, was finalized and set fuel economy and CO₂ standards that increase 1.5 percent in stringency each year for model years 2021–2026 for passenger cars and light trucks. (This is less stringent than the 2012 proposed standard, which would have required increases of 5 percent each year.) The anticipated average required fuel economy would be 40.4 mpg by model year 2026 (NHTSA 2020).

On January 20, 2021, President Joe Biden issued Executive Order 13990 “Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis” directing USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the SAFE Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, promulgated in April 2020. On April 28, 2021, USEPA reconsidered the withdrawal of the waiver of preemption for California’s zero emission vehicle (ZEV) programs and GHG emission standards within California’s Advanced Clean Car program for purposes of rescinding that action under the Clean Air Act. The Advanced Clean Car program waiver, as it pertains to the GHG emission standards and ZEV mandates, will become effective should USEPA rescind the prior action. Moreover, on August 5, 2021, the President signed an executive order that targets making half of all new vehicles sold in 2030 zero-emissions vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles (White House Briefing Room, 2021a). On March 14, 2022, USEPA rescinded their 2019 waiver withdrawal, thus bringing back into force the 2013 Advanced Clean Car program waiver, including a waiver of preemption for California’s ZEV sales mandate and GHG emissions standards (87 FR 14332–14379, March 14, 2022). USEPA ruled to revise the greenhouse gas emissions standards under the Clean Air Act section 202(a) for light-duty vehicles for 2023 and later model years to make the standards more stringent (86 FR 74434–74526, December 30, 2021).

On December 30, 2021, USEPA finalized the federal greenhouse gas emissions standards for passenger and light trucks for model years 2023 through 2026 (86 FR 74434–74526, December 30, 2021). This rule prompts auto makers to use clean technologies available today and incentivizes them to produce vehicles with zero and near-zero emissions technology. The final rule revises the current SAFE rules standards, beginning in model year 2023 and increases in

stringency year over year through model year 2026. The standards finalized for model year 2026 establish the most stringent GHG standards ever set for the light-duty vehicle sector. The final rule sets a stringency increase in model year 2023 by almost 10 percent (compared to the SAFE rule standards of model year 2022), followed by stringency increases of 5 percent for model year 2024, 6.6 percent for model year 2025, and 10 percent for model year 2026. USEPA projects that the final standards will result in a reduction of 3.1 billion tons of GHG emissions by 2050 and will also reduce emissions of some criteria pollutants and air toxics.

Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

On October 25, 2010, USEPA and the U.S. Department of Transportation proposed the first national standards to reduce GHG and improve fuel efficiency of heavy-duty trucks and buses (also known as “Phase 1”). For combination tractors, the standards began with the 2014 model year and were scheduled to achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the standards began with the 2014 model year were scheduled to achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by the 2018 model year (12 percent and 17 percent respectively if accounting for air conditioning leakage). For vocational vehicles (includes other vehicles like buses, refuse trucks, and concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the standards began with the 2014 model year, which were scheduled to achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year. Building on the success of the standards, USEPA and the U.S. Department of Transportation jointly finalized additional standards (called “Phase 2”) for medium- and heavy-duty vehicles through model year 2027 that further improve fuel efficiency and cut carbon pollution. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons.

Paris Agreement

During the Leaders’ Summit on Climate in April 2021, President Biden fulfilled his promise to rejoin the Paris Agreement and set a course for the United States to tackle the climate crisis at home and abroad, reaching net zero emissions economy-wide by no later than 2050. Additionally, as part of reentering the Paris Agreement, the United States established a new 2030 GHG emissions target, known as the “nationally determined contribution,” which is a formal submission to the United Nations Framework Convention on Climate Change. The United States’ nationally determined contribution target aims for a 50–52 percent reduction in GHG emissions from 2005 levels by 2030 (White House Briefing Room 2021a). To achieve these goals, the United States has committed to all of the following actions:

- Achieve 100 percent carbon pollution-free electricity by 2035.
- Support efficiency upgrades and electrification in buildings.
- Reduce carbon pollution from the transportation sector.
- Reduce emissions from forests and agriculture and enhance carbon sinks.
- Address carbon pollution from industrial process.

- Reduce non-CO₂ GHGs, including methane, hydrofluorocarbons, and other potent short-lived climate pollutants.
- Invest in innovation of affordable, reliable, and resilient clean technologies and infrastructure.

State

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal Programs and development subject to the Coastal Act. Policies relevant to the Proposed Project are as follows:

Section 30253 Minimization of adverse impacts. New development shall do all of the following: (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development and (4) Minimize energy consumption and vehicle miles traveled.

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the state.

California Greenhouse Gas Reduction Targets

Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32 (Emissions Limit)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, the California Air Resources Board (CARB) has the primary responsibility for reducing GHG emissions. AB 32 required CARB to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, both were signed by Governor Edmund G. Brown Jr. to update AB 32 and include an emissions reduction's goal for the year 2030. SB 32 and AB 197 amended AB 32 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure the benefits of state climate policies reach disadvantaged communities. SB 32 suggests approaches to achieving the new reduction target, which include increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

2022 Scoping Plan for Achieving Carbon Neutrality

Pursuant to AB 32 and SB 32, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which outlines the strategies the state will implement to achieve carbon neutrality by reducing GHGs to meet the anthropogenic target and by expanding actions to capture and store carbon through the state’s natural and working lands and using a variety of mechanical approaches. The major element of the 2022 Scoping plan is the decarbonization of every sector of the economy. The 2022 Scoping Plan “is the most comprehensive and far-reaching Scoping Plan developed to date” and “modeling for this Scoping Plan shows that this decade must be one of transformation on a scale never seen before to set us up for success in 2045” (CARB 2022). The 2022 Scoping Plan includes the Scoping Plan Scenario, which “builds on and integrates efforts already underway to reduce the state’s GHG, criteria pollutant, and toxic air contaminant emissions by identifying the clean technologies and fuels that should be phased in as the state transitions away from combustion of fossil fuels” (CARB 2022).

Decarbonization would require rapidly moving to zero-emission transportation for cars, buses, trains, and trucks; phasing out the use of fossil gas for heating; clamping down on chemicals and refrigerants; providing communities with sustainable options such as walking, biking, and public transit to reduce reliance on cars; continuing to build out solar arrays, wind turbine capacity, and other resources to provide clean, renewable energy to displace fossil-fuel fired electrical generation; scaling up new options such as renewable hydrogen for hard-to-electrify end uses and biomethane where needed. “Successfully achieving the outcomes called for in the Scoping Plan would reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent by 2045 relative to 2022” (CARB 2022).

Despite these efforts, some amount of residual emissions will remain from hard-to-abate industries such as cement, internal combustion vehicles still on the road, and other sources of GHGs, including high global warming chemicals used as refrigerants. The 2022 Scoping Plan addresses the remaining emissions by re-envisioning natural and working lands—forests, shrublands/chaparral, croplands, wetlands, and other lands—to ensure they incorporate and store as much carbon as possible. Since working lands will not provide enough sequestration or carbon storage on their own to address the residual emissions, additional methods of capturing, removing, and storing carbon dioxide need to be explored, developed, and deployed (CARB 2022).

For the first time, the 2022 Scoping Plan considered how the state’s natural working lands contribute to the state’s long-term climate goals. The Scoping Plan scenario considered land management activities that prioritize restoration and enhancement of ecosystem functions to improve climate adaptation and resilience to climate change impacts, including more stable carbon stocks (CARB 2022).

The 2022 Scoping Plan also discusses the role of local governments in meeting the state’s GHG reductions goals because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Furthermore, local governments make critical

decisions on how and when to deploy transportation infrastructure and can choose to support transit, walking, bicycling, and neighborhoods that allow people to transition away from cars; they can adopt building ordinances that exceed statewide building code requirements; and they play a critical role in facilitating the rollout of ZEV infrastructure. The 2022 Scoping Plan encourages local governments to take ambitious, coordinated climate action at the community scale, action that is consistent with and supportive of the state's climate goals. The Scoping Plan acknowledges that the path forward is not dependent on one agency, one state, or even one country. However, the state can lead by engaging Californians and demonstrating how actions at the state, regional, and local levels of governments, as well as action at community and individual levels, can contribute to addressing the challenge (CARB 2022).

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger issued Executive Order S-3-05, which outlined the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.²
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

In accordance with Executive Order S-3-05, the Secretary of the California Environmental Protection Agency is required to coordinate efforts of various agencies, which comprise the California Climate Action Team, to collectively and efficiently reduce GHGs. These agencies include CARB; the Secretary of the Business, Transportation and Housing Agency; Department of Food and Agriculture; the Resources Agency; the California Energy Commission; and the Public Utilities Commission. The California Climate Action Team provides periodic reports to the Governor and Legislature on the state of GHG reductions in the state as well as strategies for mitigating and adapting to climate change. The first California Climate Action Team report to the Governor and the Legislature, in 2006, contained recommendations and strategies to help meet the targets in Executive Order S-3-05. The 2010 California Climate Action Team report, finalized in December 2010, expands on the policies in the 2006 assessment (CalEPA 2010).

Executive Order B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-30-15, which involved the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

² The 2010 target to reduce GHG emissions to 2000 levels was not met (Rubin 2013).

Executive Order B-55-18

Executive Order B-55-18 was signed by Governor Edmund G. Brown Jr. on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 1383

This law (Chapter 395, Statutes of 2016) creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The short-lived climate pollutants included under this bill—including methane, fluorinated gases, and black carbon—are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. In 2017, CARB adopted a Short-Lived Climate Pollutant Reduction Strategy to implement SB 1383 (CARB 2017).

Senate Bill 97 (Dutton)

SB 97, enacted in 2007, directed the Governor’s Office of Planning and Research (OPR) to develop CEQA guidelines “for the mitigation of GHG emissions or the effects of GHG emissions.” In December 2009, OPR adopted amendments to the CEQA Guidelines Appendix G Environmental Checklist. These amendments created a new resource section for GHG emissions and suggested criteria that may be used to establish significance of GHG emissions (California Code of Regulations [CCR] Title 14, Section 15064.4). However, neither a quantitative threshold of significance nor any specific mitigation measures is included. As amended, the CEQA Guidelines require a lead agency to make a good-faith effort, based on scientific and factual data to the extent possible, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The CEQA Guidelines give discretion to the lead agency to choose whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Furthermore, the CEQA Guidelines identify three factors to be considered in the evaluation of the significance of GHG emissions:

- (1) The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The administrative record for the CEQA Guidelines amendments also clarifies “that the effects of greenhouse gas emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis” (OPR 2009).

Land Use and Transportation Planning

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the state on September 30, 2008. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for the Southern California Association of Governments (SCAG), which is the Metropolitan Planning Organization for the region in which the County of Los Angeles is located (CARB 2018a). Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

Under SB 375, the reduction target must be incorporated within that region's regional transportation plan (RTP), which is used for long-term transportation planning, in a sustainable community's strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (such as a general plan) are not required to be consistent with either the regional transportation plan or SCS.

In addition, on September 3, 2020, SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2045 RTP/SCS), also known as Connect SoCal, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, Connect SoCal provides a vision for transportation throughout the region for the next 25 years. Connect SoCal successfully achieves and exceeds the GHG emission-reduction targets set by CARB. Connect SoCal is further discussed in the *Regional and Local* subsection.

In March 2018, CARB updated the SB 375 targets to require 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions (CARB 2018b). This reduction target has been integrated into the 2045 RTP/SCS.

Transportation Fuel

In response to the transportation sector accounting for a large percentage of California's CO₂ emissions, AB 1493 (HSC Section 42823 and 43018.5) (also referred to as the Pavley standards), enacted on July 22, 2002, required CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, and economic impacts, and provide maximum flexibility to manufacturers.

The federal Clean Air Act ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed to set its own standards with a federal Clean Air Act waiver from USEPA, which was granted in June 2009. As discussed previously, USEPA and the U.S. Department of Transportation adopted GHG emission standards for model year 2017 through

2025 vehicles, which corresponds to the vehicle model years regulated under the state’s Pavley Phase II standards. The standards were overridden with the SAFE Vehicles Rule, which were finalized in 2020 by USEPA and NHTSA and set one national standard, thus withdrawing California’s waiver of preemption under Section 209 of the federal Clean Air Act. On December 30, 2021, USEPA rescinded their 2019 waiver withdrawal, thus bringing back into force the 2013 Advanced Clean Car program waiver, including a waiver of preemption for California’s ZEV sales mandate and GHG emissions standards (86 FR 74434–74526, December 30, 2021). On March 14, 2022, USEPA ruled to revise the greenhouse gas emissions standards under the Clean Air Act Section 202(a) for light-duty vehicles for 2023 and later model years to make the standards more stringent (87 FR 14332–14379, March 14, 2022). The standards finalized for model year 2026 established the most stringent GHG standards ever set for the light-duty vehicle sector.

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years through a transition to ZEVs, cleaner transit systems, and reduction of vehicle miles traveled. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for class 3–7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels (CARB 2016).

In January 2007, Governor Edmund G. Brown Jr. signed EO S-01-07, which mandated the following actions: (1) establish a statewide goal to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020; and (2) adopt a Low Carbon Fuel Standard for transportation fuels in California. CARB identified the Low Carbon Fuel Standard as one of the nine discrete early actions in the Climate Change Scoping Plan. In 2018, CARB amended the Low Carbon Fuel Standard to strengthen and smooth the carbon intensity benchmarks through 2030 in line with California’s 2030 GHG emissions reduction target enacted through SB 32 (CARB 2019).

Energy

The California Energy Commission first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although this was not originally intended to reduce GHG emissions, the resulting increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 Title 24 standards encourage efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more (CEC 2022).

The California Historical Building Code (24 CCR Part 8) applies to qualified historical buildings and structures. The purpose of the California Historical Building Code is to provide regulations for the preservation, restoration, rehabilitation, relocation or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historical Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide ADA access, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality” (CBSC 2022). As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was updated in 2022 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2023 (CBSC 2022). Several definitions related to energy that were added or revised affect hot water recirculation systems and electric vehicle (EV) chargers and charging. For new multi-family dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification. For non-residential mandatory measures, Table 5.106.5.3.3 of the CALGreen Code, which identifies the number of required EV charging spaces, has been revised in its entirety (CBSC 2022).

The state has adopted regulations to increase the proportion of electricity from renewable sources. In November 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which expanded the state’s Renewables Portfolio Standard to 33 percent renewable power by 2020 (November 17, 2008). On April 12, 2011, Governor Edmund G. Brown Jr. signed SB X1-2 to increase California’s Renewables Portfolio Standard to 33 percent by 2020. SB 350 (Chapter 547, Statutes of 2015) further increased the Renewables Portfolio Standard to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. On September 10, 2018, Governor Brown signed SB 100, which further increased California’s Renewables Portfolio Standard and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

Cap-and-Trade Program

The Climate Change Scoping Plan identified a Cap-and-Trade Program as a key strategy CARB will employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020 (17 CCR Sections 95800–96023). Under Cap-and-Trade program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons carbon dioxide equivalent [CO₂e] per year) and declines over time, and facilities subject to the cap can trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program’s duration (17 CCR Sections 95811, 95812). On July 17, 2017, the California legislature passed AB 398, extending the Cap-and-Trade program through 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis.

If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB, the reductions attributed to the Cap-and-Trade Program can change over time depending on the state’s emissions forecasts and the effectiveness of direct regulatory measures.

California Air Resources Board

CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. Some of the regulations and measures that CARB has adopted to reduce particulate matter, nitrogen oxides, and other emissions have co-benefits of reducing GHG emissions. The Proposed Project would be required to comply with the following regulations and measures:

- In 2004, CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (13 CCR Section 2485). This measure generally does not allow diesel-fueled commercial vehicles to idle for more than five (5) minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks.

- In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.
- In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection [h]). In April 2014, amendments to the Truck and Bus Regulation were approved by CARB to help ensure that the air quality benefits originally envisioned by the regulation will be achieved, by providing some additional compliance flexibility and options to vehicle owners. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.
- In 2012, CARB approved the Advanced Clean Cars Program, which includes low-emission-vehicle regulations that reduce criteria pollutant and GHG emissions from light- and medium-duty vehicles, and the zero-emissions vehicle regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018–2025 model years (CARB 2021a). The program aims to reduce smog-forming pollution from passenger vehicles by 75 percent by 2025, with the ultimate goal of total fleet electrification and elimination of tailpipe emissions. CARB is in the process of establishing the next set of low-emission-vehicle and ZEV requirements to contribute to meeting federal ambient air quality ozone standards and California’s carbon neutrality targets (CARB 2021a).
- In 2020, CARB approved the Advanced Clean Trucks Program which requires that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, “Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan, Sustainable Freight Action Plan, SB 350, and AB 32 (CARB 2021b).” The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies and reduction of idling times.

Regional and Local

South Coast Air Quality Management District

The Project site is located in the South Coast Air Basin (Air Basin), which consists of Orange county, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside counties, in addition to the San Gorgonio Pass area in

Riverside county. The South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards.

The SCAQMD adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives (SCAQMD 1993):

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995.
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000.
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415).
- Develop an emissions inventory and control strategy for methyl bromide.
- Support the adoption of a California GHG emission reduction goal.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds (SCAQMD 2008a, 2008b, 2008c). Within its October 2008 document, SCAQMD proposed the use of a percent emission reduction target to determine significant for commercial/residential projects that emit greater than 3,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO_{2e} per year would be assumed to have a less-than-significant impact on climate change. The SCAQMD’s proposed 3,000 MTCO_{2e} per year target was developed before 2020 and has never been considered for adoption and, thus, does not apply. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO_{2e} for stationary source/industrial projects where the SCAQMD is the Lead Agency. A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds (SCAQMD 2008c). The aforementioned Working Group has been inactive since 2011 and the SCAQMD has never formally adopted any GHG significance threshold for land use development projects.

Southern California Association of Governments

On September 3, 2020, the SCAG’s Regional Council formally adopted the 2045 RTP/SCS also known as the Connect SoCal, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, the 2045 RTP/SCS provide a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2045 RTP/SCS describe how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation

GHG emissions by 2020 and a 19 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level on a per capita basis (SCAG 2020a). Compliance with and implementation of the 2045 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g., nitrogen dioxide, carbon monoxide) associated with reduced per capita vehicle miles traveled.

The 2045 RTP/SCS states that the SCAG region was home to approximately 18.8 million people in 2016 and included approximately 6 million homes and 8.4 million jobs (SCAG 2020b). By 2045, the integrated growth forecast projects that these figures will increase by 3.7 million people, with approximately 1.6 million more homes and 1.7 million more jobs. High Quality Transit Service Areas, which are defined by the 2045 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours, will account for 2.4 percent of regional total land, but are projected to accommodate 51 percent and 60 percent of future household growth respectively between 2016 and 2045 (SCAG 2016). Like the 2016–2040 RTP/SCS, the 2045 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region’s High Quality Transit Service Areas. These areas are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

SCAG’s 2045 RTP/SCS provide specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a “Complete Streets” policy that meets the needs of all users of the streets, roads, and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles (SCAG 2020a).

In addition, the 2045 RTP/SCS include strategies to promote active transportation, support local planning and projects that serve short trips, promote transportation investments, investments in active transportation, more walkable and bikeable communities, that will result in improved air quality and public health, and reduced greenhouse gas emissions, and supports building physical infrastructure, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2045 RTP/SCS align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determinations in the 2045 RTP/SCS, which demonstrates achievement of the GHG emission reduction targets established by CARB (SCAG 2020a; CARB 2020a).

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1-percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2045 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals (SCAG 2020c).

Los Angeles County General Plan 2035

A general plan is a basic planning document that, alongside the zoning code, governs development in a city or county. The State of California requires each city and county to adopt a general plan with seven mandatory elements—land use, open space, circulation, housing, noise, conservation, and safety—and any number of optional elements as appropriate. The Air Quality Element of the *Los Angeles County General Plan 2035* outlines goals and policies that would reduce GHG emissions and address the impacts of climate change. Relevant goals and policies applicable to the Proposed Project are as follows (County of Los Angeles 2015):

Goal AQ 3: Implementation of plans and programs to address the impacts of climate change.

Policy AQ 3.1: Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

Policy AQ 3.2: Reduce energy consumption in County operations by 20 percent by 2015.

Policy AQ 3.3: Reduce water consumption in County operations.

Policy AQ 3.4: Participate in local, regional, and state programs to reduce greenhouse gas emissions.

Policy AQ 3.5: Encourage energy conservation in new development and municipal operations.

Policy AQ 3.6: Support rooftop solar facilities on new and existing buildings.

Policy AQ 3.7: Support and expand urban forest programs within the unincorporated areas.

Policy AQ 3.8: Develop, implement, and maintain countywide climate change adaptation strategies to ensure that the community and public services are resilient to climate change impacts.

In addition, the general plan contains policies that encourage water conservation and protection, traffic reduction, sustainable development, and waste minimization that would further reduce GHG emissions.

Los Angeles County Green Building Standards

In April 2016, the County amended the County Code to include Title 31, Green Building Standards Code. The Green Building Standards Code incorporates by reference standards from the CALGreen Code described above and supersedes the green building ordinance and the drought tolerant landscaping ordinance in Title 22 of the County Code. The Green Building Standards Code includes mandatory residential and nonresidential measures related to low impact development, electric vehicle charging infrastructure, cool roof installations, and construction waste management practices (County Code Title 31, Chapter 4, and Chapter 5).

Unincorporated Los Angeles County Community Climate Action Plan 2020

The Unincorporated Los Angeles County Community Climate Action Plan 2020 (2020 CCAP), adopted in 2015, was a component of the Los Angeles County General Plan 2035 Air Quality Element until it expired in 2020. To reduce impacts of climate change, the 2020 CCAP set a target to reduce GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020 (LA County Planning 2015). The 2020 CCAP contained 26 local actions related to green buildings and energy; land use and transportation; water conservation and wastewater; waste reduction, reuse, and recycling; and land conservation and tree planting. It also included 17 reduction strategies from the following areas: transportation; stationary energy; waste; industrial process and product use; agriculture, forestry, and other land use.

Draft 2045 Climate Action Plan

Although not adopted yet, the County released a Draft 2045 Climate Action Plan (2045 CAP) in April 2022 (LA County Planning 2022), which is an update to the 2020 CCAP and sets new GHG emissions reduction targets for 2030 and 2035, consistent with state goals, and sets a long-term aspirational goal for carbon neutrality by 2045. The 2045 CAP establishes the following GHG emissions reduction targets:

- By 2030, reduce GHG emissions by 40 percent below 2015 levels.
- By 2035, reduce GHG emissions by 50 percent below 2015 levels.

The 2045 CAP also provides a GHG emissions inventory from community-wide activities in unincorporated Los Angeles County for 2018 (5,173,240 MTCO_{2e}), along with a 2015 baseline inventory (5,351,115 MTCO_{2e}). Additionally, it provides future emissions projections for 2030, 2035, and 2045.

The 2045 CAP includes 10 strategies and 25 measures that, when combined, put the unincorporated county on the path toward carbon neutrality and are estimated to reduce annual emissions by 1.5 million MTCO_{2e} in 2030, 1.9 million MTCO_{2e} in 2035, and 2.5 million MTCO_{2e} in 2045. The five categories for GHG emissions reduction are (1) energy supply, (2) transportation, (3) building energy and water, (4) waste, and (5) agriculture, forestry, and other land uses. Under these categories, there are 10 strategies which are: (1) decarbonize the energy supply, (2) increase densities and diversity of land uses near transit, (3) reduce single occupancy

vehicle trips, (4) institutionalize low-carbon transportation, (5) decarbonize buildings, (6) improve efficiency of existing building energy use, (7) conserve water, (8) minimize waste and recover energy and materials from waste stream, (9) conserve forests and working lands, and (10) sequester carbon and implement sustainable agriculture. These 10 categories are further broken down into measures and actions which will achieve the GHG emissions reductions outlined in the Draft 2045 CAP.

OurCounty Los Angeles County Sustainability Plan

In August 2019, the County adopted the OurCounty Sustainability Plan which contains 12 cross-cutting goals, 37 strategies, and 159 actions and identifies entities and partners which will work together to achieve these goals (LACSO 2019). The OurCounty Sustainability Plan focuses on enhancing the well-being of every community in the county while reducing damage to the natural environment and adapting to the changing climate. The OurCounty goals are as follows:

Goal 2: Buildings and infrastructure that support human health and resilience. Old and new buildings and infrastructure will utilize more efficient technologies and practices that reduce resource use, improve health, and increase resilience.

Goal 4: A prosperous LA County that provides opportunities for all residents and businesses and supports the transition to a green economy. Support the growth of green economy sectors through procurement practices, land use authority, and various economic and workforce development incentives.

Goal 7: A fossil fuel-free LA County. Move towards a zero-carbon energy system that reduces GHG emissions by eliminating fossil fuel production in the County. By addressing sources of pollution, air will be cleaner for the residents and the imminent dangers from the magnitude of climate change will be limited.

Goal 8: A convenient, safe, clean, transportation system that enhances mobility and quality of life while reducing car dependency. Provide a modern transportation system for all ages and abilities to access reliable, safe, affordable, and varied mobility choices that reduce pollution. Develop programs that focus on reducing the number of vehicle miles travelled, including transit systems, walking, biking, e-scooters, and zero-emission car-share services.

Goal 9: Sustainable production and consumption of resources. Improve our ability to promote integrative and collaborative solutions at the local and regional levels to effectively manage the County's waste, water, energy, and material resources into the future.

The plan is intended to help guide decision-making in unincorporated county areas and to provide a model for decision-making in the 88 incorporated cities in the county. As a strategic plan, the OurCounty Sustainability Plan does not supersede land use plans that have been adopted by the Regional Planning Commission and Board of Supervisors, including the Los Angeles County General Plan 2035.

County of Los Angeles Municipal Code

Energy

The County has adopted by reference, Sections 102 through 119 of Chapter 1 of Title 26 of the Los Angeles County Code as Title 31 Green Building Standards Code of the Los Angeles County Code. The Green Building Code increases energy and water efficiency and reduces waste generation. The Green Building Code has co-benefits of reducing criteria pollutant and GHG emissions through the increase in energy efficiencies, which reduces building energy demand and the combustion of natural gas within buildings.

Water

As part of state and regional efforts towards water conservation, Titles 11 and 12 of the Los Angeles County Code includes requirements for water conservation and sustainability. The code requires recirculating water required for water fountains and decorative water features and commercial conveyor carwashes and the use of recycled or approved non-potable water for construction purposes. It is recommended that large, landscaped areas such as parks, cemeteries, golf courses, school grounds, and playing fields use irrigation systems with rain sensors that automatically shut off such systems during periods of rain or irrigation timers which automatically use information such as evapotranspiration sensors to set an efficient water schedule.

Solid Waste

Title 20 of the Los Angeles County Code contains provisions that implement the source reduction and recycling programs and other measures to achieve per capita waste generation for disposal in accordance with state programs. The County requires all collectors operating under a collection franchise within the county to comply with applicable resource recovery and diversion programs to minimize solid waste disposal at landfills.

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of Topanga State Park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The plan discusses GHG and climate concerns. It states that a healthy watershed provides numerous benefits including reduced vulnerability to invasive species, climate change, and future land-use changes. Native land cover and soil resources within these watersheds provide vast carbon storage capabilities, offsetting GHG emissions. Additionally, one of the primary interpretive themes of the general plan is climate change. This theme states that a well-informed public that protects water resources and understands fire ecology will help Topanga State Park's ecosystems to thrive. The general plan does not provide any avoidance, minimization or mitigation measures for climate change (State Parks 2012).

Santa Monica Mountains Local Coastal Program

The Project area is located within the California coastal zone, and all developments are subject to regulations of the Santa Monica Mountains Local Coastal Program (LCP). The LCP was certified by the California Coastal Commission in 2014 and grants the County authority to review and approve coastal development permits at the local level. The County's LCP includes a land use plan (LA County Planning 2018) to regulate land use and a local implementation plan for zoning. Development within a coastal zone may not commence until a coastal development permit has been issued by the California Coastal Commission or a local government that has a California Coastal Commission–certified LCP. The land use plan identifies the following goals and policies which pertain to air quality (LA County Planning 2018):

Goal CO-7: Shoreline and beaches that are accessible to the public and protected to the greatest extent possible from the impacts of beach sand erosion, development, conflicting uses, sea level rise, and other possible threats.

CO-203 Research and respond to the impacts of sea level rise on the Pacific Ocean/North Santa Monica Bay shoreline, with special attention to beach level septic and leach field systems.

- a. Continue to gather information on the effects of sea level rise on the shoreline, including identifying the most vulnerable areas, structures, facilities, and resources; specifically areas with priority uses such as beaches, public access and recreation resources, including the California Coastal Trail, Highway 1, significant H1 habitat such as wetlands or wetland restoration areas and riverine areas, open space areas where future wetland migration would be possible, and existing and planned sites for critical infrastructure. Participate, as possible, in regional assessments of sea level rise vulnerability, risk and adaptation planning efforts to ensure compatible treatment for sea level rise across jurisdictional boundaries. Any vulnerability assessment shall use best available science and multiple scenarios including best available scientific estimates of expected sea level rise, such as by the Ocean Protection Council [e.g., 2011 OPC Guidance on Sea Level Rise], National Research Council, Intergovernmental Panel on Climate Change, and the West Coast Governors Alliance.
- b. Best Available Science shall be updated, in keeping with regional policy efforts, as new, peer-reviewed studies on sea level rise become available and as agencies such as the OPC or the CCC issue updates to their guidance reports.
- c. Prepare a sea level rise vulnerability assessment, or cooperate in a regional or multijurisdictional assessment, or the FEMA multi-hazard assessment, and give special attention to the vulnerable areas and coastal resources highlighted in subsection a of this policy.
- d. Based on information gathered over time, propose additional policies and other actions for inclusion in the LCP to address the impacts of sea level rise. As applicable, recommendations may include such actions as:
 - relocation of existing or planned development to safer locations, working with entities that plan or operate infrastructure, such as Caltrans;
 - changes to LCP land uses, and siting and design standards for new development, to avoid and minimize risks;

- changes to standards for wetland, H1 habitat, and stream buffers and setbacks;
- modifications to the LCP to ensure long-term protection of the function and connectivity of existing public access and recreation resources; and
- modifications to the Regional Transportation Plan.

3.7.2 Affected Environment

Greenhouse Gas Background

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, data indicates that the current global conditions differ from past climate changes in rate and magnitude. The current changes in global climate have been attributed to anthropogenic (human-caused) activities by the Intergovernmental Panel on Climate Change (IPCC 2014). The term GHG refers to gases that trap long-wave radiation or heat in the atmosphere, which heats the surface of the Earth. Without human intervention, the Earth maintains an approximate balance between the GHG emissions in the atmosphere and the storage of GHGs in the oceans and terrestrial ecosystems. GHGs are the result of both natural and anthropogenic activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions.

The federal government and State of California recognized that anthropogenic GHG emissions are contributing to changes in the global climate, and that such changes are having and will have adverse effects on the environment, the economy, and public health. While worldwide contributions of GHG emissions are expected to have widespread consequences, it is not possible to link particular changes to the environment of California or elsewhere to GHGs emitted from a particular source or location. In other words, emissions of GHGs have the potential to cause global impacts rather than local impacts. Increased concentrations of GHGs in the Earth's atmosphere have been linked to global climate change and such conditions as rising surface temperatures, melting icebergs and snowpack, rising sea levels, and the increased frequency and magnitude of severe weather conditions (IPCC 2014). Existing climate change models also show that climate warming portends a variety of impacts on agriculture, including loss of microclimates that support specific crops, increased pressure from invasive weeds and diseases, and loss of productivity due to changes in water reliability and availability (CNRA 2018a). In addition, rising temperatures and shifts in microclimates associated with global climate change are expected to increase the frequency and intensity of wildfires (USGCRP 2018).

State law defines GHGs to include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ (see e.g., CEQA Guidelines Section 15364.5 and Health and Safety Code, Section 38505[g]). The most common GHG that results from human activity is CO₂, which represents 76 percent of total anthropogenic GHG emissions in the atmosphere (as of 2010 data) (IPCC 2014), followed by CH₄ and N₂O. Scientists have established a Global Warming Potential (GWP) to gauge the potency of each GHG's ability to absorb and re-emit long-wave radiation and these GWP ratios are available from

the IPCC. The GWP of a gas is determined using CO₂ as the reference gas with a GWP of 1 over 100 years. For example, a gas with a GWP of 10 is 10 times more potent than CO₂ over 100 years. The sum of each GHG multiplied by its associated GWP is referred to as CO₂e. The measurement unit CO₂e is used to report the combined potency of GHG emissions.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC’s Second Assessment Report. In 2007, the IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report. The updated GWPs in the IPCC’s Fourth Assessment Report have begun to be used in recent GHG emissions inventories. In 2013, the IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (IPCC 2013a). However, United Nations Framework Convention on Climate Change reporting guidelines for national inventories require the use of GWP values from the IPCC’s Fourth Assessment Report. To comply with international reporting standards under the framework, official emission estimates for California and the U.S. are reported using the IPCC’s Fourth Assessment Report GWP values. Therefore, statewide, and national GHG inventories have not yet updated their GWP values to the IPCC’s Fifth Assessment Report values. By applying the GWP ratios, project-related CO₂e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO₂ over a 100-year period is used as a baseline. Compounds that are regulated as GHGs are discussed below and their respective GWPs are summarized in **Table 3.7-1, Regulated Greenhouse Gas’s Reported GWP Values.**

**TABLE 3.7-1
 REGULATED GREENHOUSE GAS’S REPORTED GWP VALUES**

Regulated GHG Compound	IPCC SAR GWP	IPCC AR4 GWP	IPCC AR5 GWP
Carbon Dioxide (CO ₂)	1	1	1
Methane (CH ₄)	21	25	28
Nitrous Oxide (N ₂ O)	310	298	265
Hydrofluorocarbons (HFCs)	140 to 11,700	124 to 14,800	138 to 12,400
Perfluorocarbons (PFCs)	6,500 to 9,200	7,390 to 17,700	6,630 to 17,400
Sulfur Hexafluoride (SF ₆)	23,900	22,800	23,500

NOTES: AR4 = Fourth Assessment Report; AR5 = Fifth Assessment Report; GHG = greenhouse gas; GWP = global warming potential; IPCC = International Panel on Climate Change; SAR = Second Assessment Report.

SOURCES: IPCC 2014.

Carbon Dioxide: CO₂ is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO₂ is the reference gas (GWP of 1) for determining the GWPs of other GHGs.

Methane: CH₄ is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH₄ is 21 in the IPCC’s Second Assessment Report, 25 in the IPCC’s Fourth Assessment Report, and 28 in the IPCC’s Fifth Assessment Report.

Nitrous Oxide: N₂O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N₂O is 310 in the IPCC's Second Assessment Report, 298 in the IPCC's Fourth Assessment Report, and 265 in the IPCC's Fifth Assessment Report.

Hydrofluorocarbons: HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWPs of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC's Second Assessment Report, 124 for HFC-152a to 14,800 for HFC-23 in the IPCC's Fourth Assessment Report, and 138 for HFC-152a to 12,400 for HFC-23 in the IPCC's Fifth Assessment Report.

Perfluorocarbons: PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC's Second Assessment Report, 7,390 to 17,700 in the IPCC's Fourth Assessment Report, and 6,630 to 17,400 in the IPCC's Fifth Assessment Report.

Sulfur Hexafluoride: SF₆ is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF₆ has a GWP of 23,900 in the IPCC's Second Assessment Report, 22,800 in the IPCC's Fourth Assessment Report, and 23,500 in the IPCC's Fifth Assessment Report.

Nitrogen Trifluoride: Nitrogen trifluoride is a fluorinated compound consisting of nitrogen and fluoride. It is an inorganic, colorless, non-flammable, toxic gas with a slightly musty odor. Nitrogen trifluoride is a chemical released in some high-tech industries, including in the manufacture of many electronics and semi-conductors. Nitrogen trifluoride has a GWP of 17,200 in the IPCC's Fourth Assessment Report, and 16,100 in the IPCC's Fifth Assessment Report.

Effects of Global Climate Change

California is one of the most "climate-challenged" regions of North (Overpeck et al. 2013). Climate is usually defined as "average weather" and generally is described in terms of the mean and variability of temperature, precipitation, and wind over, and in California each of the last three decades has been successively warmer than any preceding decade (OEHHA 2018). The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local impacts of climate change, occurrence, frequency, and magnitude of extreme weather events, impacts of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Nonetheless, the IPCC, in its Fifth Assessment Report, Summary for Policy Makers, stated that "it is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse

gas concentrations and other anthropogenic forcings [*sic*] together” (IPCC 2013b). A report from the National Academy of Sciences concluded that 97–98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity (Anderegg et al. 2010).

According to the California Environmental Protection Agency, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more frequent and a greater spatial extent of forest fires; more drought years; increased erosion of California’s coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (CalEPA 2006). Below is a summary of some of the impacts that could be experienced in California as a result of global warming and climate change.

Temperature and Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the impact and, therefore, its indirect impacts, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which in turn would worsen air quality. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CalEPA 2013). However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. The South Coast region, a narrow band along the coast from Point Conception to the Mexican border, including the Los Angeles Basin and San Diego, has experienced the greatest warming among all the regions in California since 1895 (OEHHA 2018).

Heat events are projected to become more frequent and last longer. Since the 1980s, heat waves have become more humid, in part due to ocean warming, which prevents surfaces from cooling down at night, leading to higher nighttime temperatures. Southern California also has experienced the greatest nighttime extreme heat trends, at least two times greater than daytime trends, and it experiences the greatest increases in both daytime and nighttime heat extremes during late spring (April–June) (OEHHA 2018). Data suggest that the predicted future increase in temperatures resulting from climate change could potentially interfere with efforts to control and reduce ground-level ozone in the region.

According to the Cal-Adapt website’s “Local Climate Change Snapshot” database (Cal-Adapt 2023), the Project site could see an average annual increase in maximum temperature to approximately 73.3 to 74.1 °F in the mid-century (2035–2064) and approximately 74.4 to 77.3 °F at the end of the century (2070–2099) compared to 70.1 °F for the baseline period (1961–1990). The average annual number of extreme heat days also could increase to approximately 8 to 10 days in the mid-century (2035–2064) and 11 to 24 days at the end of the century (2070–2099) compared to 2 days for the baseline period (1961–1990).

Water Supply

California’s highly variable climate includes inconsistent precipitation with multi-year wet or dry periods, such as the unusually wet years of 2005, 2011, and 2017, as well as the droughts of 2001–2004, 2007–2010, and 2012–2016 (CNRA 2018b). More than other regions of the western United States, the presence or absence of these large storms within a given winter season determines California’s water resources because of their contribution to snowpack. Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, a reduced snowpack coupled with increased rainfall during winters could lead to reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge (PISEDS 2003).

In California, the spring snowpack runoff accounts for approximately 70 percent of the total water supply in the Colorado River Basin, which supplies approximately 55 percent of Southern California’s water. Since the 1950s, the snow water storage measurements on April 1 have declined by about 10 percent. Models predict that the mean snow water equivalent declines to less than two-thirds of its historical average by 2050, and by less than half by 2100. Unfortunately, the decline in the spring snowpack occurs even if precipitation amounts remain relatively stable; the snow loss results from a warmer climate (CNRA 2018b). The loss of snowpack would reduce the amount of water available. According to the Cal-Adapt website’s “Local Climate Change Snapshot” database (Cal-Adapt 2023), the Project site could see an average annual length of dry spells of approximately 167 days in the mid-century (2035–2064) and approximately 166 to 173 days at the end of the century (2070–2099) compared to 160 days for the baseline period (1961–1990). The average annual precipitation could decrease to approximately 15.8 to 15.9 inches in the mid-century (2035–2064) and approximately 16.2 inches at the end of the century (2070–2099) compared to 16.0 inches for the baseline period (1961–1990).

The California Natural Resources Agency and California Energy Commission report dated 2018 (CNRA and CEC 2018) on climate change and effects on the State Water Project, the Central Valley Project, and the Sacramento-San Joaquin Delta, concluded that “climate change poses an ever-growing threat to the well-being, public health, natural resources, economy, and environment of California. Even under the best scenario for global emission reductions, additional climate change impacts are inevitable. ...[C]limate change would bring significant negative impacts on current State Water Project and Central Valley Project operations due to the [global] warming.” By the middle of the century, climate change would cause negative effects on the water supply, including south of Delta exports being reduced by a half million-acre feet, north Delta carryover storage being diminished by 1.5-million-acre feet, with worsening water quality (CNRA and CEC 2018).

To enhance the long-term reliability of water supply in Los Angeles County, the Los Angeles Department of Water and Power has set the following goals in its *2020 Urban Water Management Plan* (LADWP 2021):

- Recycle 100 percent of wastewater by 2035.

- Source 70 percent of water locally by 2035.
- Reduce per capita water use to 100 gallons per capita per day by 2035 and maintain this usage through 2050.
- Reduce per capita potable water use by 25 percent by 2035.
- Reduce the Los Angeles Department of Water and Power's purchase of imported water by 50 percent by 2025.

Hydrology and Sea Level Rise

The central and southern coast has experienced a sea level rise of more than 5.9 inches over the 20th century and sea levels will continue to rise substantially over the 21st century. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. Flooding from sea level rise and coastal wave events leads to bluff, cliff, and beach erosion, which could affect large geographic areas. Future modeling simulations estimate that 31–67 percent of Southern California beaches may become completely eroded to the landward limit of coastal infrastructure or cliffs by the end of the century, assuming sea level rise scenarios from 3 to 6.6 feet and limited human intervention (CNRA and CEC 2018). Increased storm intensity and frequency could also affect the ability of flood-control facilities, including levees, to handle storm events.

California historically has experienced multi-year droughts and has been able to support agricultural water demands through groundwater reserves, winter snowpack, reservoir storage, and conveyance of water throughout the state in canals. However, the higher temperatures that come with climate change will likely decrease snow storage and cause more frequent and severe droughts and will require additional preparedness for more frequent surface water shortages and reliance on sustainable groundwater management (CNRA and CEC 2018).

Agriculture

California has an approximately \$50-billion agricultural industry that produces half the country's fruits, vegetables, nuts, flowers, and nursery crops (CDFA 2020). Many of California's important crops, including fruit and nut trees, are particularly vulnerable to climate change impacts like changing temperature regimes and water-induced stress. Under changing climate conditions, agriculture is projected to experience lower crop yields due to extreme heat waves, heat stress and increased water needs of crops and livestock (particularly during dry and warm years), and new and changing pest and disease threats (CNRA 2018b). Higher CO₂ levels can stimulate plant production and increase plant water use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks and interfere with plant growth. In addition, temperature increases could change the time of year crops are harvested, and thus affect their quality (CCCC 2006).

Ecosystems

Changes in temperature, precipitation, food sources, competition for prey, and other physical or biological features of the habitat may force changes in the timing of key life-cycle events for plants and animals and shift the ranges where these plants and animals live (CNRA 2018b). Range shifts have been observed in approximately 75 percent of small animal species and over 80 percent of bird species in the Sierra Nevada. High-elevation mammals moved upslope, while birds and low-elevation mammals moved downslope as frequently as upslope. The varied responses reflect the species' intrinsic sensitivity to temperature, precipitation, or other physical factors, such as changes in food sources, vegetation, and interactions with competitors. Additionally, range shifts have been noted in wintering bird species and time shifts of arriving species have been noted in butterflies and migratory birds. Furthermore, ocean acidification has affected many marine organisms and their food chain. Chinook salmon have been affected by climate change by both the number of adults returning to spawn and the increased mortality rate among juvenile salmon. Finally, during years of warmer sea temperature, California sea lions have had fewer birth rates, higher pup mortality, and increased numbers of pups having poor conditions (OEHHA 2018).

Wildfire

Wildfires in California over the past two decades are shown to be increasing in size, severity, and adverse impacts (CARB 2020b). Warming temperatures as a result of climate change influences the length of both the fire and growing seasons and consequently affects the amount of time and intensity fires burn at and the amount of available fuels. Higher temperatures lead to drought, which decreases the fuel moisture and increases the likelihood of ignitions (CARB 2020b).

According to the Cal-Adapt website's "Local Climate Change Snapshot" database (Cal-Adapt 2023), the Project area, in general, could see an average annual area burned of approximately 51 to 52.9 acres in the mid-century (2035–2064) and 49.8 to 50.7 acres at the end of the century (2070–2099) compared to 36.6 to 36.8 acres for the baseline period (1961–1990) (Cal-Adapt 2023). Increased wildfire activity leads to more GHG emissions from sources that would otherwise be carbon sinks. Between 2000 and 2019, emissions from wildfires ranged from a low of 1.2 million metric tons of carbon dioxide equivalent (MMTCO_{2e}) in 2010 to a high of 39 MMTCO_{2e} in 2018, with an annual average of 14 MMTCO_{2e}. Further, CARB estimates that wildfire emissions increased dramatically in 2020, totaling 112 MMTCO_{2e} (CARB 2020b).

Humans

Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Temperature increases cause heat-related deaths and illnesses. In 2006, reported heat-related deaths and illness were much higher than in any other year because of a prolonged heat wave (OEHHA 2018). Nineteen heat-related events that had significant impacts on human health occurred from 1999 to 2009, resulting in about 11,000 excess hospitalizations (CNRA 2018b). Additionally, indicators of the impacts of climate change on human health show that warming temperatures and changes in precipitation also can affect vector-borne pathogen transmission and disease patterns in California.

Existing Conditions

Statewide Greenhouse Gas Emissions

CARB compiles the state’s GHG emissions inventory. The most updated inventory is referred to as the 2021 edition, which reports the state’s GHG emissions inventory from calendar year 2019. Based on the 2019 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 418.2 MMTCO₂e including emissions resulting from imported electrical power (CARB 2021). Between April 2010 and July 2020, the population of California grew by an annualized rate of 0.64 percent to a total of 39.78 million (CDF 2020). In addition, the carbon intensity of California’s economy (the amount of carbon pollution per million dollars of gross domestic product) is declining. From 2000 to 2019, the carbon intensity of California’s economy decreased by 45 percent while the gross domestic product increased by 63 percent (CARB 2021c). According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 MMTCO₂e) and have remained below the Limit since that time.

Table 3.7-2, *State of California Greenhouse Gas Emissions*, identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2019. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at 40 percent in 2019.

**TABLE 3.7-2
 STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS**

Category	Total 1990 Emissions (MMTCO ₂ e)	Percent of Total 1990 Emissions ^e	Total 2019 Emissions (MMTCO ₂ e)	Percent of Total 2019 Emissions ^e
Transportation	150.7	35%	166.1	40%
Electric Power	110.6	26%	58.8	14%
Commercial	14.4	3%	28.0	7%
Residential	29.7	7%	15.9	4%
Industrial	103.0	24%	88.2	21%
Recycling and Waste ^a	–	–	8.9	2%
High GWP/Non-Specified ^b	1.3	<1%	20.6	5%
Agriculture/Forestry	23.6	6%	31.8	8%
Forestry Sinks ^c	-6.7	–	– ^c	–
Net Total (IPCC SAR)	426.6	100%	–	–
Net Total (IPCC AR4) ^d	431	100%	418.2	100%

NOTES: AR4 = Fourth Assessment Report; GWP = global warming potential; IPCC = International Panel on Climate Change; MMTCO₂e = million metric tons of carbon dioxide equivalent; SAR = Second Assessment Report.

^a Included in other categories for the 1990 emissions inventory.

^b High GWP gases are not specifically called out in the 1990 emissions inventory.

^c Forestry sinks were not calculated for 2019 pending a revised methodology under development. Forestry sinks are ecosystems carbon stored in plants and soils.

^d CARB revised the state’s 1990 level GHG emissions using GWPs from the IPCC AR4.

^e Numbers may not add up to 100 due to rounding.

SOURCES: CARB 2021c.

Los Angeles County Greenhouse Gas Emissions

The County recently released the Draft 2045 Climate Action Plan (LA County Planning 2022) which prepared an updated baseline inventory for the unincorporated areas in Los Angeles County for 2015,³ utilizing the inventory found in the *OurCounty* Sustainability Plan but using the EMFAC 2021 emission factors, and an inventory for the year 2018, given the availability in that year of the most recent complete data set of emissions-generating activity. As shown in **Table 3.7-3, 2015 and 2018 Los Angeles County Greenhouse Gas Emissions Inventory**, the Draft 2045 CAP estimates the unincorporated county’s baseline GHG emissions in the year 2018 to be approximately 5.2 MMTCO₂e. Of this, the largest contributing sector was transportation (52 percent); followed by stationary energy (33 percent); solid waste (9 percent); industrial processes and product use (5 percent); and agriculture, forestry, and other land uses (1 percent).

**TABLE 3.7-3
2015 AND 2018 LOS ANGELES COUNTY GREENHOUSE GAS INVENTORY**

Emissions Sector	2015 Emissions (MTCO ₂ e)	2018 Emissions (MTCO ₂ e)
Stationary Energy	1,908,637	1,698,809
Transportation	2,838,133	2,704,685
Waste	469,997	469,382
IPPU	253,529	239,505
AFOLU	60,860	60,860
Total	5,531,155	5,173,240

NOTES: AFOLU = agriculture, forestry, and other land use, IPPU = industrial processes and product use; MTCO₂e = metric tons of carbon dioxide equivalent

SOURCE: LA County Planning 2022.

Existing Site Emissions

The Project site includes Topanga Creek and Topanga Lagoon, a narrow Pacific Coast Highway (PCH) bridge and visitor services such as parking, lifeguard and public restroom building, State Parks employee housing, restaurants, and other business leases. Everyday operational activities at these businesses result in the emission of GHG emissions associated with vehicle trips, landscaping equipment, on-site combustion of natural gas for heating and cooking, the generation of electricity for building energy and water conveyance, and from wastewater and solid waste decomposition. In order to provide a conservative assessment, existing emissions estimates were not modeled.

³ The 2015 GHG emissions inventory for the County is adapted from the Countywide 2015 Community GHG Inventory prepared for the *OurCounty* Sustainability Plan. Per the *OurCounty* Sustainability Plan, 2015 emissions from unincorporated Los Angeles County amounted to 6.5 million MTCO₂e. The CAP accounts for emissions from all the sectors and subsectors reported in the *OurCounty* Sustainability Plan and includes additional community activities for unincorporated Los Angeles County (including off-road equipment, buses, and product use emissions, as detailed in Appendix A.1). However, due to updated activity data, emission factors, and modeling protocols, the 2045 CAP reports significantly lower emissions for 2015 (5.5 million MTCO₂e). This decrease is attributable to declining emissions factors from the CARB Emissions Factors 2021 (EMFAC2021) model, which outpace the increase in total vehicle miles traveled as modeled with the Southern California Association of Governments’ (SCAG’s) 2016 Regional Travel Demand Model. *OurCounty* was modeled using EMFAC2017 emission factors.

3.7.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to greenhouse gas emissions. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Refer to Impact GHG 3.9-1.)
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Refer to Impact GHG 3.9-2.)
- Result in cumulatively considerable impacts to greenhouse gas emissions. (Refer to Impact GHG 3.9-3.)

CEQA Guidelines Section 15064.4 assists lead agencies in determining the significance of the impacts of GHG emissions and gives them discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative and quantification-based approach are used, then Section 15064.4 recommends qualitative factors that may be used in the determination of significance. These factors include the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether a project exceeds an applicable significance threshold; and the extent to which a project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs. CEQA Guidelines Section 15064.4 does not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association, so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7I). The California Natural Resources Agency has also clarified that the Guidelines focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines Section 15064[h]) (CNRA 2009).⁴

Although GHG emissions can be quantified as discussed below, CARB, SCAQMD, and the County have not adopted quantitative project-level significance thresholds for GHG emissions that would be applicable to the Proposed Project. OPR released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that “lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice,” and that while “climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment” (CNRA 2009). Furthermore, the technical advisory states that “CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than

⁴ See also Letter from C. Bryant, Director of the Office of Planning and Research, to M. Chrisman, Secretary for Natural Resources. April 13, 2009.

significant level as a means to avoid or substantially reduce the cumulative impact of a project” (OPR 2008).

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project (14 CCR Section 15064[h][3]). To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (14 CCR Section 15064[h][3]). Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions (14 CCR Section 15064[h][3]).”

Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions. CARB’s Climate Change Scoping Plan, SCAG’s 2045 RTP/SCS, the County’s 2020 CCAP, and the Los Angeles County Green Building Code all apply to the Proposed Project and are all intended to reduce GHG emissions to meet the statewide targets set forth in AB 32 and amended by SB 32. Thus, in the absence of any adopted quantitative threshold, the significance of the Proposed Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Proposed Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. If the Proposed Project is not in conflict with the applicable regulatory plans and policies to reduce GHG emissions, then the Proposed Project would result in a less-than-significant impact with respect to GHG emissions. The County’s 2020 CCAP was adopted in August 2015 and expired in 2020, however, it is still an adopted plan for the reduction of GHG emissions. Although not yet adopted, the Proposed Project will also be compared to the GHG reduction goals and policies in the Draft 2045 CAP, which is the successor to the 2020 CCAP.

Methodology

Quantification of Greenhouse Gas Emissions

For informational purposes, the analysis calculates the amount of construction GHG emissions that would be attributable to the Proposed Project using recommended air quality models, as described below. Only construction emissions will be quantified because the Proposed Project’s operational emissions would be less than existing emissions. Under all Build Alternatives, the Proposed Project would involve removing Topanga Ranch Motel structures (Alternative 2 would remove all 25 buildings, Alternative 3 would retain and restore 20 buildings, and Alternative 4 would retain and restore 15 buildings) and replacing the existing lifeguard and public restroom building with new buildings of the same size, thus improving building energy efficiencies.

Further, all Build Alternatives would not provide new recreational facilities or substantial additional beach area that would result in additional visitors traveling to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce vehicle miles traveled (see Section 3.16, *Transportation and Circulation*, for additional details). Thus, the Proposed Project's operational GHG emissions will be analyzed qualitatively.

The primary purpose of quantifying the Proposed Project's construction GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which requires a good-faith effort by the lead agency to describe and calculate emissions. The significance of the Proposed Project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the Proposed Project, it is evaluated solely on the basis of consistency with GHG reduction plans, policies, and regulations as discussed below. The California Climate Action Registry (Climate Registry) has prepared the General Reporting Protocol for calculating and reporting GHG emissions from a number of general and industry-specific activities (Climate Registry 2016). The GHG emissions provided in this report are consistent with the General Reporting Protocol framework. The General Reporting Protocol recommends separating GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (CARB 2010).

OPR directs lead agencies to “make a good-faith effort, based on available information, to calculate, model, or estimate...GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities” (OPR 2008). Therefore, direct and indirect construction emissions have been calculated for the Proposed Project.

While there is no applicable and adopted numerical threshold for use as a “bright line” significance threshold under CEQA for the Proposed Project, in December 2008, the SCAQMD adopted a 10,000 MTCO₂e per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards applicable to this project, the SCAQMD's significance threshold of 10,000 MTCO₂e per year for industrial projects is the most relevant GHG significance threshold and is used as a benchmark for the Proposed Project. It should be noted that the SCAQMD's significance threshold of 10,000 MTCO₂e per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project

lifetime of 30 years and added to operational emissions and then compared to the threshold (SCAQMD 2008).

The justification for the threshold is provided in SCAQMD’s Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans (“SCAQMD Interim GHG Threshold”) (SCAQMD 2008). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As stated by the SCAQMD:

...the...screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects...the policy objective of [SCAQMD’s] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO₂e per year]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology (BACT)] for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility.

Thus, based on guidance from the SCAQMD, if an industrial project would emit GHGs less than 10,000 MTCO₂e per year, the project would not be considered a substantial GHG emitter and GHG emission impact would be less than significant, requiring no additional analysis and no mitigation. For the purposes of this analysis, this “bright line” numeric indicator is used as a reference point for the Proposed Project’s significance with respect to GHG emissions.

Construction

Build Alternative 4 along with certain elements of Alternative 2 were chosen for a quantitative construction analysis because it would use the most equipment that would operate simultaneously and the most overlapping construction phases. As shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Build Alternative 4 has the greatest amount of Topanga Lagoon grading acreage, Topanga Beach expansion acreage, and total number of parking spaces, and would relocate the Pacific Coast Highway slightly to the north. As shown in Table 6-1, Alternative 2 has the greatest amount of Topanga Lagoon fill removal volume and debris volume from the removal of all 25 Topanga Ranch Motel structures. Therefore, Alternative 4 combined with the Alternative 2 elements discussed above were combined to identify a worst-case analysis. Build Alternative 3

has considerably less fill and debris removal than either Build Alternatives 2 or 4. As discussed in Chapter 2, *Project Description*, removal of the existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the Build Alternatives. Thus, the analysis of the Build Alternatives accounts for the beneficial reuse options.

As discussed in Chapter 2, *Project Description*, the Build Alternatives include options for supporting the wastewater needs. Once a final preferred alternative is selected, only one of the wastewater options would be carried forward to final design. For the purposes of this analysis, Option 1 (SDI) is accounted for in the Build Alternatives impact analysis. Option 2 (Seepage Pits) and Option 3 (Sewer) are also analyzed to determine if selection of either of these options would result in GHG emission impacts.

For purposes of analysis, as discussed above and as shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Alternative 4 along with certain elements of Alternative 2 were modeled as a worst-case analysis and to be representative of the maximum impacts from the Build Alternatives as it analyzes the greatest level of on-site construction activity and provides the greatest amount of haul truck vehicle miles traveled from transporting the greatest amount of material. As discussed in Chapter 2, *Project Description*, of this Draft EIR, Build Alternative 4 would increase the lagoon restoration area to 7.6 wetted acres, and would increase the beach from 4.18 acres to 4.56 acres. Build Alternative 4 would move the alignment of PCH north and would increase the bridge to 460 feet and would include 590 feet of 4- to 12-foot-high retaining walls along the northern shoulder of PCH. The existing lifeguard and public restroom building would be relocated upslope of their current location, and north of the existing access road. The helipad and new parking garage would be relocated adjacent to it on the west. The Topanga Beach parking lot would be modified to reduce spaces in the existing paved lot on the west end, expand spaces on the east end and slightly shift the orientation of the lot shape to accommodate a new access road to the beach lifeguard and public restroom building and garage, ADA parking, and helipad. Additional spaces would be added on the west edge of the Project area where there are no spaces currently. The total graded area would be 14.4 acres. Additionally, a 91-foot-long, 4- to 6-foot-tall concrete masonry unit (CMU) retaining wall would be needed on the south side of the bridge to support the slopes on the east side.

Under Alternative 2, approximately 256,000 cubic yards of soil would be removed from the existing fill areas to contour the new lagoon. All existing 25 structures of the Topanga Ranch Motels and all other buildings on State Parks property would be fully removed generating an estimated 10,810 cubic yards of debris that will need to be trucked away. Assuming the potential for asbestos, the GHG emissions analysis used Alternative 2's greater fill removal volume and debris removal volume for this worst-case scenario with additional metrics from Alternative 4 to analyze the total emissions.

Aerially deposited lead (ADL) may be present in shallow soil in the shoulders of the roads due to the historical use as an automotive thoroughfare. For analysis purposes, it was assumed that the

top 3 feet of soil below the pavement approaches to the bridge is ADL-contaminated soil. If present, these soils would be disposed of at a hazardous materials landfill. Soils removed below a depth of three feet in the roadway excavation are assumed to be clean based on soil characterization studies (GeoCon 2022; GeoPentech 2022) and do not require any special handling. The analysis assumes that these soils would be taken to the Kettleman Hills Hazardous Waste Facility in the San Joaquin Valley. Under Alternatives 2 and 3, 23,000 cubic yards ADL-contaminated material would be removed and transported to the Kettleman Hills Hazardous Waste Facility, and 26,000 cubic yards would be removed and transported under Alternative 4. This analysis uses the higher ADL volume associated with Alternative 4.

The future visitor services would be located at the Gateway Corner (intersection of TCB and PCH). The one exception is that a maximum 2,400-square-foot concession could continue to exist at the current location of the Reel Inn restaurant just southeast of the historic motel. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. This assumes that development would be limited to roughly 5,500 square feet of one-story structures: approximately 1,600 square feet for an outdoor interpretive pavilion and approximately 2,900 square feet of park facilities (such as park office/employee house/maintenance storage). A small picnic area, trailhead, and day-use parking would also be included. Additional day-use parking would be developed to the north on a 500-foot-long section along the western shoulder of TCB. This area was previously developed and would be located on existing fill.

As discussed in Chapter 2, *Project Description*, to ensure that the bridge and lagoon restoration portion of the Proposed Project would not constrain traffic during construction, a temporary bridge would be constructed on the coastal side of the existing bridge. The temporary bridge would accommodate two lanes of traffic while the new bridge is under construction. (Note: It may be possible to develop alternative strategies for maintaining access at all times for all four lanes in the later design development phase once a preferred alternative is selected.)

In summary, the emissions of GHGs associated with construction of the Proposed Project, include fill removal for the lagoon; expansion of the PCH bridge; expansion of the beach area; demolition and disposal of construction debris from the roadway and temporary bridge, and restoration of buildings at the Topanga Ranch Motel for future visitor services; demolition and relocation of the lifeguard and public restroom building, helipad, and parking lots; and construction of a new two-car garage, concession building located at the site of the current Reel Inn, outdoor interpretive pavilion/restroom, maintenance facility, a small picnic area, and day use parking.

Construction would start in 2027 and last for five years. Construction activities will be based on Caltrans standards but generally will occur between 6:00 a.m. to 6 p.m.; however, some nighttime work may be required to accommodate certain construction elements and/or construction schedule, and contractors are anticipated to have full access to the Project site at all times. The emissions of GHGs associated with construction of the Proposed Project were calculated for each year of construction activity. Construction emissions are forecasted by assuming a conservative

estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date). Project construction is estimated to start in 2027 but may commence at a later date. If the onset of construction is delayed to a later date than assumed in the modeling analysis, construction impacts would be similar to or less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is because state regulations require construction equipment fleet operators to phase-in less polluting heavy-duty equipment and trucks over time. As a result, should the Proposed Project commence construction on a later date than modeled in this GHG impact analysis, GHG impacts would be less than the impacts disclosed herein.

Construction activities associated with wastewater Option 1 (SDI) and Option 2 (seepage pits) would occur at the same time as construction of the Build Alternatives; thus, construction activities would overlap. Option 3 (sewer) would occur after completion of the Build Alternatives; thus, construction activities would not overlap.

Project construction activities that would have the potential to create GHG emissions include the use of off-road equipment for construction activities, vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Project site and building activities including the application of paint and other surface coatings. Construction GHG emissions for the Proposed Project were estimated using the California Emissions Estimator Model (CalEEMod), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.⁵ At the time that the emissions modeling was conducted, CalEEMod Version 2022.1 was the available and approved version.

The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule based on information provided by the Proposed Project's engineering representative. These values were then applied to the same construction phasing assumptions used in the criteria pollutant analysis (see Section 3.2, *Air Quality*, of this Draft EIR) to generate GHG emissions values for each construction year. The SCAQMD guidance, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, recognizes that construction-related GHG emissions from projects “occur over a relatively short-term period of time” and that “they contribute a relatively small portion of the overall lifetime project GHG emissions” (SCAQMD 2008a).

In accordance with SCAQMD guidance, GHG emissions from construction have been amortized (i.e., averaged annually) over 30 years of the Proposed Project's life (SCAQMD 2008a).

⁵ See <http://www.aqmd.gov/caleemod>.

Therefore, the Proposed Project's total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate, which is added to the Proposed Project's operational emissions. A more detailed discussion of the methodology for projecting the Proposed Project's construction emissions and descriptions of construction sub-phasing and equipment list are available in the Air Quality and Greenhouse Gas Technical Documentation appendix for the Proposed Project, which is provided in **Appendix N** of this Draft EIR. Project construction GHG emissions are provided for informational purposes only, the analysis will be based on the potential for construction of the Proposed Project to conflict with applicable plans, policies, and regulations to reduce GHG emissions.

Operational Emissions

Operation of the Proposed Project would generate GHG emissions from vehicle trips traveling to the Project site from within the region and from on-site operations such as natural gas combustion for heating/cooling and landscaping equipment. GHG emissions would also be generated by vehicle trips, electricity demand, water demand, wastewater generation, and solid waste decomposition. Existing operations at the Project site including the lifeguard and public restroom building would be relocated, as would the helipad and current GHG emissions would be comparable to criteria GHG emissions under the Proposed Project for these uses. The Proposed Project would also include a new two-car garage, which would not generate a significant amount of GHG emissions. The five currently operating business leases would be shut down, except one facility located at the site of the current Reel Inn could be kept under all Build Alternatives.

For all Build Alternatives, the replacement bridge width is proposed at 90 feet to maintain the existing four-lane configuration of PCH with a center turn lane. The four travel lanes and median would all be 12 feet in width and would contain shoulders consistent with Caltrans standards.

Depending on the Build Alternative, under the future visitor services, some or all buildings of the Topanga Ranch Motel would be demolished or removed or retained and restored and used for future visitor services, including overnight accommodations and park facilities such as employee housing, park offices, maintenance, and storage facility. Although these facilities are mostly vacant, some of the buildings are still used today for storage and employee housing. Furthermore, all Build Alternatives would not provide new recreational facilities or substantial additional beach area that would result in additional visitors traveling to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce vehicle miles traveled (see Section 3.16, *Transportation and Circulation*, for additional details) and associated mobile source emissions. As such, the Proposed Project's GHG emissions would be comparable to or likely less than existing GHG emissions, but they would be slightly greater for Alternatives 3 and 4, which retain portions of the Topanga Ranch Motel as compared to Alternative 2. The Gateway Corner would also be developed with a restroom/outdoor interpretive pavilion, an employee residence (Alternative 2 only), and maintenance/office facility (all alternatives). Although these are new facilities, their GHG emissions would be similar or less than the five currently operating businesses which will be shutdown. Thus, the Proposed Project's operational GHG emissions would be comparable to or likely less than existing GHG emissions at the Project site. Therefore,

the Proposed Project's operational emissions have not been quantified. The analysis will be based on the potential for operation of the Proposed Project to conflict with applicable plans, policies, and regulations to reduce GHG emissions.

Greenhouse Gas Emissions Analysis

GHG 3.9-1: The Project would not generate greenhouse gas emissions, either directly or indirectly, that would not have a significant impact on the environment. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing facilities and generation of GHG emissions. Alternative 1 would not involve substantial construction or operation that would increase GHG emissions over existing conditions. Alternative 1 would not involve any construction activities or operational changes to the existing PCH bridge, Topanga Lagoon, Topanga Beach, or visitor services, although existing emissions would continue. As such, there would be no change to the lagoon footprint or habitat quality, and no new bridge would be constructed. Damage to the lifeguard and public restroom building due to coastal erosion would continue to occur; the currently unusable Topanga Ranch Motel structures would continue to deteriorate without restoration; and existing non-conforming business leases and septic systems would remain in current operation but may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel), eroding lifeguard and public restroom building, and potential advanced on-site wastewater treatment systems (AOWTS) upgrades, that would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than the Build Alternatives. No improvements to habitat would occur. Sea level rise and coastal erosion would continue to reduce the available beach area, further damage existing facilities, and reduce available habitat for fish and wildlife. Therefore, Alternative 1 would not generate substantial GHG emissions, either directly or indirectly, and would not have a significant impact on the environment.

Alternatives 2, 3, and 4 (Build Alternatives)

As described above, compliance with a GHG emissions reduction plan renders a project's impact less than significant. In support of the consistency analysis, which describes the Proposed Project's compliance with or exceedance of performance-based standards included in the regulations and policies outlined in the applicable portions of the Climate Change Scoping Plan, the 2045 RTP/SCS, the 2020 CCAP, OurCounty Sustainability Plan, and the Los Angeles County Green Building Code, quantitative calculations are provided below. The Proposed Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Proposed Project is provided below.

Construction

Construction of the Build Alternatives would generate GHG emissions through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from the Project site. Construction emissions can vary substantially from day to day, depending on the level of activity and the specific type and amount of equipment.

Build Alternatives 2 and 3 would require a total of 13.6 and 12.8 acres to be graded, respectively, as compared to 14.4 acres under Build Alternative 4. Under all Build Alternatives, Topanga Beach would be expanded from its current 4.18 acres. Build Alternatives 2 and 3 would expand the beach to 4.39 and 4.42 acres, respectively, as compared to 4.56 acres for Build Alternative 4. All Build Alternatives would expand Topanga Lagoon. Build Alternative 2 would have the largest expansion of the lagoon wetted area, 9.5 acres, as compared to 7.7 acres for Build Alternative 3 and 7.6 acres for Build Alternative 4. As such, Build Alternative 2 would also require the largest amount of fill removed and disposed of, and Build Alternatives 3 would require the least amount of fill material to be disposed. Fill material will either be hauled by truck to the nearest accepting landfill or placed for nearshore deposition pending approval by USACE. If nearshore deposition is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse. The volume of fill material removed to restore the lagoon would range from 256,000 cubic yards for Alternative 2, 210,000 cubic yards for Alternative 4, to a low of 166,000 cubic yards for Alternative 3.

Build Alternatives 2 and 3 would lengthen the bridge to 460 feet and keep the alignment of PCH. Build Alternative 4 would change the alignment of PCH to the north, lengthen the bridge to 460 feet, and include construction of retaining walls. The Build Alternatives would produce construction debris from demolition of the bridge and structures, including the Topanga Ranch Motel, which would be hauled off-site for placement. Alternative 2 would result in approximately 10,810 cubic yards of debris, Alternative 3 would result in approximately 8,250 cubic yards of debris, and Alternative 4 would result in 8,810 cubic yards of debris. Under Alternatives 2 and 3, 23,000 cubic yards ADL-contaminated material would be removed and transported to the Kettleman Hills Hazardous Waste Facility, and 26,000 cubic yards would be removed and transported under Alternative 4.

Fill material would either be hauled by truck to the nearest accepting landfill or by nearshore placement pending approval by USACE. If nearshore placement is approved by USACE, soil would be hydraulically pumped to the nearshore placement site for beneficial reuse.

Build Alternatives 2 and 4 would demolish the lifeguard and public restroom building and restroom and relocate it directly upslope of their current location. The helipad and new two-car parking garage would be relocated adjacent to it on the west. The existing parking lots would be modified. Build Alternative 3 would relocate the lifeguard and public restroom building and restroom directly upslope and to the east of their current location. The helipad would be relocated to the western edge of the parking lot and the new two-car parking garage would be located under the helipad at the beach access road level. Retaining walls will be needed to support the helipad on

top of the garage (92 feet of CMU wall 8 to 10 feet tall underneath the south side, 72 feet on the north side of the helipad) and a 192-foot-long, 4- to 6-foot-high wall to shore up the fill material supporting the remaining Topanga Ranch units. Existing parking lots would be modified.

As discussed in Section 3.2.3, *Environmental Consequences – Methodology*, Build Alternative 4 along with certain elements of Alternative 2 were chosen for a quantitative construction analysis because it would use the most equipment that would operate simultaneously and the most overlapping construction phases. Although Build Alternative 4 has less fill removal than Build Alternative 2, Alternative 2 has more construction debris to move a further distance. Build Alternative 3 has considerably less fill and debris removal than either Build Alternatives 2 or 4. Therefore, Alternative 4 combined with the Alternative 2 elements previously discussed were combined to identify a worse case analysis. Wastewater Option 2 (Seepage Pits) was analyzed quantitatively for construction, which would require approximately 3-6 months and approximately 1,000 cubic yards of excess fill material would be generated. All work and staging areas would be located on State Parks property. Wastewater Option 3 (Sewer) was analyzed quantitatively for construction, which would require approximately one additional year with the sewer alignment anticipated to run within the median of PCH between Coastline Drive and TCB and then cross PCH to shift to the north or south shoulder of PCH to connect to County of Los Angeles Department of Beach and Harbors and State Parks facilities. Approximately 1,000 cubic yards of excess excavated material is anticipated. Results of the GHG emissions calculations are presented in **Table 3.7-4, *Estimated Construction Greenhouse Gas Emissions***.

**TABLE 3.7-4
 ESTIMATED CONSTRUCTION GREENHOUSE GAS EMISSIONS**

Construction Year	CO2e (Metric Tons) ^{a,b}
Year 1	2,978
Year 2	848
Year 3	744
Year 4	3,182
Total	7,752
Wastewater Option 2 – Year 4	132
Total with Option 2	7,884
Wastewater Option 3 – Year 5	435
Total with Option 3	8,187
Amortized Over 30 Years (Maximum)	273

NOTES: CO2e = carbon dioxide equivalent.

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix N of this Draft EIR.

b CO2e emissions are calculated using the global warming potential values from the International Panel on Climate Change's Fourth Assessment Report.

SOURCE: ESA 2022, 2023 (refer to emissions calculations provided in Appendix N of this Draft EIR).

The GHG emissions shown in Table 3.7-4 are based on construction equipment operating continuously throughout the workday. In reality, construction equipment tends to operate periodically or cyclically throughout the workday. Therefore, the GHG emissions shown reflect a conservative estimate. Although GHGs are generated during construction and are accordingly considered onetime emissions, it is important to include them when assessing all of the long-term GHG emissions associated with a project. As recommended by the SCAQMD, construction related GHG emissions were amortized over 30 years to include these emissions as part of a project's annualized total emissions. In accordance with this methodology, the estimated Proposed Project's construction GHG emissions have been amortized over a 30-year period.

As shown in Table 3.7-4, the GHG emissions resulting from the Proposed Project would not exceed the reference point indicator of 10,000 MTCO₂e per year on an annual basis or on a 30-year amortized basis. Thus, GHG emissions from the Proposed Project would not result in a significant impact on the environment and impacts would be less than significant.

Operation

Operation of the Proposed Project would generate emissions of GHG emissions from vehicle trips traveling to the Project site from within the region, energy sources such as electricity demand and natural gas combustion, area sources such as landscaping equipment, water conveyance and distribution, wastewater treatment, and solid waste decomposition. As discussed above, existing operations at the Project site including the lifeguard and public restroom building would be relocated, as would the helipad and the Proposed Project's GHG emissions would be comparable to existing GHG emissions at the Project site for these uses. The Proposed Project would also include a new two-car garage, which would not generate a significant amount of GHG emissions. The four of the five currently operating businesses would be shutdown, while one concession facility located at the site of the current Reel Inn could be kept under all Build Alternatives and the facilities proposed for the Gateway Corner. All Build Alternatives would not provide new recreational facilities or substantial additional beach area that would result in additional visitors traveling to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce vehicle miles traveled (see Section 3.16, *Transportation and Circulation*, for additional details). The Proposed Project's operational emissions under all Build Alternatives would be reduced compared to existing GHG emissions as discussed in more detail below. As such, the Proposed Project's GHG emissions would be slightly less than existing emissions due to the shutdown of at least four of the current businesses and reduced vehicle miles traveled.

As discussed above, the Proposed Project's operational GHG emissions under all Build Alternatives would be less than existing GHG emissions. Thus, the Proposed Project would not generate GHG emissions that would have a significant impact on the environment. Moreover, as discussed under Threshold GHG-3.9-2 below, the Build Alternatives would not conflict with the Climate Change Scoping Plan, the 2045 RTP/SCS, the OurCounty Sustainability Plan, the 2020 CCAP, and the Los Angeles County Green Building Code. The Proposed Project's evaluation of

consistency with the above plans is the primary basis for determining the significance of the Proposed Project's GHG-related impacts on the environment.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

The SDI (Option 1) and seepage pit (Option 2) options both would require the excavation of approximately 1,000 cubic yards of excess fill material and be constructed concurrently with other Project elements over a 3- to 6-month period. Implementation of either Option 1 or 2 would require the use of a pump system Connection to the public sewer (Option 3), would involve the construction of an extension of the Los Angeles County Sanitation Districts' public sewer from existing facilities and would take an additional year to construct. The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible.

As shown below in Threshold GHG-3.9-2, because the Build Alternatives would not conflict with applicable plans, regulations or goals, the Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction

For future visitor services development, under Alternative 2, all 25 structures of the Topanga Ranch Motel and all other buildings on State Parks' property would be demolished and removed. A 2,400-square-foot concession could be located at the location of the Reel Inn. Development of the Gateway corner would potentially include a 1,600-square-foot restroom/outdoor interpretive pavilion, a 1,000-square-foot employee residence (and a 1,900-square-foot maintenance/office facility). A small picnic area, trailhead to the on-site loop trail, as well as day-use parking, would also be included.

Under Alternatives 3 and 4, approximately 15–20 structures, respectively, of the Topanga Ranch Motel would be retained and restored in the future for visitor services which could include a mix of overnight accommodations and park facilities such as employee housing, park offices, maintenance, and storage facility. Future visitor services development under Build Alternatives 3 and 4 both include a 2,400-square-foot concession located at the site of the current Reel Inn restaurant which would be kept. All other on-site business leases and structures would be removed and some minor development moved to Gateway Corner. New development at Gateway Corner would be limited in size and scale and could include outdoor interpretive pavilion/restroom, maintenance facility, a small picnic area, trailhead access, and day-use parking.

Construction of the future visitor services development would emit GHG emissions. Calculations for maximum GHG emissions from the future visitor services development under Alternative 4 with fill material and debris removal estimates for Alternative 2 are presented in Table 3.7-4, above. Impacts for future visitor services development under Build Alternative 2 would be slightly higher than those for future visitor services development under Build Alternatives 3 and 4 due to the demolition of all 25 buildings of the Topanga Ranch Motel and the potential needs to truck that material to Kettleman Hills Hazardous Waste Facility. Impacts for the future visitor services development under Build Alternative 3 would be similar to, but slightly lower than, those under Build Alternatives 2 and 4 due to the demolition of five more Topanga Ranch Motel buildings under Alternatives 2 and 4. Detailed emissions calculations are provided in **Appendix N** of this Draft EIR.

As shown in Table 3.7-4, the GHG emissions resulting from the Proposed Project would not exceed the reference point indicator of 10,000 MTCO_{2e} per year on an annual basis or on a 30-year amortized basis. Thus, GHG emissions from the Proposed Project would not result in a significant impact on the environment and impacts would be less than significant.

Operation

Future visitor services development would generate GHG emissions from vehicle trips traveling to the future Topanga State Park Visitor Services site from within the region, energy sources such as electricity demand and natural gas combustion, area sources such as landscaping equipment, water conveyance and distribution, wastewater treatment, and solid waste decomposition. Depending on the Build Alternative, under future visitor services development some or all

buildings of the Topanga Ranch Motel would be demolished or removed or retained and restored which would be used for future visitor services, including overnight accommodations and park facilities such as employee housing, park offices, maintenance, and storage facility. Although these facilities are mostly vacant, a few of the buildings are still used today for storage and one for employee housing. Additionally, four of the five existing and operating buildings would be shut down and demolished, except one would be retained as a concession facility located at the site of the current Reel Inn and could be kept under all Build Alternatives. The future visitor services development would be called Gateway Corner and would be developed with a restroom/outdoor interpretive pavilion, an employee residence (under Alternative 2), and maintenance/office facility. Although these are new facilities, they would meet improved modern building energy efficiency standards and their GHG emissions would be similar or less than the four currently operating business which will be shut down on the Project site. Thus, future visitor services development operational GHG emissions would be similar to or slightly less than existing GHG emissions at the Project site and therefore, future visitor services development operational GHG emissions were not quantified.

Caltrans has prepared a GHG Reduction Measures Toolbox for Internal Use in Caltrans Project Development (GHG Toolbox) (Caltrans 2021). As stated in the GHG Toolbox, the GHG reduction measures in the GHG Toolbox apply to construction of capital projects for which Caltrans is the CEQA lead agency. Caltrans is not the CEQA lead agency for the Proposed Project. Furthermore, as discussed above, GHG emissions would be less than significant and mitigation measures are not required. Nonetheless, this Draft EIR considers relevant reduction measures in the GHG Toolbox. In general, the Proposed Project would implement relevant measures or generally similar measures through regulatory compliance or the Proposed Project's construction approach and design. As discussed in Section 3.7.1, *Regulatory Setting – State*, the Proposed Project would comply with regulations that would reduce GHG emissions including the CARB Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling to five minutes at any given location (with specified limited exceptions), cleaner emissions standards for off-road diesel construction equipment fleets and cleaner emissions standards for on-road vehicles including passenger vehicles (Advanced Clean Cars Program) and diesel trucks (Truck and Bus regulation and Advanced Clean Trucks Program). Additionally, fuels used for equipment and vehicles would comply with the state's LCFS, as applicable, to reduce GHG emissions from fuels. As discussed in Chapter 2, *Project Description*, the Build Alternative includes removal of existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the Build Alternatives. Thus, the Proposed Project is designed to reduce the transport of earthen materials and associated transportation related GHG emissions through nearshore beneficial reuse. In addition, the Proposed Project's parking areas would be permeable to the full extent feasible with surface runoff directed to bioswales to reduce pollution. Furthermore, the purpose for the Proposed Project is to provide resiliency against sea level rise and beach erosion, protect and enhance visitor services, implement goals established in the Los Angeles County General Plan 2035, restore sediment to the littoral cell, and to restore the lagoon ecosystem habitat for two federally endangered species: the tidewater goby and the southern steelhead trout. The Proposed Project is designed to enhance habitat, improve climate

adaptation, and increase climate resilience. Further details regarding how the Proposed Project enhances habitat, improves climate adaptation, and increases climate resilience are provided in the next section in GHG 3.9-2. As such, the Proposed Project would be generally consistent with the relevant reduction measures in the GHG Toolbox. Since future visitor services development GHG emissions under all Build Alternatives would be essentially the same as existing GHG emissions, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Greenhouse Gas Emissions Plans Analysis

GHG 3.9-2: The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. *Impacts would be less than significant.*

As mentioned above, in the absence of any adopted quantitative threshold, the significance of the Proposed Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Proposed Project complies with applicable plans, policies, regulations and requirements adopted for the purpose of reducing the emissions of GHGs. As described above, compliance with a GHG emissions reduction plan renders a less-than-significant impact. The analyses below demonstrate that the Build Alternatives would not conflict with the applicable approved GHG emission reduction plans and policies included within CARB’s Climate Change Scoping Plan, the 2045 RTP/SCS, 2020 CCAP, OurCounty Sustainability Plan, and the Los Angeles Green Building Code. The Build Alternatives would also be compared against the Draft 2035 CAP for consistency even though it is not yet adopted at this time because it is the successor document to the 2020 CCAP, which expired in 2020. As shown herein, the Build Alternatives would not conflict with applicable GHG reduction plans and policies.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the lagoon footprint or habitat quality, and no new bridge would be constructed. This Alternative would not involve substantial construction or operation that would generate substantial new GHG emissions. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel), eroding lifeguard and public restroom building, and potential on-site AOWTS upgrades, that would result in temporary use of construction equipment or materials (paints); however, such equipment and material usage would be minimal and substantially less than the Build Alternatives. As such, Alternative 1 would have a less-than-significant impact with respect to conflicting with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be similar under all Build Alternatives as described in the following sections.

Construction and Operation

Under this analysis, when assessing if the Proposed Project (worst case analysis of Build Alternative 4 combined with elements of Build Alternative 2) conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, it will also be representative of Build Alternative 3, since Alternative 3 would have less impacts than the worst case analysis of Build Alternative 4 combined with elements of Build Alternative 2 under this criterion.

CARB 2022 Scoping Plan, SB 32, and Executive Order S-3-05

The CARB 2022 Scoping Plan identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32. The 2022 Scoping Plan outlines a framework that relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program and builds off of a wide array of regulatory requirements that have been promulgated to reduce statewide GHG emissions, particularly from energy demand and mobile sources. It also includes a discussion of the natural and working lands sectors as sources for both sequestration and carbon storage and land management activities that prioritize restoration and enhancement of ecosystem functions to improve climate adaptation and resilience to climate change impacts.’

Table 3.7-5, *Consistency with Applicable Climate Change Scoping Plan Greenhouse Gas Reduction Strategies*, contains a list of the GHG-reducing strategies from the 2022 Climate Change Scoping Plan. The analysis describes the Proposed Project’s compliance and consistency with these strategies outlined in the state’s Scoping Plan to reduce GHG emissions. As discussed below, the Proposed Project would not conflict with applicable 2022 Climate Change Scoping Plan actions and strategies for climate adaptation, climate resiliency, and GHG emissions goals for the natural working lands sector.

**TABLE 3.7-5
CONSISTENCY WITH APPLICABLE CLIMATE CHANGE SCOPING PLAN
GREENHOUSE GAS REDUCTION STRATEGIES**

Actions and Strategies	Statutes, Executive Orders, Outcome	Compliance/Consistency Analysis
<p>Natural Working Lands (NWL) Conserve 30% of the state's NWL and coastal waters by 2030. Implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities—and in particular low-income, disadvantaged, and vulnerable communities.</p>	<p>Executive Order N-82-20 and Senate Bill 27: California Air Resources Board to include an NWL target in the Scoping Plan. Assembly Bill 1757: Establish targets for carbon sequestration and nature-based climate solutions. Senate Bill 1386: NWL are an important strategy in meeting greenhouse gas (GHG) reduction goals.</p>	<p>No Conflict. The purpose for the Proposed Project is to provide resiliency against sea level rise and beach erosion, protect and enhance visitor services, implement goals established in the Topanga State Park General Plan, restore sediment to the littoral cell, and to restore the lagoon ecosystem habitat for two federally endangered species; the tidewater goby and the southern steelhead trout. The Proposed Project would expand and enhance habitat and improves coastal resilience in the Project area.</p> <p>The Topanga Lagoon habitat is significantly degraded due to the locally derived fill material used in 1933 to support the widening of the Pacific Coast Highway (PCH) and construction of the existing bridge. With the Proposed Project, expansion of the lagoon would protect and create essential wetland and riparian habitat for the tidewater goby, juvenile southern steelhead and for many other native aquatic and terrestrial species. Topanga Lagoon is dominantly freshwater as it is non tidal, except for brief times during the winter when high tides and storms breach the beach and create a connection or overwash. All Build Alternatives (Alternatives 2–4) were designed to maintain or improve the frequency and duration of breach events to provide longer windows of opportunity for fish passage and additional refugia for tidewater goby and juvenile southern steelhead trout.</p> <p>Under all Build Alternatives, the area of Topanga Beach would increase, adding between 0.21 and 0.38 acres of additional beach. These additional areas provide opportunities for both increased recreational space as well as incorporation of bioengineered stabilization or living shoreline elements to both provide protection from storm surge and sea level rise and restore coastal habitats. Under all Build Alternatives, the length of the existing 79-foot-long Caltrans bridge would be expanded to accommodate a widened lagoon riparian area, which would allow for the lagoon to adjust over time due to sea level rise. Thus, all Build Alternative under the Proposed Project would improve climate adaptation and increase climate resilience.</p> <p>Both the California Department of Parks and Recreation (State Parks) and Los Angeles County have developed coastal land use plans that identify beneficial uses, goals, and development policies to manage the Project area. The Proposed Project has been developed to facilitate implementation of recreation and coastal access polices outlined in the State Parks Topanga State Park General Plan and Santa Monica Mountains Local Coastal Program that are currently under-developed on the Project site. Thus, all Build Alternatives under the Proposed Project would improve access to serve all communities.</p> <p>The California coastline is subject to current coastal erosion impacts, which will be magnified by future climate change such as sea level rise effects on coastal erosion and flooding. The Build Alternatives all propose removing existing locally derived fill materials for beneficial reuse by strategically placing it in the nearshore to naturally help renourish and restore the littoral cell, which would provide additional resilience to the beach downcoast as well as within the Project area. Improvements to PCH by Caltrans, visitor services and land uses by State Parks, and coastal access and recreational facilities by County of Los Angeles Department of Beaches and Harbors are needed to adapt to future sea level rise and to improve the coastline's resiliency in the Project area. The Proposed Project would improve climate adaptation and increase coastal resiliency for essential public functions including emergency services and provide a climate-change refugia for the Topanga Lagoon ecosystem from the negative effects of sea level rise, which includes recreational beach and open space habitat areas.</p>

Actions and Strategies	Statutes, Executive Orders, Outcome	Compliance/Consistency Analysis
<p>Wetlands Restore 60,000 acres of Delta wetlands.</p>	<p>Increase carbon sequestration and reduce short-lived climate pollutants. Helps to reverse land subsidence while improving flood protection and providing critical habitat.</p>	<p>No Conflict. As discussed in Chapter 2, <i>Project Description</i>, under all Build Alternatives, a subset of the Project area within and centered around the existing lagoon and PCH bridge would be graded and the seasonally wetted and riparian habitat areas would be expanded from the existing 3.6 acres, to 7.6 to 9.5 acres, while the more upland/transition areas would increase from the 21.4 existing acres of mixed non-native vegetation to 23 to 24 acres of native dominated vegetation depending on which alternative is selected. Thus, all Build Alternatives would result in wetland restoration in support of this action and strategy.</p> <p>Coastal wetlands and lagoons are unique habitats that support specially adapted native species that thrive in a dynamic seasonal mix of saltwater and freshwater environments. Over 95 percent of the historic coastal wetlands in California have been lost to development and coastal erosion within the last 150 years. Coastal wetlands are highly productive and biologically diverse systems that enhance water quality, control erosion, maintain stream flows, sequester carbon, and provide a home to at least one third of all threatened and endangered species (NPS 2016). The Topanga Lagoon habitat is significantly degraded due to the locally derived fill dirt used in 1933 to support the widening of PCH and construction of the shorter PCH bridge. Expansion of the lagoon would protect and create essential wetland and riparian habitat for the tidewater goby, juvenile southern steelhead and for many other native aquatic and terrestrial species. Topanga Lagoon is dominantly freshwater as it is non tidal, except for brief times during the winter when high tides and storms breach the beach and create a connection or overwash. All Build Alternatives were designed to maintain or improve the frequency and duration of breach events to provide longer windows of opportunity for fish passage and additional refugia for tidewater goby and juvenile southern steelhead trout. Thus, all Build Alternative under the Proposed Project would improve climate adaptation and increase climate resilience.</p>

SOURCE: CARB 2022.

Policy Executive Order S-3-05

Even though the state has not developed a clear regulatory and technological roadmap to achieve the statewide 2050 GHG emissions reduction goal of 80 percent below 1990 levels, it has demonstrated the potential pace at which emission reductions can be achieved through new regulations as well as technology and market developments. As part of the 2017 Climate Change Scoping Plan, CARB, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator commissioned a study that evaluates the feasibility and cost of meeting the 2030 target along the way to reaching the state’s 2050 GHG emissions reduction goal. The California State Agencies’ PATHWAYS Project explores scenarios for meeting the state’s long-term GHG emissions target, which affects all sectors of the California economy with detailed representations of the buildings, industry, transportation, and electricity sectors (E3 2015). The PATHWAYS study acknowledges the inherent uncertainty associated with its modeling assumptions and emphasizes the need for continued action and policy development by the state to support the development of low-carbon technologies and markets for energy efficiency, building electrification, renewable electricity, zero-emission vehicles, and renewable fuels.

The PATHWAYS study was updated in 2018 and concludes that market transformation is needed to reduce the capital cost and to increase the range of options available in order to achieve high

levels of consumer adoption of zero carbon technologies, particularly of electric vehicles and energy efficiency and electric heat in buildings. The PATHWAYS study suggests that market transformation can be facilitated by: (1) higher carbon prices (which can be created by the Cap-and-Trade and LCFS programs); (2) adoption of codes and standards, regulations, and direct incentives to reduce the upfront cost to the customer; and (3) business and policy innovations to make zero-carbon technology options the more affordable and preferred solutions compared to fossil fueled alternatives (E3 2018). It is reasonable to expect the GHG emissions from the Proposed Project would decline over time, as the regulatory initiatives identified by CARB in the 2017 Climate Change Scoping Plan and future updates to the Scoping Plan are developed and implemented, along with other technological innovations and market developments that occur. Given the reasonably anticipated decline in emissions, the Proposed Project would not conflict with or interfere with the ability of the state to achieve the 2050 horizon-year goal of EO S-3-05.

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The purpose of the 2045 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. SCAG’s Program EIR for the 2045 RTP/SCS, certified on May 7, 2020, states that “[e]ach [metropolitan planning organization] is required to prepare an SCS as part of their regional transportation plan to meet these GHG emissions reduction targets by aligning transportation, land use, and housing strategies with respect to [Senate Bill] 375” (SCAG 2020a). The 2045 RTP/SCS seeks improved mobility and accessibility, which is defined as “the ability to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices” (SCAG 2020a). The 2045 RTP/SCS seeks to implement strategies that “alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation” (SCAG 2020a). Furthermore, the 2045 RTP/SCS includes “more compact, infill, walkable and mixed-use development strategies to accommodate new region’s growth” and “accommodate increases in population, households, employment, and travel demand” (SCAG 2020a). Moreover, the 2045 RTP/SCS (SCAG 2020a) states that while “transportation emissions are most prevalent relative to all other sectors in California and specifically in the SCAG region,” the RTP/SCS would focus “growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions.”

In order to assess the Proposed Project’s potential to conflict with the 2045 RTP/SCS, this section analyzes the Proposed Project’s consistency with the strategies and policies set forth in the 2045 RTP/SCS to meet GHG emission-reduction targets set by CARB. Generally, projects are considered to not conflict with applicable County and regional land use plans and regulations, such as SCAG’s 2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The ESGVAP would not conflict with the 2045 RTP/SCS goals as detailed in **Table 3.7-6, Consistency with Applicable 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy Actions and Strategies.**

**TABLE 3.7-6
 CONSISTENCY WITH APPLICABLE 2020–2045 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE
 COMMUNITIES STRATEGY ACTIONS AND STRATEGIES**

Actions and Strategies	Responsible Party(ies)	Compliance/Consistency Analysis
Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would primarily involve expanding a lagoon and beach, and restoring a bridge. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by Bus 534. Los Angeles County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between San Fernando Valley and Topanga Beach. Refer to Section 3.16, <i>Transportation and Circulation</i> , of this Draft EIR, for a summary of transit service in the Project area.
Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would primarily involve expanding a lagoon and beach, and restoring a bridge. However, the Proposed Project would also involve restoring the 25 abandoned and deteriorating structures associated with the Topanga Ranch Motel and the area with park facilities, a concession, and parking in Alternative 2. Alternatives 3 and 4 would retain and restore 15–20 Topanga Ranch Motel buildings, respectively. Additionally, the Project would develop the Gateway Corner, which would be limited in size to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. The Gateway Corner could include interpretive displays, park facilities (such as park office/employee house/maintenance storage), small outdoor interpretive pavilion/restroom, and a small picnic area. Additionally, the Proposed Project would include creating a trail loop through the Project site and providing pedestrian access under PCH on the east and west sides of the lagoon.
Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would primarily involve expanding a lagoon and beach, and restoring a bridge. The Project site is located near the Metro PCH/TCB bus stop, which is serviced by Bus 534. Los Angeles County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between San Fernando Valley and Topanga Beach. The Proposed Project proposes redesigning bus stops to be more obvious and welcoming, as well as incorporating bicycle parking facilities. Refer to Section 3.16, <i>Transportation and Circulation</i> , of this Draft EIR, for a summary of transit service in the Project area.
Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy and would support these actions through strategies for electric vehicle-ready and electric vehicle-capable infrastructure and parking spaces. Additionally, the Proposed Project would include creating a trail loop through the Project site and providing pedestrian access under PCH on the east and west sides of the lagoon.
Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Proposed Project would comply with Title 24 requirements and CALGreen Code to reduce energy consumption by implementing energy efficient building designs.
Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration	Local Jurisdictions, SCAG	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Proposed Project would comply with Title 24 requirements and CALGreen Code to reduce energy consumption by implementing energy efficient building designs.

Actions and Strategies	Responsible Party(ies)	Compliance/Consistency Analysis
Identify ways to improve access to public park space	Local Jurisdictions	No Conflict. The Proposed Project would not conflict with this action and strategy. The Proposed Project would primarily involve expanding a lagoon and beach, and restoring a bridge. The Proposed Project would also involve developing the Gateway Corner, which would be limited in size to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. Additionally, the Proposed Project would include creating of a trail loop through the Project site and providing pedestrian access under PCH on the east and west sides of the lagoon.
Transportation Demand Management (TDM) Strategic Plan provides an objectives-driven, performance-based process to identify and promote TDM strategies and programs across the region. SCAG will pursue implementation of these strategies in coordination with regional and local partners.	Local Jurisdictions	No Conflict. The Proposed Project would not conflict with this action and strategy and would include goals and policies that support TDM strategies (refer to Section 3.16, <i>Transportation and Circulation</i> , of this Draft EIR, for a list of the proposed policies).

NOTE: CALGreen Code = California Green Building Standards Code; EIR = environmental impact report; Metro = Los Angeles County Metropolitan Transportation Authority; PCH = Pacific Coast Highway; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; SCAG = Southern California Association of Governments; TCB = Topanga Canyon Boulevard.

SOURCE: SCAG 2020a.

Unincorporated Los Angeles County Community Climate Action Plan 2020

The Unincorporated Los Angeles County Community Climate Action Plan 2020 (2020 CCAP), adopted in October 2015 as a subcomponent of the Air Quality Element of the Los Angeles County General Plan 2035. Although the 2020 CCAP expired in 2020, it was still an adopted GHG reduction plan. The 2020 CCAP identifies 26 local actions grouped into five areas to reduce GHG emissions. The 2020 CCAP set a GHG emission target of 11 percent below 2010 levels by 2020. In 2010 estimated GHG emissions in the unincorporated areas were approximately 7.9 million MTCO_{2e} of which building energy use was the largest source, then transportation, waste generation, water conveyance and wastewater generation, agriculture, and stationary sources.

The Proposed Project aligns with the following actions and programs of the 2020 CCAP:

- **BE-1: Green Building Development:** Promote and incentivize at least Tier 1 voluntary standards within CALGreen for all new residential and non-residential buildings.
 - All new Proposed Project buildings would meet or exceed requirements in the CALGreen Code.
- **LUT-2: Pedestrian Network:** Construct and improve pedestrian infrastructure to increase walking and pedestrian access to transit and transit stations/hubs.
 - The Proposed Project would include creation of a trail loop through the Project site and provision of pedestrian access under PCH on the east and west sides of the lagoon.
- **LUT-8: Electric Vehicle Infrastructure:** Install EV charging facilities at County-owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities to ensure that at least one-third of these charging stations will be available for visitor use.
 - The Proposed Project would install EV charging facilities as required by code.

- **LUT-12: Electrify Construction and Landscaping Equipment:** Utilize electric equipment wherever feasible for construction projects.
 - The Proposed Project would use electric construction equipment wherever feasible.
- **SW-1: Waste Diversion Goal:** For the county’s unincorporated areas, adopt a waste diversion goal to comply with all state mandates associated with diverting from landfill disposal at least 75% of the waste by 2020.
 - The Proposed Project would comply with the waste diversion goal.
- **LC-2: Create New Vegetated Open Space:** Restore and re-vegetate previously disturbed land and/or unused urban and suburban areas.
 - The Proposed Project would expand Topanga Lagoon by removing fill from previously disturbed land.
- **LC-4: Protect Conservation Areas:** Encourage the Protection of existing land conservation areas.
 - The Proposed Project would expand Topanga Lagoon and Topanga Beach to protect against coastal erosion and sea level rise.

Thus, the Proposed Project would incorporate 2020 CCAP goals and actions and would not result in conflicts with the plan. Thus, the Proposed Project would not conflict with the 2020 CCAP.

Los Angeles County General Plan 2035

The Los Angeles County General Plan 2035 provides the policy framework for establishing the long-range vision for the growth and development of unincorporated areas within the county, and establishes goals, policies, and programs to foster healthy, livable, and sustainable communities. The Air Quality Element has goals and policies relating to GHGs. The Proposed Project incorporates some of these policies to reduce GHG emissions and battle climate change as shown below:

- **Policy AQ 2.3: Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.**
 - The Proposed Project would support this policy by expanding Topanga Lagoon and Topanga Beach to protect them from coastal erosion and sea level rise.
- **Policy AQ 2.4: Coordinate with different agencies to minimize fugitive dust sources, activities, and uses.**
 - The Proposed Project would adhere to SCAQMD Rule 403 to minimize fugitive dust during construction by developing a Storm Water Pollution Prevention Plan and implementing required best management practices.
- **Policy AQ 3.5: Encourage energy conservation in new development and municipal operations.**
 - The Proposed Project would adhere to meeting or exceeding requirements in the CALGreen Code for all new Project buildings.
- **Policy AQ 3.8: Develop, implement, and maintain countywide climate change adaptation strategies to ensure that the community and public services are resilient to climate change impacts.**

- The Proposed Project would support this policy by expanding Topanga Lagoon and Topanga Beach to protect them from coastal erosion and sea level rise due to climate change.

Thus, the Proposed Project would incorporate goals and policies of the Los Angeles County General Plan 2035 Air Quality Element and would not result in conflicts with the plan. Thus, the Proposed Project would not conflict with the general plan.

OurCounty Sustainability Plan

The Proposed Project would align with the strategies and goals of the OurCounty Sustainability Plan, specifically the following strategies that reduce GHG emissions: integrate climate adaption and resilience into planning, building, infrastructure, and community development decisions; require sustainable, healthy building design and construction; equitable and sustainable land use and development without displacement; increase ecosystem function, habitat quality, and connectivity, and prevent the loss of native biodiversity in the region; preserve and enhance open space, waterways, and priority ecological areas; improve access to parks, beaches, recreational waters, public lands, and public spaces; adopt inclusive design and programming for parks, beaches, public lands, cultural amenities, and public spaces; use sustainability best practices in the design and management of parks and recreational facilities; create a zero-emission transportation system; reduce waste generation; implement strong water conservation measures; reduce building energy consumption; and divert reusable and recyclable materials from landfills. As such, the transportation system enhances mobility while reducing car dependency. The Proposed Project would not conflict with the OurCounty Sustainability Plan.

CALGreen Code and Los Angeles County Green Building Ordinance

The Proposed Project would be consistent with the requirements of the CALGreen Code and LA County Green Building Ordinance, which include building energy and water efficiency improvements. The Proposed Project would implement both new and existing building energy efficiency improvements, such as electrifying new buildings, increasing production of renewable energy, improving the energy efficiency of buildings, reducing indoor and outdoor water consumption, and increasing the use of gray and recycled water, as required. The Proposed Project would not conflict with the code requirements of the CALGreen Code and LA County's Green Building Ordinance.

Draft 2045 Climate Action Plan

Although not yet approved, the Draft 2045 Los Angeles County Climate Action Plan (2045 CAP) is the County's path toward meeting the goals of the Paris Agreement and achieving carbon neutrality for unincorporated areas of the County. The 2045 CAP builds on previous climate action work from the 2020 CCAP. The 2045 CAP identifies strategies, measures, and actions to mitigate emissions from community activities. The Draft 2045 CAP is designed to be consistent with the reduction measures and recommendations contained in CARB's 2022 Scoping Plan. The Pavley Program, Renewable Portfolio Standard, Low Carbon Fuel Standard, SB 375 land use and transportation strategies, energy efficiency measures, solar PV measures, vehicle and fuel efficiency measures, landfill methane capture, and urban forestry practices are

all measures relied upon in the 2022 Scoping Plan that are also included in the Draft 2045 CAP. Consistent with SB 32, the Draft 2045 CAP sets a GHG emissions target for 2030 equivalent to 40 percent below the County's 2015 baseline emissions, which is approximately 3.9 MMTCO₂e. This is also equivalent to a 46 percent reduction below countywide 1990 emissions. The Draft 2045 CAP sets a 2035 target equivalent to 50 percent below the 2015 baseline, which is approximately 3.3 MMTCO₂e. The Draft 2045 CAP also sets an aspirational goal of carbon neutrality by 2045. The Draft 2045 CAP builds upon the existing and ongoing efforts of the 2020 CCAP and focuses on actions to reduce GHG emissions associated with community activities in unincorporated areas of the county.

The Proposed Project aligns with several strategies of the Draft 2045 CAP strategies relating to the reduction of GHG emissions, as follows:

- **Strategy 1: Decarbonize the Energy Supply.**
 - The Proposed Project would support this initiative by adding EV chargers.
- **Strategy 3: Reduce Single-Occupancy Vehicle Trips.**
 - The Proposed Project would support this initiative by expanding the pedestrian network by creating a trail loop through the Project site that connects to regional trail systems such as the California Coastal Trail and providing pedestrian access under PCH on the east and west sides of the lagoon.
- **Strategy 4: Institutionalize Low-Carbon Transportation.**
 - The Proposed Project would use electric construction equipment wherever feasible.
- **Strategy 6: Improve Efficiency of Existing Building Energy Use.**
 - The Proposed Project would adhere to the CALGreen Code and Los Angeles County Green Building Ordinance in place at the time of building construction to improve energy efficiency.
- **Strategy 7: Conserve Water.**
 - The Proposed Project would adhere to the CALGreen Code and Los Angeles County Green Building Ordinance in place at the time of building construction to reduce water consumption.
- **Strategy 8: Minimize Waste and Recover Energy and Materials from the Waste Stream.**
 - The Proposed Project would support this strategy by adhering to waste division goals.
- **Strategy 9: Conserve Forest and Working Lands.**
 - The Proposed Project would expand Topanga Lagoon and Topanga Beach; thus it would expand the wetlands and surrounding riparian/transitional/upland areas while retaining native trees, all of which serve as a carbon sink.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts

associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

The SDI (Option 1) and seepage pit (Option 2) options both would require the excavation of approximately 1,000 cubic yards of excess fill material and be constructed concurrently with other Project elements over a 3- to 6-month period. Implementation of either Option 1 or 2 would require the use of a pump system connection to the public sewer (Option 3), would involve the construction of an extension of the Los Angeles County Sanitation Districts' public sewer from existing facilities and would take an additional year to construct. The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible.

Based on the information above, the Proposed Project would comply with approved plans, policies, and regulations for reducing GHG emissions. Therefore, this impact would be less than significant. Additionally, although not yet approved, the Proposed Project would also comply with goals and policies of the Draft 2045 CAP.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction and Operation

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternatives 3 and 4, 15 to 20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities

such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be present. As mentioned above under subsection *Alternatives 2, 3, and 4 (Build Alternatives)*, in the absence of any adopted quantitative threshold, the significance of the Proposed Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether future visitor services development complies with applicable plans, policies, regulations and requirements adopted for the purpose of reducing the emissions of GHGs. As described above, compliance with a GHG emissions reduction plan renders a less-than-significant impact. The analyses above under subsection *Alternatives 2, 3, and 4 (Build Alternatives)* demonstrates that future visitor services development under the Build Alternatives would not conflict with the applicable approved GHG emission reduction plans and policies included within CARB's Climate Change Scoping Plan, the 2045 RTP/SCS, 2020 CCAP, OurCounty Sustainability Plan, and the Los Angeles Green Building Code. Future visitor services development under the Build Alternatives was also be compared against the Draft 2035 CAP for consistency even though it is not yet adopted at this time because it is the successor document to the 2020 CCAP which expired in 2020. Thus, future visitor services development under the Build Alternatives would not conflict with applicable GHG reduction plans and policies discussed above and in Tables 3.7-5 and 3.7-6. Therefore, this impact would be less than significant. Additionally, although not yet approved, the future visitor services development would also comply with goals and policies of the Draft 2045 CAP.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Cumulative Impacts

GHG 3.9-3: The Project would not result in cumulatively considerable impacts to greenhouse gas emissions. *Impacts would be less than significant.*

Analysis of GHG emissions is cumulative in nature because impacts are caused by cumulative global emissions and additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as a project is located. The emission of GHGs by a single development project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

The state has mandated a GHG emissions target of reducing statewide emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050 even while statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB has established and is implementing regulations to reduce statewide GHG emissions. Currently, there are no adopted CARB, SCAQMD, or County significance thresholds or specific numeric reduction targets applicable to the Proposed Project, and no approved policy or guidance to assist in determining significance at the cumulative level. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064(h)(3),⁶ State Parks, as lead agency, has determined that the Proposed Project's contribution to cumulative GHG emissions and global climate change would be less than significant if it is consistent with the approved applicable regulatory plans and policies to reduce GHG emissions: 2017 Climate Change Scoping Plan, SCAG's 2045 RTP/SCS, 2020 CCAP, OurCounty Sustainability Plan. Additionally, although not yet approved, the Proposed Project is also consistent with GHG reduction policies in the Draft 2045 CAP. See GHG 3.9-2, above, for a discussion of the Proposed Project's consistency with approved plans. Given that the Proposed Project would not conflict with applicable GHG reduction plans, policies, and regulations, emissions associated with the Proposed Project would be less than significant on a cumulative basis.

Mitigation Measures

None Required

Significance Determination

Less than Significant

3.7.4 Summary of Impacts

Table 3.7-7 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to greenhouse gas emissions/climate change. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

⁶ The CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a proposed project's incremental contribution to a cumulative impact can be found not cumulatively considerable if a proposed project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of a project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

**TABLE 3.7-7
 SUMMARY OF PROPOSED PROJECT IMPACTS TO GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
GHG 3.7-1: Greenhouse Gas Emissions Analysis	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
GHG 3.7-2: Greenhouse Gas Emissions Plans Analysis	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
GHG3.7-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	None Required	LTS

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less-than-Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.7.5 References

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3.8 Hazards and Hazardous Materials

This section evaluates the potential hazards and hazardous materials impacts associated with construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to hazards and hazardous materials; a description of the existing hazards and hazardous materials within the Project area; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to hazard conditions within the Project area and in the surrounding area.

3.8.1 Regulatory Setting

Federal

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act (Code of Federal Regulations [CFR] Title 29, Parts 70–2400 [29 CFR 70–2400]) is implemented by the U.S. Occupational Safety and Health Administration (OSHA) and contains provisions for hazardous materials handling. OSHA requirements set forth in 29 CFR 1910 et seq. are designed to promote worker safety, worker training, and a worker’s right to know (OSHA 2022). OSHA has delegated the authority to administer its regulations in California to the State of California.

Hazardous Materials Transportation Act

Enacted in 1975, the Hazardous Materials Transportation Act (United States Code [USC] Title 49, Section 5101 et seq. [49 USC 5101 et seq.]) is the principal federal law regulating the transportation of hazardous materials. Its purpose is to “protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce” under the authority of the U.S. Secretary of Transportation.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) (42 USC Part 2) was the first major federal law regulating the potential health and environmental problems associated with hazardous and nonhazardous solid waste. The RCRA and implementing regulations promulgated by the U.S. Environmental Protection Agency provide the general framework for the national hazardous and nonhazardous waste management systems. This framework includes the determination of whether hazardous wastes are being generated, techniques for tracking wastes to their eventual disposal, and the design and permitting of hazardous waste management facilities (USEPA 2022a).

RCRA amendments enacted in 1984 and 1986 began the process of eliminating land disposal as the principal method of hazardous waste disposal. Hazardous waste regulations promulgated in 1991 address site selection, design, construction, operation, monitoring, corrective action, and closure of disposal facilities. Additional regulations addressing solid waste issues are contained in 40 CFR Part 258.

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (1986; 42 USC 9601 et seq.) was created to help communities plan for emergencies involving hazardous substances. This law requires hazardous chemical emergency planning by federal, state, and local governments; Native American Tribes; and industry. It also requires that industry report on the storage, use, and releases of hazardous chemicals to federal, state, and local governments (USEPA 2022b).

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective to evaluate the cost-effectiveness of using public funding to restore buildings destroyed by natural disasters in areas of known high hazards (e.g., flood zones, high fire hazard zones, earthquake fault zones, and landslide zones) (National Park Service 2002).

State

Hazardous Waste Control Law of 1972

The Hazardous Waste Control Act (Health and Safety Code Section 25100 et seq.) created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. This law is implemented by regulations contained in California Code of Regulations (CCR) Title 26, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the California Department of Toxic Substances Control (DTSC).

Hazardous Materials Release Response Plans and Inventory Law of 1985

The Hazardous Materials Release Response Plans and Inventory Law of 1985, aka the Business Plan Act (Health and Safety Code Sections 25500–25547.8), governs hazardous materials handling, reporting requirements, and local agency surveillance programs.

California Emergency Services Act (Assembly Bill 38)

Assembly Bill (AB) 38 (Chapter 372, Statutes of 2008) combined the Office of Homeland Security and the Office of Emergency Services into the California Emergency Management Agency (CalEMA). Under AB 38, CalEMA was responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities in the state. In 2013, under the Governor's reorganization plan #2, CalEMA was eliminated and restored to the

Governor's Office, renaming it the California Governor's Office of Emergency Services (Cal OES 2022).

Hazardous Materials Release Cleanup (Assembly Bill 440)

AB 440 (Chapter 588, Statutes of 2013) authorizes a local agency to take cleanup action similar to that under the Polanco Redevelopment Act that the local agency determines is necessary, consistent with other federal and state laws, to remedy or remove a release of hazardous substances within the boundaries of the local agency. AB 440 allows the local agency to designate another agency, in lieu of the department or the regional board, to review and approve a cleanup plan and to oversee the cleanup of hazardous material from a hazardous material release site, under certain conditions. It also provides immunity to the local agency as long as the action is in accordance with a cleanup plan prepared by a qualified independent contractor, and approved by the department, a regional board, or the designated agency, and the cleanup is undertaken and properly completed. Finally, AB 440 authorizes the local agency to recover cleanup costs from the responsible party.

California Occupational Safety and Health Administration Regulations

The California Occupational Safety and Health Administration (Cal/OSHA) sets forth regulations for the disturbance of asbestos-containing construction materials, including removal operations for all types of such materials. Cal/OSHA requires that contractors and employers that remove asbestos-containing construction materials be registered and that consultants and technicians who conduct sampling and/or removal be certified. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response.

Cal/OSHA works to ensure that employers have controls to reduce and monitor exposure levels of hazardous materials, provide an informational program describing any exposure during operations, and inspect drums and containers before removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations (California Department of Industrial Relations 2022).

California Code of Regulations Title 8, Section 1529

This section of the CCR governs asbestos exposure for work identified in Section 1502, including the following:

- Demolition or salvage of structures where asbestos is present.
- Removal or encapsulation of materials containing asbestos.
- Construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos.
- Asbestos spill/emergency cleanup.

- Transportation, disposal, storage, containment of, and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed.
- Excavation potentially involving exposure to asbestos as a natural constituent that is not related to asbestos mining and milling activities.

South Coast Air Quality Management District Rule 1403

The federal Clean Air Act regulates asbestos as a hazardous air pollutant, which subjects it to regulation by the South Coast Air Quality Management District (SCAQMD) under its Rule 1403. OSHA also regulates asbestos as a potential worker safety hazard. These rules and regulations prohibit emissions of asbestos from demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos fibers; and require notice to federal and local government agencies before renovation or demolition activities that could disturb asbestos (SCAQMD 2007).

California Emergency Plan

The California Emergency Plan describes how response to natural or human-caused emergencies occurs within the state (Cal OES 2017). The plan describes methods for conducting emergency operations and the emergency services of government agencies. It also describes how resources are mobilized, how the public is informed, and how continuity of government is maintained during an emergency. Further, the California Emergency Plan discusses hazard mitigation (actions to reduce risk) and preparedness and recovery from disaster. Among the hazards and vulnerabilities considered in the plan are earthquake, flood, fire, landslide, tsunami, hazardous materials emergencies, and energy disruption.

California Fire Code (California Code of Regulations Title 24, Part 9)

The California Fire Code (CCR Title 24, Part 9), a subsection of the California Building Code, combines the Uniform Fire Code with amendments necessary to address California's unique needs. Its regulations safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The California Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The code's provisions apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The California Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Typical fire safety requirements of the California Fire Code include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code

applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.

California Public Resources Code

The California Public Resources Code (PRC) was established in 1939 by the California Code Commission. The PRC contains laws related to natural resources, the conservation, utilization, and supervision thereof, along with mines and mining, oil and gas, and forestry. The following sections of the PRC, reproduced below verbatim, are relevant to the Proposed Project.

Public Resources Code Section 4427

During any time of the year when burning permits are required, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following:

- (a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet.
- (b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.

This section does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

Public Resources Code Section 4428

No person, except any member of an emergency crew or except the driver or owner of any service vehicle owned or operated by or for, or operated under contract with, a publicly or privately owned utility, which is used in the construction, operation, removal, or repair of the property or facilities of such utility when engaged in emergency operations, shall use or operate any vehicle, machine, tool or equipment powered by an internal combustion engine operated on hydrocarbon fuels, in any industrial operation located on or near any forest, brush, or grass-covered land between April 1 and December 1 of any year, or at any other time when ground litter and vegetation will sustain combustion permitting the spread of fire, without providing and maintaining, for firefighting purposes only, suitable and serviceable tools in the amounts, manner and location prescribed in this section.

- (a) On any such operation a sealed box of tools shall be located, within the operating area, at a point accessible in the event of fire. This fire toolbox shall contain: one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a sufficient number of shovels so that each employee at the operation can be equipped to fight fire.
- (b) One or more serviceable chainsaws of three and one-half or more horsepower with a cutting bar 20 inches in length or longer shall be immediately available within the operating area, or, in the alternative, a full set of timber-felling tools shall be located in the fire toolbox, including one crosscut falling saw six feet in length, one double-bit ax with a 36-inch handle,

one sledge hammer or maul with a head weight of six, or more, pounds and handle length of 32 inches, or more, and not less than two falling wedges.

- (c) Each rail speeder and passenger vehicle used on such operation shall be equipped with one shovel and one ax, and any other vehicle used on the operation shall be equipped with one shovel. Each tractor used in such operation shall be equipped with one shovel.

Public Resources Code Section 4431

During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saw, auger, drill, tamper, or other portable tool powered by a gasoline-fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches, or one serviceable fire extinguisher. The Director of Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by use of portable power tools under various climatic and fuel conditions.

The required fire tools shall at no time be farther from the point of operation of the power saw or tool than 25 feet with unrestricted access for the operator from the point of operation.

Public Resources Code Section 4442

- (a) Except as otherwise provided in this section, no person shall use, operate, or allow to be used or operated, any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brush-covered land, or grass-covered land unless the engine is equipped with a spark arrester, as defined in subdivision (c), maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.
- (b) Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.
- (c) A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inches in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.
- (d) Engines used to provide motive power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code.
- (e) Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in effective mechanical condition.
- (f) Motor vehicles when being operated in an organized racing or competitive event upon a closed course are not subject to this section if the event is conducted under the auspices of a recognized sanctioning body and by permit issued by the fire protection authority having jurisdiction.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. The following policy is potentially relevant to the Project:

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

Regional and Local

Los Angeles County General Plan 2035

The Safety Element of the Los Angeles County General Plan 2035 contains goals and policies to shape development so that risks to humans and property from natural disasters are reduced (County of Los Angeles 2015). The policy framework set forth in the Safety Element discourages new development from occurring in areas that have been designated as areas of high fire, flood, or seismic hazard.

Goals in the Safety Element related to wildland fire are potentially relevant to the Project (refer to Section 3.18, *Wildfire*).

All-Hazards Mitigation Plan

The Safety Element works in conjunction with the All-Hazards Mitigation Plan, which is prepared by the County's Chief Executive Office, Office of Emergency Management (CEO OEM), which sets strategies for natural and human-caused hazards in Los Angeles County. The All-Hazards Mitigation Plan was updated and adopted by the County Board of Supervisors in 2019 and profiles a wide variety of human-induced and natural hazards: earthquakes, fires, climate change, dam failure, flood, tsunami, landslides, and wildfire. The plan is the second countywide compilation of future mitigation strategies and programs and addresses all major natural and human-caused disasters in Los Angeles County that fall within the responsibility of County departments. The plan addresses the unincorporated areas of the county. Although the plan does not provide specific mitigation planning for each of the 88 cities in Los Angeles County, many of the strategies and mitigation goals cross political boundaries and also apply to and cover the incorporated areas (CEO OEM 2019).

Operational Area Emergency Response Plan

The Operational Area Emergency Response Plan establishes the County's emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts among the various emergency departments, agencies, special districts, and jurisdictions that compose the Los Angeles County Operational Area. The purpose of this plan is to incorporate and coordinate all County facilities and personnel, along with the jurisdictional resources of the cities and special districts within Los Angeles County, into an

efficient operational area organization capable of responding to any emergency using the California Standardized Emergency Management System, mutual aid, and other appropriate response procedures. The Operational Area Emergency Response Plan is an extension of the California Emergency Plan. The operational concepts covered in the plan focus on large-scale disasters that have the potential to generate unique situations (CEO OEM 2023)..

Materials-Specific Regulations

The use and removal of hazardous building materials is subject to the following regulations specific to the demolition and renovation of structures.

Asbestos-Containing Materials Regulations

State-level agencies, in conjunction with the U.S. Environmental Protection Agency and OSHA, regulate removal, abatement, and transport procedures for asbestos-containing materials (ACM). Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations, and medical evaluation and monitoring is required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk for asbestos emissions and exposure. Finally, SCAQMD must be notified before the onset of demolition or construction activities with the potential to release asbestos.

The following regulations apply to the removal and disposal of ACM: 40 CFR Part 61, Subpart M (Asbestos National Emission Standards for Hazardous Air Pollutants); 8 CCR Sections 1529 and 5208; and SCAQMD Rule 1403. SCAQMD Rule 1403 provides detailed requirements for the definition of materials that qualify as ACM, qualifications for ACM contractors, and procedures for testing, containment, removal, and disposal.

Lead-Based Paint

Cal/OSHA's Lead in Construction Standard (8 CCR Section 1532.1) addresses all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

The following regulations apply to the removal and disposal of lead-based paint (LBP): Title IV, Toxic Substances Control Act, Sections 402, 403, and 404; and 8 CCR Section 1532.1. In addition, the California Department of Public Health (CDPH) requires that proponents of LBP removal actions prepare and submit CDPH Form 8551: Abatement of Lead Hazards Notification and CDPH Form 8552: Lead Hazard Evaluation Report.

Hazardous Waste Transportation

In California, unless specially exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. DTSC maintains a list of

active registered hazardous waste transporters throughout the state. There are approximately 208 registered hazardous waste transporters in Los Angeles County (DTSC 2022a).

The process of transporting hazardous waste often involves transfer facilities. A *transfer facility* is any waste transportation–related facility that is not an on-site facility. These facilities include but are not limited to loading docks, parking areas, storage areas, and other similar areas.

Although not all transfer facilities hold hazardous waste, an operator of a facility that accepts hazardous waste for storage, repackaging, or bulking must obtain formal authorization for those activities through the hazardous waste permit process. Hazardous waste transporters are exempt from storage facility permit requirements if they observe the limits on storage time and handling. Hazardous waste transfer facilities fall into three main categories:

- An exempt transfer facility operated by a registered transporter.
- A transfer facility operating under the authority of an RCRA permit.
- A transfer facility operation under the authority of a Standardized Permit.

A transfer facility may be either permitted or exempt. The permit authorizes the activities and establishes the conditions that must be followed by the operator of a permitted transfer facility. Exempt facilities are owned and operated by the transporter of the waste.

Hazardous Materials Release Threats

When unexpectedly released into the environment, hazardous materials may create a significant hazard to the public or environment. Hazardous materials are commonly stored and used by a variety of businesses in Los Angeles County and could be released into the environment through improper handling or during incident or accident conditions. The business plans and response systems discussed in the following sections are in place to help prevent threats of hazardous material releases.

Hazardous Materials Business Plans

The Los Angeles County Fire Department’s Health Hazardous Materials Division serves as the Certified Unified Program Agency (CUPA) for the unincorporated areas and for most of the county’s incorporated cities. A CUPA is an agency certified by DTSC to conduct the Unified Program, a collection of state-mandated programs formulated to protect people and the environment from the effects of hazardous materials handling, storage, and release. As part of the Unified Program, businesses that handle, store, or dispose of a hazardous substance at a given threshold quantity must prepare, submit, and implement Hazardous Materials Business Plans for emergency response to releases or threatened releases of hazardous materials. These business plans must include the facility’s inventory of hazardous materials handled, an emergency response plan for actual or threatened releases, an employee training program, and a facility map displaying the locations of reportable hazardous materials. The chemical inventories are updated and submitted annually, and the overall business plans are reviewed and submitted every three years or when significant changes in business operation occur (LACFD 2009).

Risk Management Plans

One of the programs administered by the Los Angeles County Fire Department's Health Hazardous Materials Division and its participating agencies is the California Accidental Release Prevention (CalARP) program (LACFD 2009). The CalARP program requires the owner or operator of a stationary source with more than a threshold quantity of a regulated substance to prepare a risk management plan. The CalARP program combines federal and state program requirements for the prevention of accidental releases of listed substances into the atmosphere. Under the CalARP program, a risk management plan must include a hazard assessment program, an accidental release prevention program, and an emergency response plan. The risk management plan must be revised every five years or as necessary.

3.8.2 Affected Environment

Hazardous Materials

Hazardous materials are commonly encountered during construction activities. Hazardous materials typically require special handling, reuse, and disposal because of their potential to harm human health and the environment. California Health and Safety Code Section 25501 defines a *hazardous material* as:

A material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Existing Project Area Conditions

The Project area is located in the Santa Monica Mountains, adjacent to the community of Topanga and the City of Malibu, in unincorporated Los Angeles County.

The Project area is a mix of developed and undeveloped areas. The northern portion of the Project area is undeveloped open space with several commercial/retail businesses, the Topanga Ranch Motel, several unofficial hiking trails, Topanga Lagoon, and Topanga Creek. State Parks removed structures and old and leaking septic systems following the purchase of the property in 2001. The southern portion of the Project area is developed with Pacific Coast Highway (PCH), the Topanga Lagoon Bridge (Bridge Number 53-0035), beach parking lots, and a Los Angeles County Fire Department (LACFD) lifeguard and public restroom building and helipad. The Project area is bounded by the Santa Monica Mountains to the north; Topanga Canyon Boulevard (TCB), a gasoline station and convenience store, the continuation of PCH, and Ratner Beach to the east; the Pacific Ocean to the south; and single-family residences, a retail clothing store, and the continuation of PCH to the west. The Project area has been used primarily as a regional thoroughfare since at least the early 1900s. Historical sources also indicate that more than a dozen

structures that were constructed sometime before 1938 were or are present within the northern Project area.

Commercial/retail businesses and the Topanga Ranch Motel were found to include retail-size containers of cleaning agents, maintenance chemicals, herbicides, and pesticides; propane cylinders and containers; gasoline cans; and paint containers. No RECs were identified at the facilities on-site north of PCH. However, at the Topanga Ranch Motel, the surface soil adjacent to the bungalows was observed to contain building roofing debris and paint flakes. Based on the age of the motel structures, the potential exists for the surface soil to contain ACM from the roofing materials or lead from the paint (LBP). No RECs were identified at Topanga Beach and the associated parking lots and facilities located south of PCH. Evidence of a hazardous substance release associated with the existing electrical pole-mounted transformers (i.e., polychlorinated biphenyls, or PCBs, in the transformer oil) in the Project area was not observed in the vicinity during the site reconnaissance.

Because of the absence of records indicating that underground storage tanks (USTs) have been removed, the historic use of the property currently occupied by Oasis Imports as a service station and the potential presence of USTs represents an environmental concern for the Project area.

Aerially deposited lead is assumed to be present in shallow soil in the shoulders of the roads given their historical use as automotive thoroughfares. ACMs and/or LBP may be present on or within on-site structures and the Topanga Lagoon Bridge. In addition, the Project area has the potential to contain lead or chromium, as yellow traffic striping and pavement markings applied before 2005 potentially contained lead chromate pigment that may not have been completely removed or worn away.

Hazardous Materials Database Search

The GeoTracker database, maintained by the State Water Resources Control Board, and the EnviroStor database, maintained by DTSC, were checked for nearby hazardous materials sites. The GeoTracker database includes the following hazardous materials site lists: leaking underground storage tank (LUST) cleanup sites; spills, leaks, investigation, and cleanup sites; permitted UST facilities; land disposal sites; military cleanup sites; and other cleanup sites. The EnviroStor database includes federal Superfund, state response, voluntary cleanup, school cleanup, and hazardous waste corrective action. DTSC is also responsible for updating the Hazardous Waste and Substances Site List (the Cortese List). The list is a planning document used by state and local agencies and developers to comply with CEQA requirements by providing location information for hazardous material release sites.

The search of the GeoTracker and EnviroStor databases did not identify any hazardous materials sites within the Project area (DTSC 2022b; SWRCB 2022a). One LUST cleanup site was identified approximately 340 feet east of the Project area's eastern boundary at 18541 Pacific Coast Highway in Malibu (SWRCB 2022b). The LUST cleanup site is the former Thrifty #214/Arco #9616, currently a 7-Eleven gasoline station, and has had a status of "Completed—Case Closed" since November 25, 2009 (Geocon 2022; SWRCB 2022b). The potential

contaminant of concern was gasoline within an aquifer used for drinking water supply (SWRCB 2022b). The closed status means that the site has been cleaned up and the overseeing regulatory agency has concluded that this site no longer poses a risk to people or the environment.

Schools

No schools are located within one-quarter mile of the Project area. The nearest school is Westside Waldorf School, 17310 Sunset Boulevard in Pacific Palisades, approximately 2 miles east of the Project area.

Airports

An airport land use compatibility plan (ALUCP) exists for each of the airports in Los Angeles County (County of Los Angeles 2009). The Project area is not located within the Los Angeles County ALUCP. The nearest public commercial airport is Santa Monica Airport, approximately 7 miles southeast of the Project area.

Emergency Response and Evacuation Plans

Emergency response plans include elements to maintain the continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state, and local levels for all types of disasters, including human-made and natural. It is the responsibility of government to undertake an ongoing comprehensive approach to emergency management to avoid or minimize the effects of hazardous events. Local governments have primary responsibility for preparedness and response activities.

The Safety Element of the Los Angeles County General Plan 2035 addresses the protection of the community from risks associated with natural disasters such as earthquakes, slope instability, soils hazards, and fires (County of Los Angeles 2015). The County's Integrated Waste Management Plan addresses hazardous materials management (LA County DPW 2020). The Los Angeles County All-Hazards Mitigation Plan prepared by the County's CEO OEM sets strategies for both natural and human-caused hazards in the county (CEO OEM 2019) and is described above under Section 3.8.1, *Regulatory Setting*. The All-Hazards Mitigation Plan, which has been approved by the Federal Emergency Management Agency and CalEMA, includes a compilation of known and projected hazards in Los Angeles County and describes historical disasters in the county. The CEO OEM also prepares the Operational Area Emergency Response Plan, described above under Section 3.8.1, *Regulatory Setting* (CEO OEM 2012).. City of Malibu Mass Evacuation Plan was developed through a collaborative, multi-agency process to ensure a safe and effective evacuation of the community during life-threatening emergencies. The Plan identifies roles and responsible agencies, establishes communication protocols, and identifies evaluation and traffic management strategies (City of Malibu 2020).

Wildfire

The California Department of Forestry and Fire Protection publishes Fire Hazard Severity Zone maps, for both State and Local Responsibility Areas. The Project area is mapped as being primarily a Very High Fire Hazard Severity Zone (VHFHSZ) within a State Responsibility Area, with a small portion of PCH on the western boundary of the Project area being a VHFHSZ in a Local Responsibility Area (CAL FIRE 2022). Please refer to Section 3.18, *Wildfire*, for additional details.

3.8.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to hazards and hazardous materials. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Vector control has been listed as an additional threshold of significance. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials. (Refer to Impact HAZ 3.8-1.)
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment. (Refer to Impact HAZ 3.8-1.)
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Refer to Impact HAZ 3.8-2.)
- 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 create a significant hazard to the public or the environment. (Refer to Impact HAZ 3.8-3.)
- For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area. (Refer to Impact HAZ 3.8-4.)
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. (Refer to Impact HAZ 3.8-5.)
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. (Refer to Impact HAZ 3.8-6.)
- Cause an increase in airborne insect populations. (Refer to Impact HAZ 3.8-7.)
- Result in cumulatively considerable impacts related to hazards and hazardous materials. (Refer to Impact HAZ 3.8-8.)

Methodology

This environmental analysis of potential impacts related to hazards and hazardous materials is based on a review of the results of the Project-specific Phase I assessment and a review of literature and database research. The Project would be regulated by the various laws, regulations, and policies summarized above in Section 3.8.1, *Regulatory Setting*. This analysis assumes compliance by the Project with applicable federal, state, and local laws and regulations, and local and state agencies would be expected to continue to enforce applicable requirements to the extent

that they do so now. Note that compliance with many of the regulations is a condition of permit approval. A significant impact would occur if, after considering the features described in Chapter 2, *Project Description*, and the required compliance with regulatory requirements, a significant impact would still occur. For those impacts considered significant, mitigation measures are proposed to reduce the identified impacts.

Hazardous Materials

HAZ 3.8-1: The Project could create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal, or the accidental release of hazardous materials. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project footprint. Existing functions and conditions throughout the Project area would remain the same. Existing facilities and leases within the Project area that use hazardous materials would continue to manage hazardous materials under current conditions. The transport of these hazardous materials would require continued compliance with numerous hazardous materials regulations, including the Hazardous Materials Transportation Act. Such regulations are designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of hazardous materials into the environment. Additionally, the California Fire Code requires measures for the safe storage and handling of hazardous materials. Therefore, under Alternative 1, no construction or operational impacts related to the routine transport, storage, production, use, or disposal of hazardous materials would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential hazards to the public or the environment through the routine transport, storage, production, use, or disposal, or the accidental release of hazardous materials would be similar under all Build Alternatives, as described in the following sections.

Construction

During the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in an inadvertent release, which could adversely affect construction workers, the public, and the environment, resulting in a potentially significant impact.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment. Contractors would be required to prepare and implement Hazardous Materials Business Plans that would require that

hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

As discussed in Section 3.6, *Geology, Soils, Seismicity, Topography, and Paleontology*, construction contractors would be required to prepare a storm water pollution prevention plan (SWPPP) for construction activities according to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, and equipment and fuel storage; protocols for responding immediately to spills; and describe best management practices for controlling site runoff.

In addition, the transportation of hazardous materials would be regulated by the U.S. Department of Transportation (USDOT), the California Department of Transportation (Caltrans), and the California Highway Patrol. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

Workers handling hazardous materials are required to adhere to OSHA and Cal/OSHA health and safety requirements. Hazardous materials must be transported to and from the Project area in accordance with RCRA and USDOT regulations and disposed of in accordance with the RCRA and the CCR at a facility that is permitted to accept the waste. Because compliance with existing hazardous materials regulations and programs is mandatory, Project construction activities are not expected to create a potentially significant hazard to construction workers, the public, or the environment.

Furthermore, in the event of a spill releasing hazardous materials in the Project area, a coordinated response would occur at the federal, state, and local levels, including the LACFD, which is the local hazardous materials response team. In the event of a hazardous materials spill, the LACFD and the local police department would be notified simultaneously and sent to the scene to assess and respond to the situation.

As discussed in Section 3.8.2, *Affected Environment*, no RECs were identified at the businesses on-site north of PCH or at Topanga Beach and the associated parking lots and facilities south of PCH. However, the potential for aeri ally deposited lead, lead, or chromium in shallow soil to be present in the shoulders of the roads, and for ACMs and/or LBP on or within on-site structures and the existing PCH Bridge, represent RECs for the Project area. In addition, given the absence of records indicating that USTs have been removed, the historic use of the portion of the property currently occupied by Oasis and the Malibu Feed Bin as a service station, and the potential presence of USTs, represents an environmental concern for the Project area. As a result, construction workers could be exposed to such contaminated soils and potential USTs during demolition, excavation, and revegetation activities.

As discussed above in Section 3.8.1, *Regulatory Setting*, under *Materials-Specific Regulations*, existing regulations require that surveys be conducted for ACM and LBP on structures that predate the 1970s ban on the use of ACM and LBP in and on structures. The surveys would be conducted before structure demolition activities. Should ACM and/or LBP be detected at concentrations above regulatory action levels, the hazardous building materials would be removed in accordance with all applicable federal, state, and local regulations, which would include proper disposal of hazardous building materials and worker protection. Compliance with these existing regulations would result in a less-than-significant impact.

To address the potential presence of aeriably deposited lead or chromium in soil, **Mitigation Measure HAZ-1** requires that samples of soils and the Topanga Hotel be analyzed and appropriately remediated or removed if soils contain hazardous quantities of contaminants. This would reduce any potential impacts on construction workers from encounters with hazardous materials to less-than-significant levels with mitigation.

To address the potential for USTs at the former service station at Oasis Imports, **Mitigation Measure HAZ-2** requires that a geophysical survey be conducted before construction to evaluate the Project area for the potential presence of USTs. Implementation of Mitigation Measures HAZ-1 and HAZ-2 would reduce construction impacts related to accidental upset or encounter of hazardous materials to a less-than-significant level with mitigation.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials during construction of the Proposed Project would limit the potential for creation of hazardous conditions due to the routine use or accidental release of hazardous materials.

Operation

Operation and maintenance activities at Topanga Lagoon would require weed and pest control operations, as necessary. Periodic earthwork operations may also be required to maintain the lagoon contour, enhance soil permeability, and remove vegetative growth. Maintenance activities and periodic earthwork outside of normal operations would also be subject to regulations for safe handling, transportation, and disposal. Such regulations would require appropriate containerization and labeling, transportation by licensed hazardous materials haulers, and disposal at licensed facilities permitted to accept the waste.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials during operation and maintenance of the Proposed Project would limit the potential for creation of hazardous conditions due to the routine use or accidental release of hazardous materials. Therefore, operational impacts on the public and the environment would be less than significant.

Operation of the new bridge would not contain any facilities that would include or require the use of hazardous materials. Therefore, no operational impacts related to the routine transport, storage, production, use, or disposal of hazardous materials would occur.

The proposed beach and park facilities could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals common petrochemicals, fertilizer, and/or pesticides.. The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials during operation and maintenance of the Proposed Project would limit the potential for creation of hazardous conditions due to the routine use or accidental release of hazardous materials. Therefore, operational impacts on the public and the environment would be less than significant.

The Proposed Project could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals. Consistent with hazardous materials use at Topanga Lagoon and Beach's facilities, proposed visitor services' facilities would be required to comply with laws and regulations as outlined above in Section 3.8.1, *Regulatory Setting*. Given compliance with existing regulations, potential hazardous materials impacts would be less than significant.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Construction and operational impacts from hazardous materials would be similar as described above for all Build Alternatives.

Given compliance with relevant federal, state, and local regulations, potential hazardous materials impacts during construction and operation would be less than significant. Implementation of **Mitigation Measures HAZ-1 and HAZ-2** would further reduce potential impacts related to the public and the environment to less-than-significant levels.

Mitigation Measures

HAZ-1: Before initiating ground disturbance and construction activities, Project landowners/managers (State Parks, Caltrans, the County of Los Angeles Department of Beaches and Harbors) shall collect representative samples of soils and fill material to be analyzed for lead, asbestos, and chromium and any other substances required by the regulatory agencies. Landowners/managers shall avoid if feasible, or otherwise remove from the Project area, soils and fill material identified as containing hazardous quantities of contaminants and shall dispose of such soils and fill material in accordance with applicable hazardous waste regulations. No contaminated soils or fill materials will be eligible for nearshore placement.

HAZ-2: Before construction, a geophysical survey shall be conducted to evaluate the Project area for the potential presence of USTs. In the event that USTs are detected, the USTs shall be removed in accordance with all applicable federal, state, and local regulations.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services Development

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. The proposed facilities could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals. As described above, the Project’s construction of future visitor services facilities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment. Hazardous Materials Business Plans that would be implemented and all construction work would be consistent with California Fire Code. The Project’s SWPPP would control the spill of potential hazardous materials during construction from contaminating soils on-site or off-site. Additionally, all transportation of hazardous materials would comply with USDOT, Caltrans, and California Highway Patrol requirements. All construction workers would adhere to OSHA and Cal/OSHA health and safety requirements.

Any hazardous materials required for construction work, or contaminated soils or materials excavated or demolished from the construction activities, would be transported to and from the Project area in accordance with RCRA and USDOT regulations. Hazardous soils and/or materials would be disposed of in accordance with the RCRA and the CCR at a facility that is permitted to accept hazardous waste. Furthermore, should a spill of hazardous materials occur in the Project area, State Parks would coordinate with all relevant federal, state, and local agencies, including the LACFD.

Because ACM, LBP, and USTs could be present on or within historical structures in the Topanga State Park area, construction workers could be exposed to such contaminated soils and potential USTs during construction activities. However, implementation of **Mitigation Measures HAZ-1 and HAZ-2** (defined above) would reduce potential hazardous materials impacts during the construction of future visitor services facilities.

Consistent with the hazardous materials uses described above, programmatic development of future visitor services at Topanga State Park would be required to comply with the laws and regulations outlined above in Section 3.8.1, *Regulatory Setting*.

Mitigation Measures

Implement **Mitigation Measures HAZ-1 and HAZ-2**.

Significance Determination

Less than Significant with Mitigation Incorporated

Hazardous Materials near Schools

HAZ 3.8-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. *No impact would occur.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions, including the handling of hazardous materials. Under Alternative 1, there would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Therefore, no construction or new operational activities with the potential to emit or handle hazardous materials within one-quarter mile of a school would take place. No impact would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential impacts of emissions or handling of hazardous materials within one-quarter mile of a school would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

No schools are located within one-quarter mile of the Project area. The nearest school is Westside Waldorf School, approximately 2 miles east of the Project area. Therefore, no construction or new operational activities with the potential to emit or handle hazardous materials within one-quarter mile of a school would take place. No impact would occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Wastewater options would be on-site and/or along TCB and PCH. No schools are in the vicinity of the proposed sewer alignment. Therefore, no impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Programmatic development of future visitor services at Topanga State Park would not result in hazardous materials impacts on schools because there are no schools within one-quarter mile of the Project area.

Mitigation Measures

None Required

Significance Determination

No Impact

Hazardous Material Site Listing

HAZ 3.8-3: The Proposed Project would not 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 not create a significant hazard to the public or the environment. *No impact would occur.*

Alternative 1 (No Build)

Under Alternative 1, conditions throughout the Project area would remain the same as existing functions and conditions. There would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Therefore, no construction or new operational activities with the potential to create hazards to the public or environment due to placement of people or structures on a hazardous materials site would take place. No impact would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential hazards to the public or the environment due to placement of people or structures on a hazardous materials site would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

A search of the GeoTracker and EnviroStor databases did not identify any hazardous materials sites within the Project area (DTSC 2022b; SWRCB 2022a). One LUST cleanup site, the former Thrifty Station No. 241/Arco Station No. 6916, approximately 155 feet east of the Project area at 18541 Pacific Coast Highway in Malibu, was identified as having a release of gasoline that impacted groundwater. Investigation and corrective actions were completed at the site and no further action related to the petroleum release was required. The Los Angeles Regional Water Quality Control Board closed this regulatory case in November 2009. The regulatory closure of the LUST case indicates that the regulatory agency has concluded that this site does not pose a risk to people or the environment. Therefore, impacts related to hazardous material sites would not occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Wastewater options would be on-site along TCB and PCH. As described above, there are no active hazardous material sites within the Project area. Therefore, no impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Programmatic development of future visitor services at Topanga State Park would not create a significant hazard to the public or the environment due to site placement because there are no active hazardous material sites in the Project area.

Mitigation Measures

None Required

Significance Determination

No Impact

Safety Hazards near Airport

HAZ 3.8-4: For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. *No impact would occur.*

Alternative 1 (No Build)

Under Alternative 1, conditions throughout the Project area would remain the same as existing functions and conditions. There would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Therefore, no construction or new operational activities with the potential to result in a safety hazard or noise for people residing or working in the Project area would take place. No impact would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential safety hazards or excessive noise for people residing or working in the Project area would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

The nearest public commercial airport is Santa Monica Airport, approximately 7 miles southeast of the Project area. The Project area is outside of the ALUCP planning areas in Los Angeles County. Therefore, construction and operation of the Proposed Project would not result in an airport-related safety hazard or airport-related noise for people residing or working in the area. No impact would occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Wastewater options would be on-site along TCB

and PCH. As described above, there are no airports in the Project vicinity. Therefore, no impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Programmatic development of future visitor services at Topanga State Park would not result in an airport-related safety hazard or airport-related noise for people residing or working in the area because the Project area is outside of the ALUCP planning areas in Los Angeles County.

Mitigation Measures

None Required

Significance Determination

No Impact

Emergency Response Plan

HAZ 3.8-5: The Project could impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, conditions throughout the Project area would remain the same as existing functions and conditions. There would be no changes to the existing lagoon, lifeguard and public building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Construction and operation activities under Alternative 1 would be the same as current conditions with respect to emergency response and evacuation. No Project activities would occur within surrounding rights-of-way (ROWs) that could impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for interference with an adopted emergency response plan or emergency evacuation plan would be similar under all Build Alternatives, as described in the following sections.

Construction

Disaster Routes in Los Angeles County include State Route 1, also known as PCH, which bisects the Project area, and State Route 27 (TCB), which is adjacent to the eastern boundary of the Project area (LA County DPW 2022) and identified as Evacuation Zone 11 (City of Malibu 2020).

Project construction would require installing a 180-foot-long by 31-foot-wide temporary bridge and sequentially building a new, approximately 460-foot-long bridge to replace the existing PCH bridge that crosses over the lagoon. This bridge construction may require short-term lane/road closures or detours, although a Project requirement is to maintain all four lanes of PCH at all times within the bridge replacement area. Potential lane/road closures or detours could congest local roadways that could be used by the public and emergency responders if an emergency or disaster were to occur. A construction and emergency traffic management plan for the Proposed Project would be prepared and implemented to help prevent the Proposed Project from causing construction impacts on local ROWs, such as blockage of the highway during red flag, wildfire, and other emergency conditions (**Mitigation Measure TRA-1**). The plan would outline appropriate traffic control measures intended to ensure that adequate traffic operations and access is provided through the construction area. The construction and emergency traffic management plan would be developed in coordination with Caltrans, the City of Malibu, the County, State Parks, DBH, and emergency service responders, which would include fire departments, police departments, and ambulances with jurisdiction within the Project area. With implementation of **Mitigation Measure TRA-1**, impacts on the circulation system within the Project area during construction of the Proposed Project would be reduced to a less-than-significant level, and the Proposed Project would not impair or physically interfere with emergency response teams or an evacuation plan.

Operation

Operation and maintenance activities for the Project would be substantially similar to current conditions with respect to emergency response and evacuation. No operation-related activities that could impair or physically interfere with an adopted emergency response plan or emergency evacuation plan would occur within surrounding ROWs. As a result, no impact would occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH between the bridge and Coastline Drive would be closed intermittently during construction of the sewer alignment.

Under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. As described in Section 3.16, *Transportation and Circulation*, implementation of a construction and emergency traffic management plan (**Mitigation Measure TRA-1**) would provide appropriate traffic control measures intended to ensure adequate traffic operations and access during construction in the event of an emergency.

Mitigation Measures

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*).

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Construction

Proposed construction activities for future visitor services facilities at Topanga State Park would involve the transport of equipment, vehicles, and materials on local roadways. Additionally, temporary lane closures and/or detours may be required during installation of potential pipelines needed for wastewater connection in the TCB ROW. These activities would have the potential to result in impacts on circulation system performance. As discussed above, **Mitigation Measure TRA-1** would include the preparation and implementation of a construction and emergency traffic management plan. With implementation of **Mitigation Measure TRA-1**, impacts on the circulation system in the Project area during construction would be reduced to a less-than-significant level.

Programmatic development of future visitor services within Topanga State Park or at Topanga Beach would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant with mitigation.

Operation

Under all Build Alternatives (Alternatives 2, 3, and 4), operation and maintenance activities associated with the programmatic development of future visitor services at Topanga State Park would be similar to current conditions with respect to emergency response and evacuation. Future visitor services would not increase traffic substantially or otherwise interfere with evacuation routes compared to existing conditions. No substantial operation-related activities that could impair an adopted emergency response plan or emergency evacuation plan would occur within surrounding ROWs. As a result, no impact would occur.

Mitigation Measures

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*).

Significance Determination

Less than Significant with Mitigation Incorporated

Wildland Fires

HAZ 3.8-6: The Project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Construction and operation activities under Alternative 1 would be the same as current conditions with respect to potential injury or death involving wildland fires. No Project activities would occur which could exacerbate wildland fires in the area.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires would be similar under all Build Alternatives, as described in the following sections.

Construction

The Project area is mapped as being primarily a Very High Fire Hazard Severity Zone, or VHFHSZ, within a State Responsibility Area, with a small portion of PCH on the western boundary of the Project area being a VHFHSZ in a Local Responsibility Area. As discussed in Impact FIRE 3.18-2 in Section 3.18, *Wildfire*, the primary fire hazards from Project construction would involve the use of vehicles and equipment. Heat or sparks from construction vehicles and equipment could ignite dry vegetation and cause a fire, particularly during the dry, hot conditions from June to September and from September to December when dry winds are more likely to occur. Additionally, construction activities that could generate sparks have a greater likelihood of creating a source of ignition. Therefore, depending on the time of year (as seasonality may affect climate conditions, prevailing winds, and vegetation/fuels) and the location of construction activities, the increase in sources of potential ignition associated with Project construction could exacerbate the risk of wildfire in the Project area and surroundings. Project construction could increase the risk of exposure of people or structures to significant loss, injury, or death involving wildland fires, which would result in a potentially significant impact.

All personnel in the Project area would have to comply with PRC Sections 4427, 4428, 4431, and 4442, which include regulations governing the handling of combustible fuels and equipment that can exacerbate fire risks. During construction, strict adherence to these PRC sections would ensure that contractors are responsible for all monitoring and safety measures, thus reducing any potential for exacerbating wildfire risks. Additionally, all construction would comply with fire

protection and prevention requirements specified by the CCR and Cal/OSHA, including easily accessible firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, spark arrestors on equipment, and worker training for firefighter extinguisher use. With implementation of all relevant PRC sections and adherence to requirements specified by the CCR and Cal/OSHA, potential impacts related to wildland fires would be less than significant.

Operation

The Proposed Project would involve an increase in lagoon, wetland, and riparian bank habitats, which would allow the lagoon system to evolve to accommodate changing sea level and storm surge conditions and would result in increased water levels in the Project area. This would effectively create larger areas of inundation that would be less susceptible to catching fire. Additionally, native vegetation restored within the riparian/transitional and upland habitats would replace more highly flammable non-native vegetation (such as *Arundo donax*) throughout the Project area. Structure restoration and building under all Build Alternatives would incorporate wildfire hardening requirements to reduce the potential for ignition.

Operation of the Proposed Project would require periodic maintenance similar to existing maintenance in the Project area. Operation-related activities would involve the use of a limited number of maintenance trucks for inspections and material delivery. These trucks would travel only on established access roads and would have a low potential to produce sparks, fire, or flame that could result in the uncontrolled spread of wildfire. However, as discussed under Impact FIRE 3.18-2 in Section 3.18, *Wildfire*, the Project area is located within a VHFHSZ and includes some undeveloped, steep hillsides. Therefore, operation of the expanded lagoon could reduce wildfire risks.

However, implementation of **Mitigation Measure FIRE-1** listed in Section 3.18, *Wildfire*, would require the preparation of a fuel modification plan, consistent with LACFD's standards (refer to **Appendix K**). The fuel modification plan would identify fuel modification zones around the Project area and the type of landscaping allowed in these zones and would ensure that the height and density of vegetation is modified to reduce the risk of wildfire impacts for visitors to the Project area.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation, or SDI (Option 1); on-site seepage pits (Option 2); and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment.

Under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Additionally, as described in Section 3.16, *Transportation and Circulation*, implementation of a construction and emergency traffic management plan (Mitigation Measure **TRA-1**) would provide appropriate traffic control measures intended to ensure adequate traffic operations and access during construction in the event of an emergency. Implementation of **Mitigation Measures FIRE-1 and TRA-1** would reduce potential construction and operational impacts related to wildland fires to less than significant.

Mitigation Measures

Implement **Mitigation Measures FIRE-1 and TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Construction activities for programmatic development of future visitor services at Topanga State Park have the potential to expose people to wildland fires; however, all personnel in the Project area would have to comply with PRC Sections 4427, 4428, 4431, and 4442, which include regulations related to the handling of combustible fuels and equipment that can exacerbate fire risks. Additionally, all construction would comply with fire protection and prevention requirements specified by the CCR and Cal/OSHA.

Once operational, the future visitor services development would generally resemble existing conditions for risks associated with wildfire and the future visitor services facilities would not include development/uses that would exacerbate wildfire risk. Nonetheless, implementation of **Mitigation Measure FIRE-1** would require the preparation of a fuel modification plan to reduce the risk of wildfire impacts associated with the development.

Mitigation Measures

Implement **Mitigation Measures FIRE-1 and TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Vector Control

HAZ 3.8-7: The Project could cause an increase in airborne insect populations. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no changes to the existing lagoon, lifeguard building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Construction and operation activities under Alternative 1 would be the same as current conditions with respect to airborne insect populations. No Project activities that could cause an increase in airborne insect population would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for an increase in airborne insect population to occur would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

The proposed expansion of the lagoon would create new standing pools of water. If algae growth develops or insects such as midges or mosquitoes use the water as a breeding area, any standing pools of water could be considered a nuisance or a health threat to the surrounding community. Hatching midges can emerge in such tremendous numbers that they create nuisance problems. Midges often emerge simultaneously, forming vast clouds of flying insects. They are especially attracted to lights. Large clouds of insects could form over local roadways, creating a traffic hazard.

West Nile Virus, a disease transmitted by mosquitoes, has been detected in Los Angeles County, with approximately 93 human cases and seven deaths in 2020 and 17 human cases and one death in 2021 (LA County DPH 2022). The County Department of Public Health has provided residents with tips for avoiding the West Nile Virus. Under all Build Alternatives, the Proposed Project could contribute to a public health hazard if the standing water in the expanded lagoon areas were to contribute to an increase in the mosquito population in the Project area.

However, **Mitigation Measure HAZ-3** requires coordination with the County Department of Public Health and the Greater Los Angeles County Vector Control District to ensure the development of appropriate insect control measures that utilize abatement methods appropriate for lagoons, to protect water quality and wildlife populations. Implementation of Mitigation Measure HAZ-3 would minimize the potential effects associated with airborne insect populations by minimizing population increases.

The proposed construction and operation of the PCH bridge would not result in the creation of new standing pools of water that could attract insects or act as breeding grounds for airborne insect populations.

The proposed construction and operation of the helipad, lifeguard and public restroom building, and beach parking would not result in the creation of new standing pools of water that could attract insects or act as breeding grounds for airborne insect populations.

The proposed construction and operation of the proposed visitor services would not result in the creation of new standing pools of water that could attract insects or act as breeding grounds for airborne insect populations.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation, or SDI (Option 1); on-site seepage pits (Option 2); and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

Implementation of the wastewater options would not create areas of standing water that would attract insects. However, as described above, **Mitigation Measure HAZ-3** would minimize the potential effects of airborne insect populations by minimizing population increases. Impacts would be less than significant with mitigation.

Mitigation Measures

HAZ-3: State Parks shall coordinate with the County of Los Angeles Department of Public Health and the Greater Los Angeles County Vector Control District before Project operations to develop, and if necessary to implement, appropriate insect abatement methods. Such methods shall not utilize any substances that may contaminate water or harm wildlife.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Programmatic development of future visitor services within Topanga State Park would not include the creation of new standing pools of water that could attract insects or act as breeding grounds for airborne insect populations.

Mitigation Measures

Implement **Mitigation Measure HAZ-3**.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

HAZ 3.8-8: The Project could result in cumulatively considerable impacts related to hazards and hazardous materials. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts vary based on the environmental resource under consideration. The geographic scope of analysis for cumulative hazardous materials impacts encompasses and is limited to future project sites and their immediately adjacent areas. This is the case because impacts related to hazardous materials are generally site-specific and depend on the nature and extent of the hazardous materials release, and on existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller, more localized area surrounding the immediate spill location and extent of the release and could be cumulative only if two or more hazardous materials releases were to overlap spatially.

The time frame during which the Proposed Project could contribute to cumulative hazards and hazardous materials effects includes both the construction and operations phases. The operational phases for the Proposed Project are permanent. However, similar to the geographic limitations discussed above, impacts relative to hazardous materials are generally time specific. Hazardous materials events could be cumulative only if two or more hazardous materials releases were to occur at the same time and overlap at the same location.

Significant cumulative impacts related to hazards and hazardous materials could occur if the incremental impacts of the Proposed Project were to combine with the incremental impacts of one or more cumulative projects identified in **Chapter 3** thus substantially increasing the risk that people or the environment would be exposed to hazards and hazardous materials.

Construction

Cumulative projects would be subject to the same regulatory requirements as discussed for the Proposed Project. These requirements include implementing Hazardous Materials Business Plans and complying with existing regulations for the transport, use, storage, and disposal of hazardous materials. That is, cumulative projects involving releases of or encountering hazardous materials would be required to manage their hazardous materials to the same established regulatory standards as the Proposed Project. In the case of spills or accidents, cumulative projects would be required to remediate their respective sites to the same established regulatory standards.

These requirements would apply regardless of the number, frequency, or size of the release(s), or the residual amount of chemicals present in the soil from previous spills. Although it is possible that the Proposed Project and cumulative projects could result in releases of hazardous materials at the same time and in overlapping locations, the responsible party for each spill would be required to remediate site conditions to the same established regulatory standards. Further, **Mitigation Measure HAZ-1** requires that samples of soils in the Project area be analyzed and appropriately remediated or removed if soils contain hazardous quantities of contaminants.

Additionally, **Mitigation Measure HAZ-2** requires that a geophysical survey be conducted before construction to evaluate the Project area for the potential presence of USTs.

Implementing these mitigation measures would reduce any potential impacts on construction workers from encounters with hazardous materials to a less-than-significant level and would reduce impacts on groundwater from the potential transport of hazardous substances during recharge activities. The less-than-significant impacts of the Project that would remain after remediation would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific. Accordingly, no significant cumulative impact related to the use or release of hazardous materials would result. For the reasons described above, the combined effects of construction under the Proposed Project and cumulative projects would not make a cumulatively considerable contribution to a cumulative impact related to the use of hazardous materials.

Construction of the cumulative projects could require the temporary closure of traffic lanes or cause delays in circulation that could affect emergency access. Similar to the Proposed Project, other cumulative construction projects would be required to provide appropriate traffic control and emergency access for their projects similar to **Mitigation Measure TRA-1**. In addition, many local encroachment permits require the implementation of a traffic control plan as a condition of the permit. Implementation of traffic control plans would reduce the cumulatively considerable contribution to a cumulative impact related to emergency access.

Cumulative projects in areas susceptible to wildfires would also be required to implement wildfire prevention measures, such as the Proposed Project's **Mitigation Measure FIRE-1**. Additionally, if cumulative projects have the potential to result in an increase in airborne insect populations, the projects would be required to coordinate with public health departments to develop appropriate insect control measures. Potential cumulative impacts regarding vectors would be considered less than cumulatively considerable with the implementation of best practices for insect abatement as described in **Mitigation Measure HAZ-3**. For the reasons described above, the combined effects of the Proposed Project and cumulative projects would not result in a cumulatively considerable effect, and impacts would be less than significant.

Operations

Similar to the Proposed Project, the cumulative projects may involve the handling, storage, and disposal of hazardous materials. Each cumulative project would be required to prepare and implement a Hazardous Materials Business Plan and comply with applicable regulations, including those governing the use, storage, transportation, and disposal of hazardous materials, such as emergency response and notification procedures to follow in the event of a spill or release. Transportation and disposal of wastes would also be subject to regulations for the safe handling, transportation, and disposal of chemicals and wastes. As noted previously, such regulations include standards to which the parties responsible for hazardous materials releases must return spill sites, regardless of location, frequency, or size of release, or existing background contaminant concentrations to their original conditions. Compliance with existing regulations

governing the use of hazardous materials would reduce the risk of environmental or human exposure to such materials and would reduce the cumulatively considerable contribution to a cumulative impact relative to hazardous materials.

Cumulative projects in areas susceptible to wildfires would also be required to implement wildfire prevention measures, and insect control measures would be required if project operations would attract insects. With compliance with existing regulations, the combined effects of the Proposed Project and cumulative projects would not result in a cumulatively considerable effect, and impacts would be less than significant with mitigation.

Mitigation Measures

Implement **Mitigation Measures HAZ-1, HAZ-2, HAZ-3, TRA-1, and FIRE-1.**

Significance Determination

Less than Significant with Mitigation Incorporated

3.8.4 Summary of Impacts

Table 3.8-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to hazards and hazardous materials. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.8-1
 SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO HAZARDS AND HAZARDOUS MATERIALS**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
HAZ 3.8-1: Hazardous Materials	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures HAZ-1 and HAZ-2.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures HAZ-1 and HAZ-2.	LTSM
HAZ 3.8-2: Hazardous Materials Near Schools	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
HAZ 3.8-3: Hazardous Material Site Listing	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
HAZ 3.8-4: Safety Hazards Near Airport	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
HAZ 3.8-5: Emergency Response Plan	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM

Impact	Alternative	Mitigation Measure	Significance after Mitigation
HAZ 3.8-6: Wildland Fires	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures FIRE-1 and TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures FIRE-1 and TRA-1.	LTSM
HAZ 3.8-7: Vector Control	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure HAZ-3.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure HAZ-3.	LTSM
HAZ 3.8-8: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures HAZ-1, HAZ-2, HAZ-3, TRA-1, and FIRE-1.	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant with Mitigation Incorporated

SU = Significant and Unavoidable

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3.9 Hydrology/Floodplain and Water Quality/ Stormwater Runoff

This section addresses the potential impacts of implementation of the Proposed Project related to hydrology/floodplain and water quality/stormwater runoff. This section summarizes applicable regulations related to hydrology/floodplain and water quality/stormwater runoff; describes existing hydrology/floodplain and water quality/stormwater runoff conditions in the Project area; and evaluates the potential impacts of the Proposed Project related to hydrology/floodplain and water quality/stormwater runoff in and around the Project area.

The Proposed Project's Build Alternatives (Alternatives 2, 3, and 4) were specifically designed to preserve and improve the existing wetted area that supports endangered tidewater gobies year-round and fish passage of southern steelhead when conditions permit. Therefore, each Build Alternative would provide space for the lagoon and creek to evolve and migrate over time in response to changes in sea level rise (SLR) in the long term, as well as reduce flooding and lower stream velocities during potential fish passage-enabling storm events in the short term. Each Build Alternative would provide improvements to refugia habitat important to support tidewater gobies and would increase the window of opportunity for fish passage by decreasing flow velocities and providing potential suitable rearing habitat for juvenile steelhead that currently does not exist.

3.9.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan requires that a qualified geologist conduct soil evaluations that would support location and design of septic systems to protect water resources and floodplains (National Park Service 2002).

Clean Water Act

Regulatory authorities exist on both the federal and state levels for the control of water quality in California. The U.S. Environmental Protection Agency (USEPA) is the federal agency responsible for water quality management pursuant to the Clean Water Act (CWA) of 1977. The purpose of the CWA is to protect and maintain the quality and integrity of the nation's waters by requiring states to develop and implement state water plans and policies. The relevant sections of the CWA are summarized below.

Clean Water Act Section 303: Water Quality Standards and Implementation Plans

Section 303 of the CWA requires states to designate beneficial uses for water bodies or segments of water bodies and to establish water quality standards to protect those uses for all waters of the

United States. Under Section 303(d), states, territories, and authorized tribes are required to develop lists of impaired waters. *Impaired waters* are waters that do not meet water quality standards established by the state. The law requires that these jurisdictions establish a priority ranking for listed waters and develop action plans to improve water quality. Inclusion of a water body on the Section 303(d) List of Impaired Water Bodies triggers development of a *total maximum daily load* (TMDL) for that water body and a plan to control the associated pollutant/stressor on the list. The TMDL is the maximum amount of a pollutant/stressor that a water body can assimilate and still meet the water quality standards. Typically, a TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. Section 303(d) is described as part of the regulatory framework because the Los Angeles Regional Water Quality Control Board (RWQCB) has identified 303(d) impaired waters as listed below in Section 3.9.2, *Affected Environment*.

Clean Water Act Section 401: Water Quality Certification

Section 401 of the CWA (United States Code Title 33, Section 1341 [33 USC 1341]) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into navigable waters, including the crossing of rivers or streams during road, pipeline, or transmission line construction, to obtain a certification from the state in which the discharge originates. The certification ensures that the discharge would comply with the applicable effluent limitations and water quality standards. The state agency responsible for implementing Section 401 of the CWA in California is the State Water Resources Control Board (SWRCB). The Los Angeles RWQCB is responsible for issuing Section 401 permits in the Project area.

The categories of eligible project types covered under this permit are listed below and an individual project covered under this permit may include more than one of these types:

1. Improvements to Stream Crossings and Fish Passage
2. Removal of Small Dams, Tide Gates, Flood Gates, and Legacy Structures
3. Bioengineered Bank Stabilization
4. Restoration and Enhancement of Off-Channel and Side-Channel Habitat
5. Water Conservation Projects
6. Floodplain Restoration
7. Removal or Remediation of Pilings and Other In-Water Structures
8. Removal of Nonnative Terrestrial and Aquatic Invasive Species and Revegetation with Native Plants
9. Establishment, Restoration, and Enhancement of Tidal, Subtidal, and Freshwater Wetlands
10. Establishment, Restoration, and Enhancement of Stream and Riparian Habitat and Upslope Watershed Sites

A *restoration project* is defined as one that would result in a net increase in aquatic or riparian resource area functions and/or services through implementation of the eligible project types,

relevant general protection measures (GPMs), and consideration of design guidelines, summarized below.

The Proposed Project would qualify for coverage under this Order, which is designed for projects that are greater than 5 acres or a cumulative of less than 500 linear feet of streambank or coastline restoration. The Proposed Project would incorporate the required techniques and minimization measures as directed in the permit. The post-construction monitoring plan for the Proposed Project would comply with the guidelines found in the permit. The Proposed Project is also designed to avoid any actions within the existing wetted areas, with the exception of temporary actions associated with removing the existing bridge, so as to avoid any potential “take” of federally listed tidewater gobies and steelhead.

Clean Water Act Section 402: National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the CWA is one of the primary mechanisms for controlling water pollution through the regulation of sources that discharge pollutants into waters of the United States. USEPA has delegated authority of issuing NPDES permits in California to the SWRCB, which has nine RWQCBs. The Los Angeles RWQCB regulates water quality in the Project area. The NPDES permit program is described in detail below under the discussion of state regulations.

Clean Water Act Section 404: Discharge of Dredged or Fill Material

Section 404 of the CWA (33 USC 1344) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into the waters of the United States at specified disposal sites (Code of Federal Regulations Title 33, Part 323 [33 CFR Part 323]). The selection and use of disposal sites would be in accordance with guidelines developed by the Administrator of USEPA in conjunction with the Secretary of the Army and published in 40 CFR Part 230 (the “guidelines”). 40 CFR Part 230, Subpart C includes water quality aspects of dredge-and-fill activities. Among other topics, these guidelines address discharges that alter substrate elevation or contours, suspended particulates, water clarity, nutrients and chemical content, current patterns and water circulation, water fluctuations, and salinity gradients.

Rivers and Harbors Appropriations Act of 1899

The Rivers and Harbors Appropriations Act of 1899, also known as the Rivers and Harbors Act, authorizes the U.S. Army Corps of Engineers (USACE) to exercise control over all construction projects that occur within navigable waters of the United States. The Rivers and Harbors Act was intended for the protection of navigation and navigable capacity and was later amended to include protection of the environment. Section 10 of this law regulates work and structures occurring in, over, and under navigable waters that affect the course, location, condition, or capacity of navigable waters of the United States, including dredging, wharf improvements, overwater cranes, and artificial islands and installations on the outer continental shelf. Under Section 13 of the Rivers and Harbors Act, discharge of refuse into any navigable water is prohibited without approval by USACE.

California Toxics Rule

On May 18, 2000, USEPA promulgated numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards to be applied to waters within California (40 CFR 131.38). USEPA promulgated this rule based on the USEPA Administrator's determination that the numeric criteria are necessary in California to protect human health and the environment. The rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria (which is required by the CWA) for many priority toxic pollutants, necessitating this action by USEPA. These federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA. USEPA and the SWRCB have the authority to enforce these standards, which are incorporated into the NPDES permits that regulate discharges in the Project area.

Executive Order 11988 and National Flood Insurance Program

Under Executive Order 11988, the Federal Emergency Management Agency (FEMA) is responsible for management of *floodplain areas*, defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (representing the 100-year flood hazard zone). Also, FEMA administers the National Flood Insurance Program (NFIP), which requires that local governments covered by federal flood insurance enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year flood zone. To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

Specifically, the NFIP requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year floodplain be elevated to or above the 100-year flood level (known as *base flood elevation*), and a requirement that subdivisions be designed to minimize exposure to flood hazards. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. The County of Los Angeles is a participating jurisdiction in the NFIP. Therefore, all new development must comply with the minimum requirements of the NFIP.

State

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, "Coastal Resources Planning and Management Policies," includes policies that constitute the standards for the adequacy of local coastal Programs and development subject to the Coastal Act. The following policies are potentially relevant to the Proposed Project:

Section 30231 Biological productivity; water quality. 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 and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 Diking, filling or dredging; continued movement of sediment and nutrients.

(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:

(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.

(6) Restoration purposes.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30235 Construction altering natural shoreline. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30236 Water supply and flood control. Channelization, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Division 7 of the California Water Code) provides the basis for water quality regulation within California. This law established the authority of the SWRCB and the nine RWQCBs. The SWRCB administers water rights, sets state policy for water pollution control, and implements various water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and most enforcement activities. The Proposed Project is within the jurisdiction of the Los Angeles RWQCB.

The Porter-Cologne Act requires the SWRCB and/or the RWQCBs to adopt statewide and/or regional water quality control plans, the purpose of which is to establish water quality objectives for specific water bodies. In the Los Angeles region, the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan) serves as the legal, technical, and programmatic basis of water quality regulation in the region and along the coast. The Porter-Cologne Act also authorizes the SWRCB and RWQCBs to implement the NPDES program, which establishes discharge limitations and receiving water quality requirements for discharges to waters of the United States. This law also authorizes the NPDES program under the CWA, which establishes effluent limitations and water quality requirements for discharges to waters of the state. The Basin Plan and the NPDES permits relevant to the Proposed Project are discussed further below.

NPDES Waste Discharge Program

The federal CWA established the NPDES program to protect the water quality of receiving waters of the United States. Under CWA Section 402, discharging pollutants to receiving waters of the United States is prohibited unless the discharge is in compliance with an NPDES permit. In California, administration of the NPDES program has been delegated by USEPA to the SWRCB. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities. Through the nine RWQCBs, point-source dischargers are required to obtain NPDES permits (or, in California under authority of the Porter-Cologne Act, waste discharge requirements). *Point sources* include municipal and industrial wastewater facilities and stormwater discharges.

In NPDES permits, effluent limitations serve as the primary mechanism for controlling discharges of pollutants to receiving waters. When developing effluent limitations for an NPDES permit, a permit applicant must consider limits based on both the technology available to control the pollutants (technology-based effluent limits) and limits that are protective of the water quality standards of the receiving water (water quality-based effluent limits¹ if technology-based limits are not sufficient to protect the water body). For inland surface waters and enclosed bays and estuaries, the water quality-based effluent limitations are based on criteria in the National Toxics

¹ Water quality-based effluent limits specify the level of pollutant (or pollutant parameter), generally expressed as a concentration, that is allowable.

Rule and the California Toxics Rule, and objectives and beneficial uses defined in the applicable water quality control plan (basin plan).

There are two types of NPDES permits: individual permits tailored to an individual facility and general permits that cover multiple facilities or activities within a specific category. The NPDES permits relevant to construction and operation of the Proposed Project are described below.

Before any NPDES permits are issued for construction activities or operational discharges, or before licenses are issued, a review and authorization process must be completed by the Los Angeles RWQCB to ensure that such permits and licenses will protect designated beneficial uses and water quality, and that TMDL requirements are incorporated as permit conditions in a manner consistent with relevant plans, policies, and guidelines.

NPDES Construction General Permit

The State of California adopted the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The Construction General Permit regulates construction site stormwater management. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, must obtain coverage under the Construction General Permit for discharges of stormwater associated with construction activity. The Proposed Project would be required to comply with the permit requirements to control stormwater discharges from the construction site. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, as well as construction of buildings and the undergrounding of utilities.

In the Project area, the Construction General Permit is implemented and enforced by the Los Angeles RWQCB, which administers the stormwater permitting program. To obtain coverage under this permit, the Proposed Project must electronically file a storm water pollution prevention plan (SWPPP) and other compliance-related documents before construction. The SWPPP must identify best management practices (BMPs) that must be implemented to reduce construction effects on receiving water quality based on potential pollutants. The BMPs must be directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, and vehicle and equipment washing and fueling. The SWPPP also must describe the BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs).

The Construction General Permit includes several new requirements relative to the previous Construction General Permit (99-08-DWQ). These requirements include risk-level assessment² for construction sites, an active stormwater effluent monitoring and reporting program during construction (for Risk Level II and III sites), rain event action plans for certain higher risk sites,³ and numeric effluent limitations for pH and turbidity, as well as requirements for qualified professionals who prepare and implement the plan. The risk assessment and SWPPP must be prepared by a State-Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State-Qualified SWPPP Practitioner.

Proposed Project construction activities would be consistent with the Construction General Permit. Compliance is required by law, and the provisions of the permit and BMPs for construction and post-construction phases have proven effective in protecting water quality at construction sites and downgradient receiving waters.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act (SGMA) of 2014 creates a framework for sustainable, local groundwater management in California. The SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs. This law requires local regions to create a groundwater sustainability agency (GSA) and to adopt groundwater management plans for groundwater basins or subbasins that are designated as medium or high priority; it sets a 20-year timeline for implementation. High-priority basins or subbasins in critical overdraft were required to adopt groundwater management plans by 2020; medium-priority basins or subbasins were required to adopt groundwater management plans by 2022. Basins were initially prioritized under the SGMA by the California Department of Water Resources (DWR) under the California Statewide Groundwater Elevation Monitoring Program.

The Project area does not include DWR-designated groundwater basins or adjudicated basins and, as such, does not have a specific groundwater management plan and is not subject to SGMA (DWR 2022).

Regional and Local

Water Quality Control Plan for the Los Angeles Region (Basin Plan)

The Los Angeles RWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes), groundwater, coastal drainages, estuaries, coastal lagoons, and enclosed bays within the Los Angeles RWQCB's jurisdictional area (California Water Boards 2022). The preparation and adoption of basin plans are required by California Water Code Section 13240.

² The Construction General Permit defines three levels of risk (Risk Levels I, II, and III) that may be assessed for a construction site. Risk is calculated based on the "project sediment risk," which determines the relative amount of sediment that can be discharged given the project and location details, and the "receiving water risk" (the risk sediment discharges pose to the receiving waters).

³ Those sites that have a high potential for mobilizing sediment in stormwater and drain to a sediment-sensitive water body.

According to Water Code Section 13050, basin plans establish the beneficial uses to be protected for the waters within a specified area, water quality objectives to protect those uses, and an implementation program for achieving the objectives. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the basin plans are regulatory references for meeting the federal and state requirements for water quality control. The water quality objectives are thus incorporated into NPDES permits. The Los Angeles RWQCB's Basin Plan (California Water Boards 2022):

1. Designates beneficial uses for surface and ground waters.
2. Sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy.
3. Describes implementation programs for achieving objectives to protect all waters in the region.

In addition, the Basin Plan incorporates all applicable SWRCB and RWQCB plans and policies and other pertinent water quality policies and regulations (California Water Boards 2022).

Los Angeles RWQCB Groundwater Dewatering General Permit

Los Angeles RWQCB General NPDES Permit No. CAG994004 (R4-2018-0125) covers discharges of treated and untreated groundwater generated from permanent or temporary dewatering operations, including groundwater generated from construction dewatering activity. In addition, this permit covers discharge from cleanup of contaminated sites where other project-specific General Permits may not be appropriate, such as groundwater impacted by metals and/or other toxic compounds.

This permit regulates the discharge of groundwater that may or may not be impacted by toxic compounds and/or conventional pollutants. It ensures that the pollutant concentrations in the discharge would not violate any water quality objectives for receiving waters, including discharge prohibitions. Required groundwater samples taken before discharging operations determine whether the water must be treated before being discharged. Various biological, chemical, physical, and thermal treatment systems may be employed to remove these toxic or conventional pollutants in groundwater to applicable permit limits.

Dischargers must submit a Report of Waste Discharge before permit authorization, including a feasibility study on reuse/alternative disposal methods and a description of the treatment, collection, and discharge system. An ongoing monitoring and reporting program is also required under this permit. When treatment is required before discharge, dischargers must submit schematics of treatment flow diagrams with descriptions of the treatment system, including statements on the effectiveness of the system to achieve the applicable permit limits during the permit process.

Los Angeles County Municipal Separate Storm Sewer System Permit

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Stormwater runoff and authorized non-storm flows

(conditionally exempt discharges) are regulated under NPDES stormwater permits. Phase I NPDES permits require medium and large cities, or certain counties with populations of 100,000 or more, to obtain NPDES permit coverage for their stormwater discharges. Phase II permits require regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. The MS4 permits require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable, the performance standard specified in CWA Section 402(p), typically through the application of BMPs. The management programs specify what BMPs would be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

The current Los Angeles County MS4 Permit (Order No. R4-2012-0175-A01) became effective on September 8, 2016. Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) from unincorporated areas of Los Angeles County under County jurisdiction, including where the Proposed Project is located, and 84 cities within the Los Angeles County Flood Control District (the Permittees) are regulated under the MS4 NPDES permit. The MS4 permit contains minimum standards that the Permittees must enforce when construction activities disturb an area greater than 1 acre, as would be the case under the Proposed Project. (See also the requirements for the statewide construction permit discussed above.) Compliance with MS4 construction requirements includes implementation of worksite BMPs similar to those described for the Construction General Permit for erosion, sediment, non-stormwater management, and waste management.

During operation of the Proposed Project, non-stormwater discharges from the Project area would be prohibited (with some conditional exceptions). Stormwater discharges must meet water quality-based effluent limitations, or water quality standards for discharges leaving the area, and must not cause or contribute to the exceedance of receiving water limitations (water quality standards for receiving waters). The MS4 permit requires implementation of a planning and land development program for all “new development” and “redevelopment” projects subject to the Order to accomplish the following objectives:

- Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development toward existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
- Minimize the adverse impacts from stormwater runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA.
- Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing low-impact development (LID) design principles to mimic predevelopment water balance hydrology through infiltration, evapotranspiration, and rainfall harvest and use.

- Maintain existing riparian buffers and enhance riparian buffers when possible.
- Minimize pollutant loadings from impervious surfaces such as rooftops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including source control BMPs such as good housekeeping practices), LID strategies, and treatment control BMPs.
- Properly select, design, and maintain LID and hydromodification control BMPs to address pollutants that are likely to be generated, reduce changes to predevelopment hydrology, ensure long-term function, and avoid the breeding of vectors.
- Prioritize the selection of BMPs to remove stormwater pollutants, reduce stormwater runoff volume, and beneficially use stormwater to support an integrated approach to protecting water quality and managing water resources.

The MS4 permit order specifies the criteria or thresholds for determining projects that are classified as “new development” and “redevelopment projects” subject to the requirements above. Redevelopment projects subject to approval for the design and implementation of post-construction controls to mitigate stormwater pollution, before completion of a project, include the following:

- Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site.
- Where redevelopment results in an alteration to more than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, the entire project must be mitigated.
- Where redevelopment results in an alteration of less than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, only the alteration must be mitigated, and not the entire development.

The Municipal NPDES permit provisions require that proposed projects include a Standard Urban Stormwater Mitigation Plan (SUSMP) or functional equivalent document to address potential water quality impacts on-site using LID, and that the potential impact on downstream water bodies (i.e., hydromodification) be evaluated. BMPs are required in all drainage areas that would be developed. Additionally, the NPDES permit requires owners or operators to implement BMPs to retain the 0.75-inch, 24-hour rain event, or the 85th percentile, 24-hour storm event, whichever is greater, and to achieve applicable water quality-based effluent limitations and/or receiving water limitations established pursuant to TMDLs. The discharger would be required to prepare a monitoring and reporting program documenting outfall-based stormwater monitoring data (where stormwater exits the facility), data from wet- and dry-weather receiving water monitoring, outfall-based non-stormwater monitoring data, and other relevant regional studies.

The frequency of required monitoring and sampling activities is determined by factors such as the type of receiving water body. In case of exceedance, the discharger must submit an Integrated Monitoring and Compliance Report. This report would be used to determine additional measures to prevent or reduce pollutants contributing to the exceedance of receiving water limitations.

The Proposed Project has been designed to comply with the MS4 permit as administered by the local jurisdiction (i.e., the County), in addition to the statewide water quality program administered by the Los Angeles RWQCB including the Porter-Cologne Act. As such, discharges by the Proposed Project covered under the MS4 permit requirements would be required to adhere with the waste load allocations assigned to MS4 discharges for applicable TMDLs.

Los Angeles County Code

Title 12, Environmental Protection, Chapter 12.80 - Stormwater and Runoff Pollution Control

Part 3 - Discharge to the Storm Drain System

Section 12.80.410 - Illicit discharges prohibited.

No person shall cause any discharge to enter the storm drain system unless such discharge:

- a. Consists entirely of stormwater;
- b. Consists of non-stormwater that is authorized by a NPDES permit issued by the USEPA, the SWRCB, or a RWQCB;

Section 12.80.450 - Stormwater and runoff pollution mitigation for construction activity.

No person shall commence any construction activity for which a permit is required by Title 26 of this code without implementing all stormwater and runoff pollution mitigation measures required by such permit.

Section 12.80.510 - Best management practices for construction activity.

All BMPs required as a condition of any permit for construction activity granted pursuant to Title 26 of this code shall be maintained in full force and effect during the term of the project, unless otherwise authorized by the director.

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of the park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The plan sets aside a number of management zones including a Lower Topanga and Lagoon Zone, Watershed Zone, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The plan also contains specific proposals to consolidate Topanga State Park's trails by eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012). The Topanga State Park General Plan provides the following goal and guidelines potentially relevant to the Proposed Project:

Goal: Protect, enhance, and restore the Park's wetlands and hydrologic resources.

Guideline 2: Identify the sources that degrade water quality and quantity within the watersheds associated with the Park. Ensure that current and future park developments

and visitor-use patterns do not degrade water quality and quantity. Pursue cooperative actions with watershed neighbors and users to improve water conservation ethics, reduce or eliminate the discharge of pollutants, and restore natural flow and hydrological processes.

Guideline 4: Perform wetland delineation in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual prior to development near any wetland site.

Guideline 5: Support and work towards the preservation, protection, and restoration of the lagoon at the mouth of Topanga Canyon.

Topanga Creek Watershed Management Plan

The Topanga Creek Watershed Management Plan provides voluntary guidelines for implementing a variety of preventive planning and BMPs that reflect current understanding of the interrelationships and connections of the physical, chemical, biological, economic, and social aspects of the Topanga Creek Watershed (Topanga Creek Watershed Committee 2002). Sections 4 and 9 of the Plan include goals and actions related to improving and protecting water quality and reducing flood hazards.

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains LCP consists of the Santa Monica Mountains Land Use Plan (LUP) and implementing actions, including the Santa Monica Mountains Local Implementation Program, a series of ordinance sections added to the Zoning Ordinance, Title 22 of the County Code, and a zoning consistency program within coastal Los Angeles County.

The Santa Monica Mountains LUP, a component of the *Los Angeles County General Plan 2035*, replaced the Malibu LUP, which was certified by the CCC in 1986. The Santa Monica Mountains LUP includes some of the policies of the Malibu LUP, new policies, and many policies from the Santa Monica Mountains North Area Plan (LA County Planning 2022a).

The Local Implementation Program is the primary implementation mechanism for the Santa Monica Mountains LUP and a part of the County's Zoning Ordinance. The Local Implementation Program establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the Santa Monica Mountains LUP. Zoning changes, which include a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LCP. These changes were mandated by state law to eliminate potential conflicts between the LCP and zoning designations.

Although the LCP provides guidance for the CCC's review of the Consolidated Coastal Development Permit, the Coastal Act is the legal standard of review. Coastal Act policies are the standards used by the CCC in its coastal permit decisions, and for the review of LCPs prepared by local governments and submitted to the CCC for approval. Coastal cities and counties must

incorporate these policies into their individual LCPs. The Project area is located within the Santa Monica Mountains Coastal Zone (LA County Planning 2018). The Santa Monica Mountains LCP has been certified by the CCC, and therefore is consistent with Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies.

The following Coastal Act policies incorporated into the Santa Monica Mountains LCP are applicable to the Proposed Project:

- Protection and expansion of public access to the shoreline and recreational opportunities and resources, including commercial visitor-serving facilities.
- Protection, enhancement and restoration of environmentally sensitive habitats, including intertidal and nearshore waters, wetlands, bays and estuaries, riparian habitat, certain wood and grasslands, streams, lakes, and habitat for rare or endangered plants or animals.
- Protection of productive agricultural lands, commercial fisheries and archaeological resources.
- Protection of the scenic beauty of coastal landscapes and seascapes.
- The establishment, to the extent possible, of urban-rural boundaries and directing new housing and other development into areas with adequate services to avoid wasteful urban sprawl and leapfrog development.
- Protection against loss of life and property from coastal hazards.

The following goals and policies of the Santa Monica Mountains LCP are applicable to the Proposed Project:

Goal CO-1: Maintain and restore biological productivity and coastal water quality appropriate to maintain optimum populations of marine and freshwater organisms and to protect human health.

Policies CO-1 through CO-31 are provided in support of **Goal CO-1**.

Goal CO-2: Sensitive Environmental Resource Areas shall be protected against any significant disruption of habitat values. Development in areas adjacent to Sensitive Environmental Resource Areas shall be sited and designed to prevent impacts which would significantly degrade these areas and shall be compatible with the continuance of the habitat.

Policies provided in support of **Goal CO-2** include **Policies CO-33 through CO-67** related to Sensitive Environmental Resource Areas and H3 Habitat Protection; **Policies CO-68 and CO-69** related to stream protection; **Policies CO-70 through CO-73** related to environmental review policies; **Policies CO-74 through CO-95** related to new development; **Policies CO-96 through CO-98** related to fuel modification; **Policies CO-99 and CO-100** related native tree protection; and **Policies CO-101** related to restoration.

Goal CO-4: An integrated open space system that preserves valuable natural resources and provides a variety of recreational opportunities, within a program coordinated among federal, state, local and non-profit agencies.

Policies CO-117 through CO-123 are provided in support of **Goal CO-4**.

Goal CO-7: Shoreline and beaches that are accessible to the public and protected to the greatest extent possible from the impacts of beach sand erosion, development, conflicting uses, sea level rise, and other possible threats.

Policies CO-187 through CO-203 are provided in support of **Goal CO-7**. **Policies CO-191 to CO-195** also correspond to Section 30230 Marine resources; maintenance of the Coastal Act.

3.9.2 Affected Environment

Watershed

Watersheds are defined as areas of land where the water underneath those areas, or draining off them, flows to the same place. There are eight major watersheds in Los Angeles County, some located solely within the county and some extending beyond the county: the Antelope Valley, Ballona Creek, Santa Clara River, Los Angeles River, Sun Valley, Santa Monica Bay, Dominguez Channel, and San Gabriel River watersheds (LA County DPW 2022).

The Los Angeles RWQCB identifies watersheds and various groupings and subdivisions (e.g., watershed management areas, watersheds, hydrologic areas, and hydrologic subareas) in its Basin Plan (SWRCB 2014). The Project area is located at the downstream terminus of the Topanga Creek watershed, which is part of the Santa Monica Bay watershed and is the third largest drainage into Santa Monica Bay (LA County DPW 2022; RCDSMM 2021). The main drainage feature, Topanga Creek, is fed by freshwater ground seeps and direct precipitation and flows to Topanga Lagoon from the southern reach of the Project area. Topanga Creek, a perennial stream, enters the Project area from the northeastern boundary and passes under the bridge, through Topanga Lagoon, and into the Pacific Ocean at Topanga Beach (**Appendix K**). Topanga Lagoon separates Topanga Creek from the beach and causes water to pond before discharging to the Pacific Ocean. Water for the lagoon comes from the creek as well as from ocean water during high tide when the lagoon is connected. Winter storm flows from Topanga Creek flush out a sandbar deposited during summer, allowing greater direct tidal influence during the rainy season and tidal muting and eventual closure during the summer and fall months. The creek channel is constrained in the area immediately north of the Pacific Coast Highway (PCH) bridge due to fill materials and by the narrow opening of the bridge.

Aquatic Resources

In August 2020 and June 2023, wetland delineations were conducted within the Project area to identify wetlands and non-wetland waters potentially subject to jurisdiction by USACE under Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act (WRA 2020; State Parks 2022; ESA 2023). The delineation was updated in 2023. **Table 3.9-1** and **Table 3.9-2** summarize the aquatic resources mapped within the Project area.

**TABLE 3.9-1
 SUMMARY OF POTENTIAL CLEAN WATER ACT SECTION 404/401 JURISDICTIONAL AREAS WITHIN THE
 PROJECT AREA**

Features	Cowardin Class	USACE/RWQCB	
		Wetland (acres)	Non-Wetland Water Acres (linear feet)
Lagoon	Estuarine, subtidal, unconsolidated bottom (subtidal pond)	0.59	-
Open Waters	Marine, intertidal, unconsolidated bottom	-	3.29
Streams	Riverine, intermittent, unconsolidated bottom	-	5.84
Total		0.59	9.13

NOTES:

RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers

The *Cowardin Class* is a commonly used classification system for wetlands (Cowardin et al. 1979). The Cowardin system is used by the U.S. Fish and Wildlife Service for the National Wetlands Inventory. In this system, wetlands are classified by landscape position, vegetation cover, and hydrologic regime. The Cowardin system includes five major wetland types: marine, tidal, lacustrine, palustrine, and riverine.

SOURCES: WRA 2020; Cowardin et al. 1979

**TABLE 3.9-2
 SUMMARY OF POTENTIAL CDFW AND LOS ANGELES COUNTY SMM LCP JURISDICTIONAL AREAS
 WITHIN THE PROJECT AREA**

Features	Cowardin Class	CDFW Streambed (acres)	CCC Wetland (acres)
Lagoon	Estuarine, subtidal, unconsolidated bottom (subtidal pond)	0.59	0.59
Riparian Vegetation	Riverine, intermittent, Forested wetland	18.51	18.51
Streams	Riverine, intermittent, unconsolidated bottom	2.44	2.44
Total		20.95	20.95

NOTES: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; SMM LCP = Santa Monica Mountains Local Coastal Program

SOURCES: WRA 2020; Cowardin et al. 1979

Climate

The Santa Monica Bay watershed is located in Southern California, which is known for its Mediterranean climate: hot, dry summers and cool winters with highly variable amounts of rain influenced by climatic events known as El Niño and La Niña (SWRCB 2014). Rainfall during the 2020–2021 water year was 5.08 inches, a decrease of 8.61 inches from the previous year (WRD 2022).

Stormwater

Stormwater is created when a precipitation event (rainfall) causes water to collect in pools and rivulets on either pervious or impervious surfaces. When sufficient water collects, it flows over

the land, creating stormwater runoff. In natural areas, stormwater runoff generally flows toward streams, rivers, lakes, or coastal waters and infiltrates through the soil into groundwater. In developed areas, stormwater is generally either retained on-site, infiltrated through pervious areas such as bioswales and gardens, or directed into stormwater drainage systems. Stormwater collection is more difficult in developed areas and runoff is exacerbated, as pavement and structures generally do not allow for stormwater infiltration into the soil. In undeveloped or pervious areas, runoff occurs when the soil approaches saturation and no longer absorbs the precipitation. Stormwater runoff often becomes polluted by sediment and toxic contaminants, particularly in developed areas, where it flows over streets and sidewalks. Urban runoff conveyed through municipal storm drain systems is one of the causes of poor water quality at discharge locations in urban areas.

Stormwater is conveyed and enters Topanga Creek in a variety of ways, including freshwater ground seeps as well as direct precipitation (WRA 2020). Additionally, several culverts along Topanga Canyon Boulevard (TCB) relieve drainage from the roadside and convey stormwater into Topanga Creek (Google Earth 2022). Another culvert, located on the east bank of Topanga Lagoon, conveys water from the parking lot and PCH by the bridge.

Water Quality

More than a dozen different stormwater and wastewater pollutants, including metals, nutrients, indicator bacteria, organics, pesticides, trash, and other contaminants, are found in water bodies in the county in amounts significantly above established water quality standards. Sources of this pollution fall into two categories: point sources and nonpoint sources.

Point Sources

Point sources are well-defined locations at which pollutants flow into water bodies. Discharges from wastewater treatment plants and industrial sources are examples of point sources. These sources are controlled through regulatory systems including permits issued by the RWQCBs under the NPDES program (see Section 3.9.1).

Nonpoint Sources

Nonpoint sources of pollutants are typically derived from project site runoff caused by rain or irrigation and have been classified by USEPA into one of the following categories: agriculture, urban runoff, construction, hydromodification, resource extraction, silviculture (forest cultivation), and land disposal. Nonpoint-source pollution is not addressed by the same regulatory mechanisms as those used to control point sources. Instead, in California, the SWRCB implements the Nonpoint Source Program to minimize nonpoint-source pollution. This program describes a three-tiered approach: the voluntary use of BMPs, regulatory enforcement of the use of BMPs, and effluent limitations. Each RWQCB implements the least restrictive tier until more stringent enforcement is necessary (County of Los Angeles 2015).

Impaired Water Bodies

Section 303(d) of the federal Clean Water Act (33 USC 1251) requires states to identify waters that do not meet water quality standards after applying certain required technology-based effluent limits. These are referred to as *impaired water bodies*. States are required to compile this information in a list and submit the list to USEPA for review and approval.

The SWRCB's 2018 List of Water Quality Limited Segments includes 875 segments within the Los Angeles RWQCB's jurisdiction as impaired, including segments of coastal shoreline, bays, rivers or streams, lakes, tidal wetlands, and estuaries (SWRCB 2021). For each impaired water body, the state is required to develop a TMDL, the amount of pollution that a water body can receive while remaining in compliance with water quality standards. TMDLs have been established or are being established for Los Angeles County's impaired water bodies.

Topanga Creek is listed on the RWQCB 303(d) list for lead in the upper watershed and chronic bacterial contamination at Topanga Beach, including in the Project area. No other pollutants of concern have been listed for the watershed (RCDSMM 2022). Two sampling and monitoring studies in the Topanga Creek watershed conducted in 2003–2004 and 2012–2014 found that total and fecal coliform bacterial exceedances were associated with storm events. The studies also found that dogs and birds were a significant source of fecal contamination to the lagoon and ocean, and that both dogs and gulls are likely contributing to exceedances of *Enterococcus* and *E. coli* state water quality standards. Ocean exceedances were therefore coming from sources at the beach or lagoon and increased when there was a breach condition during storm events. The Los Angeles City Department of Sanitation's Environmental Monitoring Division collects samples weekly as part of the requirements of its MS4 permit and those data are compiled and reported in Heal the Bay's Beach Report Card. Based on the water quality report conducted in 2022, water samples analyzed for fecal indication bacteria found that bacterial concentrations are variable and frequently low.

Water temperature in the Topanga Lagoon is a focal concern that has been monitored for many years. The limited size of the open water area also exposes sensitive species, including the tidewater goby and southern steelhead, to significant temperature changes with few retreat areas to use during drought, heat waves, and other extreme-weather events (RCDSMM 2014). It was found that water temperatures were higher in summer/fall 2020 (21–25 degrees Celsius) and substantially lower in 2021, although the lagoon experienced lengthy time periods in both years when water temperatures were on the upper end of thermal tolerance for both tidewater gobies and southern steelhead.

Groundwater

When precipitation and surface water infiltrate naturally into the ground, they typically travel first through an unsaturated soil zone until they reach the *water table*, which is the layer where the soil is saturated. This layer of soil saturation is called a *groundwater basin* or *aquifer*. Aquifers can hold millions of acre-feet of water and extend for miles. Los Angeles County is underlain by numerous groundwater basins. Except during times of drought, groundwater extraction accounts

for nearly one-third of water usage in the unincorporated areas. In rural areas, many households depend solely on private wells that tap into local groundwater sources.

Topanga Lagoon and Creek and the watershed do not receive imported water, and groundwater extraction is extremely limited in the upper watershed only (RCDSMM 2022). During field investigations in the Project area, the groundwater surface was generally encountered in beach deposits at depths ranging from 3.5 feet mean sea level (MSL) to 33 feet MSL (GeoPentech 2022). However, the Project area is not located within either a DWR-designated groundwater basin or an adjudicated groundwater basin (DWR 2022).

Flood Hazards

Flood Zone

Within the Project area, Topanga Beach and a portion of Topanga Lagoon are located within FEMA flood hazard Zone VE (FEMA 2022). Additionally, the remaining portion of the lagoon, Topanga Creek, and portions of the Project area surrounding the creek are located within FEMA flood hazard Zone AE.

Zone VE is defined as “coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves” (FEMA 2023) and *Zone AE* is defined as floodplain areas that have a 1 percent annual chance of experiencing a flood and have had a specific depth of potential flooding projected by FEMA. Note that an area with a 1 percent annual chance of experiencing a flood is also known as the *100-year floodplain*.

Coastal Flooding and Sea-Level Rise

During the winter months (generally November to February), offshore storms occurring over the Pacific Ocean, combined with high tides and strong winds, have the potential to cause coastal flooding as a result of wave run-up. The base flood elevations mapped on FEMA’s Flood Insurance Rate Maps are based on the 100-year elevations (e.g., extreme high tide), as well as surge components (atmospheric pressure, wind setup, El Niño sea-level effects) and wave components (wave setup and swell from the Pacific Ocean). As discussed above, the Topanga Beach portion of the Project area and a portion of Topanga Lagoon have been identified by FEMA as being located in flood hazard Zone VE, which has a 1 percent or greater chance of flooding and an additional hazard associated with storm waves.

Rising sea levels will increase the potential for coastal flooding, and the issue of sea level rise, or SLR, is important in land use planning and hazard analysis in coastal areas. California Executive Order S-13-08, signed by Governor Arnold Schwarzenegger on November 14, 2008, specifies that all state agencies planning construction projects in areas vulnerable to future SLR must consider a range of scenarios for 2070 and 2100 to assess project vulnerability, and, to the extent feasible, must reduce expected risks and increase resiliency with respect to SLR.

The lifeguard and public restroom building, beach, and parking areas south of PCH are managed by DBH and are currently experiencing significant impacts from coastal erosion and storm surges, which are projected to increase with SLR (RCDSMM 2022).

Four different alternatives are analyzed in this EIR: Alternative 1: No Project/No Build–Managed Decline, Alternative 2: Maximum Lagoon Habitat, Alternative 3: Limited Lagoon Habitat Expansion, and Alternative 4: Maximum Managed Retreat. Alternatives 2, 3, and 4 are referred to collectively in this EIR as the “Build Alternatives.”

Modeling of SLR for each alternative was conducted for the years 2070 and 2100. It was determined that the 100-year flood elevation in the lagoon would not change with 1.6 feet of SLR (year 2070) and would increase slightly with 6.8 feet of SLR (year 2100) under all alternatives. Alternative 2 would have the lowest water surface elevation under all SLR scenarios due to its large lagoon area and would be the most resilient in terms of SLR (Moffatt & Nichol 2022a). Alternative 4 would maximize the resilience of beach infrastructure by pulling facilities the farthest inland.

Tsunami Hazards

A *tsunami* is a very large ocean wave caused by an underwater earthquake, volcanic eruption, or submarine landslide. Tsunamis can cause flooding to coastlines and inland areas less than 50 feet above sea level and within 1 mile of the shoreline. The travel time for a locally generated tsunami, from initiation at the source to arrival at coastal communities, can be five to 30 minutes.

The likelihood of inundation of low-lying coastal areas as a result of a tsunami is high. Within the Project area, Topanga Beach and a portion of Topanga Lagoon/Topanga Creek are susceptible to tsunami hazards (CGS 2021). Design of the PCH bridge meets Caltrans tsunami criteria.

3.9.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to hydrology/floodplain and water quality/stormwater runoff. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Refer to Impact HYD 3.9-1.)
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Refer to Impact HYD 3.9-2.)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - Result in substantial erosion or siltation on- or off-site;

- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- 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; or
- Impede or redirect flood flows. (Refer to Impact HYD 3.9-3.)
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation. (Refer to Impact HYD 3.9-4.)
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Refer to Impact HYD 3.9-5.)
- Result in a cumulatively considerable impact to hydrology and water quality. (Refer to Impact 3.9-6.)

Methodology

General

The Proposed Project would be regulated by the various laws, regulations, and policies summarized in Section 3.9.1, *Regulatory Setting*. This analysis assumes that the Proposed Project would comply with applicable federal, state, and local laws and regulations and that state and local agencies would continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

After considering implementation of the Proposed Project as described in Chapter 2, *Project Description*, and compliance with the required regulatory requirements, the environmental analysis below identifies whether the defined significance thresholds would be exceeded and, therefore, whether a significant impact would occur. For those impacts that are considered to be potentially significant, mitigation measures are proposed to reduce the identified impacts to the extent feasible.

The environmental analysis of potential impacts related to hydrology/floodplain and water quality/stormwater runoff is based on a review of published literature, water resources data, and the site-specific geotechnical investigation and design reports prepared for the Project. Additionally, the results of the Project-specific studies described below have been used to inform much of the analysis and are included as appendices to this Draft EIR.

Water and Sediment Quality Study Technical Report

The Water and Sediment Quality Study Technical Report (WSQSTR) summarizes prior sampling investigations and related studies to assess the water and sediment quality at Topanga Beach, in Topanga Creek, and in Topanga Lagoon; describes the alternatives and summarizes the potential water and sediment quality benefits of the Build Alternatives; and assesses potential impacts of the Proposed Project on water and sediment quality (**Appendix P**).

Topanga Lagoon Restoration Ecohydrology Report

The Topanga Lagoon Restoration Ecohydrology Report (hereafter referred to as “Ecohydrology Report”) documents the fish passage and habitat suitability assessment for southern steelhead and tidewater goby for the Proposed Project. An assessment of habitat elevations for use in mapping habitat zones for the Proposed Project’s Build Alternatives is also provided in this report (**Appendix M**; ESA 2022b).

Nearshore Mound Dispersal Study

Moffatt & Nichol conducted a modeling analysis of the nearshore mound dispersal proposed as part of the Project. This report documents the numerical modeling effort simulating the nearshore mound sediment transport over time and identifying whether it would benefit the surrounding shoreline and affect sediment transport within the littoral cell (**Appendix C**; Moffatt & Nichol 2023a).

Shoreline Morphology Analyses

Moffatt & Nichol conducted a comprehensive technical analysis on waves, hydrodynamics, sediment transport, and beach morphology for both existing conditions and proposed alternatives to investigate concerns raised about the potential impacts of the Proposed Project on beach erosion and surf break conditions (**Appendix B**; Moffatt & Nichol 2023b).

Water Quality

HYD 3.9-1: The Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. *Impacts would be less than significant.*

Alternative 1 (No Build)

As noted in the Los Angeles RWQCB Basin Plan, bacteria levels are of concern in Topanga Lagoon. As summarized in water quality studies prepared for the Project, the bacteria levels in the lagoon correspond to levels in the Pacific Ocean during rain events and when the lagoon is connected to the ocean directly. There is no treatment of stormwater sheetflow from the roadways and parking areas. Additionally, excessive nutrients in coastal lagoons typically lead to algae blooms, which can affect water quality parameters such as pH and dissolved oxygen and could be detrimental to aquatic wildlife.

Under Alternative 1, there would be no change to the existing Project area footprint. Existing functions and conditions throughout the Project area would continue to deteriorate over time. Existing water quality in the Project area could potentially be affected by increased runoff of hazardous materials from the deteriorating structures and feces/trash from increasing homeless activity. Therefore, under Alternative 1, no construction or operational impacts related to existing water quality conditions throughout the Project area would occur; however, existing impacts would continue.

Alternatives 2, 3, and 4 (Build Alternatives)

During implementation of the Build Alternatives, water quality in Topanga Lagoon and the nearby ocean would have the greatest potential to be negatively affected by mobilization/placement of sediments and soils, use of construction equipment requiring hazardous materials such as oil and hydraulic fluid and increases in contaminated stormwater runoff or direct discharge into receiving waters. Additionally, the proposed wetted lagoon and riparian habitat areas would have the potential to increase bacteria inputs due to an increase in bird use. Generally, potential impacts related to water quality standards or waste discharge requirements would be similar under all Build Alternatives, as described in the following sections.

Construction

Construction of the Proposed Project, including excavation, grading, and placement activities, could cause sediments and soils to enter receiving waters through dust emissions, construction equipment, and stormwater runoff or direct discharge, which could violate water quality standards and waste discharge requirements. However, as discussed in Section 3.9.1, *Regulatory Setting*, the 401 permit and Construction General Permit require implementation of BMPs such as erosion and sediment controls, dust controls, controls for off-site sediment migration from construction equipment, and stormwater pollution prevention measures during construction activities. Project construction activities would be consistent with the Construction General Permit; compliance is required by law, and the provisions of the permit and BMPs for construction and post-construction phases have proven effective in protecting water quality at construction sites and down-gradient receiving waters. The Proposed Project would be required to comply with the 401 permit and Construction General Permit to prevent impacts on receiving waters from sediment migration and direct discharges as detailed in a SWPPP; therefore, there would be no potential impacts.

During Project construction, other potential water quality impacts could occur during utility relocation and during the installation of the 180-foot-long by 31-foot-wide temporary bridge adjacent to the existing southbound lane of PCH. The temporary bridge would accommodate two lanes of traffic during construction of the new bridge. The new permanent bridge would take approximately nine to 12 months to construct and would be built to avoid having footings in the lagoon.

Once the temporary bridge was completed and traffic diverted, the old bridge would be removed in stages to facilitate construction of the new bridge, first northbound and then southbound. Before demolition of the old bridge, the area within the footprint of the existing bridge culvert would be dewatered. This work would be done under the supervision of a qualified biologist and would be accomplished by excluding fish from the work area to an appropriate adjacent habitat, then utilizing AquaDams, Portadams, or another type of cofferdam on either side of the culvert in lieu of driving sheet piles, which would create acoustic impacts. These cofferdams would be set up within a few feet of the culvert to lessen the temporary impact on the waterway. Pumps would be used to keep the work area dry during demolition. Water would be pumped into a staging pond for filtration and eventual release into the ocean after water quality testing.

Shoring would be installed directly behind the culvert on both sides to support the soil underneath the active vehicular lane. The bridge deck and abutments would be removed with concrete saws and excavators with hoe-ram attachments to demolish the thick slabs supporting the culvert. Construction debris would be hauled off-site for disposal.

Piles would be cut 3 feet below the finished mudline or deeper. The latter would depend on the potential scour depth and/or scour impacts on the piles. The second phase would be similar to the first. When completed, the water controls would be removed.

The construction of the temporary and new bridges and the removal of the old bridge would be subject to a 401 permit and the Construction General Permit; compliance with all permit requirements would result in less-than-significant impacts.

Under all Build Alternatives, the Proposed Project would excavate existing fill sediments to increase the footprint of the lagoon and restore habitat. The sediment excavated as part of the Proposed Project may be designated for placement in an off-site landfill or placed strategically in the nearshore to re-nourish the shoreline. The nearshore soil placement area would be approximately 35 acres. The proposed placement of excavated sediments in marine placement sites would have the potential to affect water quality in the marine placement sites. However, as discussed in the WSQSTR, physical and chemical testing would be conducted as described in the Draft Sampling and Analysis Plan (SAP) prepared for the Proposed Project (Moffatt & Nichol 2022b) to determine the suitability of the excavated material for nearshore placement.

Samples would be analyzed in a manner consistent with USACE- and USEPA-established protocols for the ocean placement of material, as outlined in the Inland Testing Manual (ITM) (USEPA and USACE 1998). Should the material excavated during the proposed lagoon expansion and habitat restoration activities be incompatible for nearshore placement, material would not be placed in the nearshore and would likely be disposed of in an upland location as described in the Sediment Beneficial Reuse Plan (**Appendix G**). Therefore, no adverse impact related to water quality standards would result from nearshore placement. Impacts would be less than significant.

As described in Section 3.8, *Hazards and Hazardous Materials*, **Mitigation Measure HAZ-1** requires an analysis of soils for hazardous quantities of contaminants and, if necessary, appropriate removal of contaminated soils, and **Mitigation Measure HAZ-2** requires a geophysical survey before construction to evaluate the Project area for the potential presence of underground storage tanks. Implementation of **Mitigation Measures HAZ-1 and HAZ-2** would reduce the potential for construction impacts related to accidental upset or encounter of hazardous materials, thereby limiting the potential for water quality contamination by concentrations of hazardous materials during construction. Impacts would be less than significant with mitigation.

Construction of the temporary bridge and new bridge and removal of the old bridge would be subject to a 401 permit and the Construction General Permit, and compliance with all permit requirements would result in less-than-significant impacts. Therefore, the Proposed Project is

not anticipated to increase bacteria in the lagoon or at the beach and is not anticipated to negatively affect implementation of the Bacteria TMDL at Topanga Beach. Impacts would be less than significant.

Operation

Each Build Alternative for the Proposed Project (Alternatives 2, 3, and 4) would expand the lagoon ecosystem to improve estuarine hydrological and ecological functions, protect endangered species, and restore habitat and species within the Project area. Restoring and improving habitats and hydrological and ecological functions would improve water and sediment quality conditions in the lagoon. As discussed in the WSQSTR (Appendix P; ESA 2022a), the proposed wetlands along the side of riverbanks (riverine wetlands) would capture potentially polluting nutrients such as nitrogen, though not at rates as high as those documented for specially designed treatment wetlands (Land et al. 2013).

The Build Alternatives would provide expanded riparian habitats that would remove potentially polluting nutrients and assist in nutrient cycling. All Build Alternatives therefore have the potential to remove nutrients and improve water quality conditions, including dissolved oxygen levels. However, Alternative 2 would provide the greatest increase in lagoon, wetland, and riparian habitats, as well as the largest lagoon, and would provide the greatest potential benefit to water quality.

The Proposed Project would overall reduce impervious surfaces at the site, although the proposed new PCH bridge and roadway would slightly increase the amount of impervious surface for that Project element. The proposed new and replacement parking areas and the proposed visitor service elements would incorporate permeable porous surfaces as feasible; there would also be stormwater capture and infiltration systems such as rain gardens and bioswales, which would be sized to accommodate an 85th percentile storm event.

As discussed in the WSQSTR, the 2014 Topanga Source ID Study concluded that bacteria levels in the ocean increase when the lagoon is directly connected to the ocean. The 2014 Topanga Source ID Study also concluded that dogs and gulls are a significant source of fecal contamination to Topanga Lagoon and the Pacific Ocean. The creation of wetlands may lead to an increase in gull and other bird use of the lagoon habitat, which could increase bacteria in the lagoon and ocean.

However, the expanded and restored seasonally wetted lagoon and riparian habitat areas under the Proposed Project's Build Alternatives would provide water quality treatment benefits. Restored vegetated wetland would be expected to provide nutrient uptake and removal and reduce bacteria levels. Therefore, although an increase in gull and other bird use may increase bacteria input to the lagoon, the expanded and restored lagoon habitat may also reduce overall bacteria levels in the lagoon. The water quality treatment benefits of the restored vegetated wetland habitat are expected to outweigh the potential increase in bacteria inputs due to increase in bird use. The restored lagoon may therefore contribute less bacteria to the ocean during rain events and when the lagoon mouth is open.

In addition, according to the results of the Restoration Ecohydrology Report (refer to **Appendix M**) Alternative 2 is predicted to keep Topanga Lagoon's mouth closed for longer periods because Alternative 2 would increase the lagoon's volume, so the lagoon would take longer to fill with streamflow and wave overwash before breaching. The results of modeling by Environmental Science Associates (ESA) show that under Alternative 2, the lagoon mouth is expected to be closed more often during the rainy season from November through May. Modeling results for Alternatives 3 and 4 show little change in closure patterns as compared to existing conditions. Alternative 2 may therefore lead to reduced bacteria levels in the ocean by increasing the duration of mouth closures.

The 2014 Topanga Source ID Study summarized in the WSQSTR also showed that although human markers were detected infrequently in the creek, lagoon, and ocean, a single "direct deposit" of human feces to the lagoon resulted in an exceedance of enterococci (ENT). The Proposed Project's improvements to public access and improved visitor services, which includes more State Parks staff present, may help with achieving greater enforcement of the no-dog and no-camping rules, which could reduce dog and human sources.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within the Caltrans right-of-way (ROW). Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots.

Through compliance with regulatory requirements and implementation of **Mitigation Measures HAZ-1 and HAZ-2**, potential impacts would be reduced to less-than-significant levels.

Mitigation Measures

Implement **Mitigation Measures HAZ-1 and HAZ-2** (refer to Section 3.8, *Hazards and Hazardous Materials*).

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area, which would include at most approximately 5,500 square feet (sf) of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area as well as day use parking would also be included. Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel and one concession would be retained. Development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. This could include an outdoor interpretive pavilion/restroom, a maintenance facility, a small picnic area, and day use parking. There is a record of a gas station on this site (Geocon 2022), and it is not clear whether the old underground tank remains. Investigation of this potential source of old contamination would be completed during work at this site and appropriate measures for avoiding contamination would be applied.

As discussed above, excavation, grading, and placement activities during construction could cause the migration of sediments and soils into receiving waters through dust emissions, construction equipment, and stormwater runoff or direct discharge, which could violate water quality standards and waste discharge requirements. However, implementation of permeable porous pavers, rain gardens, and bioswales as well as the other BMP requirements of the 401 permit and Construction General Permit as detailed in a SWPPP would be implemented to prevent impacts on receiving waters from sediment migration and direct discharges. Therefore, potential impacts would be reduced to less-than-significant levels.

Implementation of future visitor services would decrease impervious surfaces within the Project area. As stated above in the discussion of potential construction impacts, the Proposed Project would be required to comply with the 401 permit as detailed in a SWPPP to prevent potential impacts on receiving waters from direct discharges and therefore, there would be less than significant impacts.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Groundwater Supplies

HYD 3.9-2: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project area footprint. Existing functions and conditions throughout the Project area would continue to deteriorate. Existing facilities and lessees located within the Project area do not currently use groundwater supplies and there would be no change to groundwater recharge. Therefore, under Alternative 1, no construction or operational impacts related to the decrease of groundwater supplies or impeding sustainable groundwater management would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts on groundwater supplies and groundwater recharge would be similar under the Build Alternatives. The Proposed Project would require ground-disturbing activities and involve new permeable and impermeable surfaces and minor increases to existing staff and visitors that may result in impacts on groundwater supplies, as discussed in the sections below.

Construction

The proposed facilities would have the potential to affect groundwater if excavation associated with construction was deep enough to reach the local groundwater table. Should this occur, groundwater dewatering would be required, to allow for installation of facilities or foundations. As discussed in Section 3.9.2, the groundwater surface in the Project area was generally encountered in beach deposits at depths ranging from 3.5 feet MSL to 33 feet MSL (GeoPentech 2022).

Under the Build Alternatives, construction of the proposed components would require excavation and demolition activities for the proposed improvements at Topanga Lagoon, the PCH bridge, Topanga Beach, and the Topanga State Park visitor services. Construction dewatering would not involve substantial groundwater extraction from aquifers used for municipal or industrial water supply. Dewatering for construction would be temporary and highly localized and would involve extraction of low volumes of groundwater. As such, dewatering activities conducted during construction—including but not necessarily limited to dewatering that would occur before demolition of the bridge culvert—would not result in significant long-term effects on local groundwater supplies. Additionally, any dewatering would be subject to the Los Angeles RWQCB's approval for withdrawal and disposal. Discharges would be conducted in adherence with the Los Angeles RWQCB Dewatering General Permit (NPDES Permit No. CAG994004), which includes measures to reduce potential groundwater impacts, such as implementation of BMPs to control discharges and designation of a discharge disposal site.

The Proposed Project would use the local municipal water supply during construction for activities such as dust control and maintenance of construction vehicles and equipment. Such water use would not result in development of new wells or extraction of additional groundwater.

Operation

Once construction was complete, operations and maintenance activities would remain similar to existing conditions. It is not anticipated that operations and maintenance activities for facilities would be significantly greater than at present; however, it should be noted that management and maintenance of the restored lagoon area and any expanded visitor services would require additional efforts at least for the first five to 10 years post-implementation to comply with all permitting monitoring requirements. This would not represent a substantial increase in the number of permanent workers in the study area and would create no substantial long-term increase in water demand or demand on public water sources. Because potable water would be provided via a connection to the public water system, demands on groundwater supplies would not occur during operations.

As discussed in Chapter 2, *Project Description*, existing facilities in the Project area generally include abandoned and deteriorating structures associated with the defunct Topanga Ranch Motel, paved parking areas, local business lessees, and beach facilities (i.e., the lifeguard and public restroom building, helipad, and beach parking). Under any of the Build Alternatives, the Proposed Project would fully remove and/or retain for future restoration and construction the existing buildings, relocate existing beach facilities, and expand the Topanga Beach and Lagoon ecosystems at the Project site. The Project overall would reduce impervious surfaces at the site, although the proposed new PCH bridge and roadway would slightly increase the amount of impervious surface for that Project element.

Existing buildings associated with the Topanga Ranch Motel would be retained under Alternatives 3 and 4. However, Alternative 2 would not provide additional benefits to groundwater recharge compared to Alternatives 3 and 4, as this area is currently developed/disturbed and not located within a local groundwater recharge area. The proposed new and replacement parking areas and the visitor service elements proposed would incorporate permeable surfaces as feasible, as well as stormwater capture and infiltration systems such as rain gardens and bioswales, which could potentially enhance groundwater recharge. Furthermore, the proposed developments would not substantially alter permeability and existing groundwater recharge in other parts of the Project area.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with the development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within

Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction.

Potable water delivered to the Project area is regulated by the County. Wastewater generated through wastewater management Options 1 and 2 would percolate through the substrate and recharge the underlying aquifer. Wastewater conveyed through the sewer alignment would be treated and recycled by the County.

Therefore, impacts resulting from construction and operational activities on groundwater supplies and local groundwater recharge would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

The redevelopment of future visitor services facilities would have the potential to affect groundwater if excavation associated with construction were deep enough to reach the local groundwater table. Should this scenario occur, groundwater dewatering would be required, to allow for installation of facilities or foundations. Construction dewatering would not involve substantial groundwater extraction from aquifers used for municipal or industrial water supply. Dewatering for construction would be temporary and highly localized and would involve extraction of low volumes of groundwater. As such, dewatering activities conducted during construction—including but not necessarily limited to dewatering that would occur before demolition of the bridge culvert—would not result in significant long-term effects on local groundwater supplies. Additionally, any dewatering would be subject to the Los Angeles RWQCB's approval for withdrawal and disposal. Discharges would be conducted in adherence with the Los Angeles RWQCB Dewatering General Permit (NPDES Permit No. CAG994004), which includes measures to reduce potential groundwater impacts, such as implementation of BMPs to control discharges and designation of a discharge disposal site.

The Proposed Project would use the local municipal water supply during construction for activities such as dust control and maintenance of construction vehicles and equipment. Such water use would not result in development of new wells or extraction of additional groundwater. Therefore, impacts of construction-related activities on groundwater supplies and local groundwater recharge would be less than significant.

Once construction of future visitor services facilities was complete, operation and maintenance activities would remain similar to those under existing conditions, and no substantial long-term increase in water demand or demand on public water sources would occur. Because potable water would be provided via connection to the public water system, demands on groundwater supplies would not occur during operations. Therefore, impacts resulting from operation on groundwater supplies would be less than significant.

Implementation of future visitor services facilities would reduce the overall acreage of impermeable surface areas at the Project site, and bioswales and rain gardens would be constructed to manage stormwater runoff. The Topanga State Park visitor services area is currently developed/disturbed and is not located within a local groundwater recharge area. Operations of future visitor services would generally result in reduced impervious surfaces as compared with existing conditions. Furthermore, the proposed redevelopment would not substantially alter permeability and existing groundwater recharge in other parts of the Project area. Therefore, impacts related to groundwater recharge would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Drainage Patterns

HYD 3.9-3: The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows. Impacts would be less than significant.

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project area footprint. Drainage patterns throughout the Project area would not be altered, except through the continued decline of buildings, slope and coastal erosion, and the conditions projected to occur if none of the Build Alternatives were implemented. Flooding patterns caused by the constrained opening of the existing 79-foot PCH bridge would continue, as would sheetflow from the roadway and bridge into Topanga Lagoon and Creek. Therefore, under Alternative 1, no construction or operational impacts related to existing drainage patterns throughout the Project area would occur; however, existing and ongoing erosion, siltation, flooding, poorly sited stormwater drainage systems, stormwater pollution, and flood flows would continue.

Alternatives 2, 3, and 4 (Build Alternatives)

The Project area is located at the downstream terminus of the Topanga Creek watershed. Topanga Creek is fed by freshwater ground seeps and by direct precipitation in the watershed, and it flows into Topanga Lagoon in the southern reach of the Project area. Topanga Creek enters the Project area on the northeastern boundary and passes under the bridge, flows through the lagoon, and enters the Pacific Ocean at Topanga Beach. For more detail on existing drainage in the Project area, refer to Section 3.9.2, *Affected Environment*.

Potential impacts of the Proposed Project on existing drainage patterns within the Project area would be similar under all Build Alternatives. The Proposed Project would require ground-disturbing activities (e.g., excavation and grading) for removal and/or relocation of existing facilities and installation of new facilities along Topanga Beach, and for the proposed expansion of existing Topanga Beach and Lagoon habitat. These ground-disturbing activities may result in impacts on the existing drainage pattern of the Project area, as discussed in the sections below. All ground-disturbing equipment would avoid entering or disturbing the wetted area and adjacent native riparian trees, in accordance with direction from regulatory agencies.

Construction

Construction of the Proposed Project would include the use of heavy-duty equipment for ground-disturbing activities; this work could temporarily alter existing drainage patterns and flows in the Project area by exposing the underlying soils, modifying flow direction, and making the Project area temporarily more permeable. Exposed and stockpiled soils could be temporarily subject to erosion and conveyance into Topanga Creek and Lagoon during storm events. Sediment and other pollutants generated during construction would have the potential to be mobilized and transported by stormwater runoff, potentially degrading surface and groundwater quality on- and off-site. However, as discussed in Impact HYD 3.9-1, the 401 permit and Construction General Permit would require the implementation of BMPs such as erosion and sediment controls, dust controls, controls for off-site sediment migration from construction equipment, and stormwater pollution prevention measures.

Operation

As discussed above under Impact HYD 3.9-1, the Proposed Project's Build Alternatives would decrease impervious surfaces in the Project area through implementation of the proposed new porous paver parking areas to replace existing parking areas, and other visitor-serving and public access components, such as rain gardens and bioswales, which would reduce flows into the creek and lagoon. Additionally, the 401 permit would require the implementation of BMPs, which would be detailed in a Standard Urban Storm Water Mitigation Plan (SUSMP), to address potential water quality impacts on-site and the potential impact on downstream water bodies. The Proposed Project would be required to comply with the permit requirements to control stormwater discharges from the Project area. Furthermore, a SWPPP would need to be filed before construction. The SWPPP would identify BMPs to be implemented to reduce effects on receiving water quality based on potential pollutants. The Proposed Project would be required to comply with the 401 permit to prevent impacts on receiving waters from direct discharges as detailed in a SWPPP. Therefore, there would be no potential impacts.

Each of the Build Alternatives would lengthen the bridge span to reduce flooding, expand and restore riparian and transition habitat around the existing lagoon, and capture the 85th percentile storm runoff from any impervious surfaces. The restored riparian and transition zone habitat proposed under the Build Alternatives is expected to enhance the existing lagoon habitat and allow Topanga Lagoon to expand with future SLR. Alternative 4 would realign the PCH bridge to the north and is therefore expected to improve overall habitat resiliency and increase beach area with SLR compared to the other alternatives. These overall habitat benefits are assessed in the Topanga Lagoon Alternatives Analysis Report (Appendix E; Moffatt & Nichol 2022b) and summarized in the WSQTS (Appendix P; ESA 2022a).

Of the four alternatives, Alternative 2 would provide the maximum increase in lagoon, wetland, and riparian habitats. It would also provide the largest lagoon and transition zone, and therefore could provide the most wetland, emergent, and riparian vegetation. As discussed under Impact HYD 3.9-1, Alternative 2 would increase the lagoon's volume, so the lagoon would take longer to fill with streamflow and wave overwash before breaching. ESA modeling results show that under Alternative 2, the lagoon mouth is expected to be closed more often during the rainy season from November through May, while modeling results for Alternatives 3 and 4 show little change in closure. Alternative 2 may therefore lead to reduced bacteria levels in the ocean by increasing the duration of mouth closures.

Therefore, the Proposed Project is not anticipated to substantially alter the existing drainage pattern of the Project area; result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots.

Therefore, construction and operation of the Proposed Project would not substantially alter the drainage patterns of the Project site in a manner that would result in substantial changes to

drainage patterns or associated erosion, sedimentation, flooding, exceedance of drainage system capacities, or impeding or redirecting flood flows. The Proposed Project would result in a less-than-significant impact.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area, which would include at most approximately 5,500 square feet (sf) of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area as well as day use parking would also be included. Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage.

Construction of the Proposed Project would include the use of heavy-duty equipment for ground-disturbing activities, which could temporarily alter existing drainage patterns and flows in the Project area by exposing the underlying soils, modifying flow direction, and making the Project area temporarily more permeable. Exposed and stockpiled soils could be temporarily subject to erosion and conveyance into nearby storm drains during storm events. Sediment and other pollutants generated during construction would have the potential to be mobilized and transported by stormwater runoff, potentially degrading surface and groundwater quality on- and off-site. However, as discussed in Impact HYD 3.9-1, the 401 permit and Construction General Permit would require the implementation of BMPs such as erosion and sediment controls, dust controls, controls for off-site sediment migration from construction equipment, and stormwater pollution prevention measures.

Therefore, construction of future visitor services would not substantially alter the drainage patterns of the Project site in a manner that would result in substantial changes to drainage patterns or associated erosion, sedimentation, flooding, exceedance of drainage system capacities, or impeding or redirecting flood flows. Impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Release of Pollutants in Flood Hazard Zone

HYD 3.9-4: The Project could, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project area footprint. Existing functions and conditions throughout the Project area would continue to deteriorate. Risks of Project area inundation and the release of pollutants from existing development in the Project area would potentially increase if the Topanga Ranch Motel structures were to collapse as unprotected slopes continue to erode. Further, the lifeguard and public restroom building, beach, and parking areas south of PCH are currently experiencing significant impacts from coastal erosion and storm surge, which is projected to increase with SLR. Therefore, under Alternative 1, no construction or operational impacts related to existing inundation risks at the Project site would occur; however, existing risks related to inundation of the Project area and pollutant release would continue.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts related to the release of pollutants as a result of Project inundation would be similar under all Build Alternatives. The Proposed Project would include development in low-lying coastal areas that have the potential to be inundated as a result of coastal flooding, SLR, or tsunami hazards, and therefore could risk the release of pollutants during construction and operational activities, as discussed in the sections below.

As part of the Proposed Project, Topanga Lagoon would be expanded and restored with more natural side channels based on historic topography, and the longer PCH bridge span would allow for greater flood conveyance. The proposed restoration would not increase the potential for seiche hazards in the Project area. No harbors, bays, lakes, or canals are near the Project area that could create seiche events or inundate the Project area.

Construction

Coastal flooding from wave run-up and tsunami damage is typically confined to low-lying coastal areas. As discussed in Section 3.9.2, *Affected Environment*, the Topanga Beach portion of the Project area, Topanga Lagoon, Topanga Creek, and a portion of the Project area surrounding the creek are located within the FEMA flood hazard zones where the potential exists for 100-year floods. During the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, all of which are commonly used in construction. The potential would also exist for workers to encounter toxic materials, such as lead-based paints or asbestos-containing materials from demolished structures, aerially deposited lead, lead or chromium in shallow soils, or underground storage tanks throughout the Project site. Thus, if the Project area were to be inundated as a result of coastal floods, SLR, or tsunamis during the proposed construction period, pollutants could be released from the Project area into the Pacific Ocean.

Other potential construction impacts would be associated with the relocation of utilities and installation of the 180-foot-long by 31-foot-wide temporary bridge adjacent to the existing southbound lane of PCH. The temporary bridge would accommodate two lanes of traffic during construction of the new bridge. The new permanent bridge would take approximately nine to 12 months to construct and would be built to avoid having footings in the lagoon.

Once the temporary bridge was completed and traffic diverted, the old bridge would be removed in stages to facilitate construction of the new bridge, first northbound and then southbound. Before demolition of the old bridge, the area within the footprint of the existing bridge culvert would be dewatered. This work would be done under the supervision of a qualified biologist and would be accomplished by excluding fish from the work area to an appropriate adjacent habitat, then utilizing AquaDams, Portadams, or another type of cofferdam on either side of the culvert in lieu of driving sheet piles, which would create acoustic impacts. This control would be set up within a few feet of the culvert to lessen the temporary impact on the waterway. Pumps would be used to keep the work area dry during demolition. Water would be pumped into a staging pond for infiltration and eventual release into the ocean after water quality testing.

Shoring would be installed directly behind the culvert on both sides to support the soil underneath the active vehicular lane. The bridge deck and abutments would be removed with concrete saws and excavators with hoe-ram attachments to demolish the thick slabs supporting the culvert. Construction debris would be hauled off-site for disposal.

Piles would be cut 3 feet below the finished mudline or deeper. The latter would depend on the potential scour depth and/or scour impacts on the proposed piles. The second phase would be similar to the first. When completed, the water controls would be removed.

As discussed in Section 3.6, *Geology, Soils, Seismicity, Topography, and Paleontology*, and Section 3.8, *Hazards and Hazardous Materials*, construction activities for the Proposed Project would be required to prepare and adhere to Hazardous Materials Business Plans (HMBPs) as well as NPDES Construction General Permit requirements and the required SWPPP. **Mitigation Measures HAZ-1 and HAZ-2** require that samples of soils on-site be analyzed and appropriately remediated or removed if hazardous quantities of contaminants are detected, and that the Project area be evaluated for the potential presence of underground storage tanks. In addition, State Parks and its construction contractors would comply with the various federal, state, and local regulations related to the removal of any asbestos or lead before construction, and the transport, use, handling, and disposal of hazardous materials.

Therefore, compliance with applicable laws and regulations that govern hazardous materials would ensure that potential impacts are less than significant. Further, implementation of **Mitigation Measures HAZ-1 and HAZ-2** would reduce potential construction impacts related to inundation and resulting release of pollutants would be reduced to less-than-significant levels.

Operation

The potential for flooding, tsunamis, and SLR would not change as a result of the Proposed Project. The Proposed Project would retain and relocate existing facilities and expand the beach and lagoon habitat within the Project area, as discussed in Chapter 2, *Project Description*. The specific location of the proposed components would vary by alternative. However, it should be noted that under the Build Alternatives (Alternatives 2, 3, and 4), key facilities on Topanga Beach (i.e., the existing lifeguard and public restroom building and the helipad) would be demolished and rebuilt closer to the realigned access road and at a higher elevation to protect structures from SLR. As a result, the Proposed Project would reduce the risk of inundation and pollutant release from the key facilities listed above. Removal and/or relocation of other existing facilities would not increase the potential for the facilities to be inundated, as they would remain in the coastal zone.

The primary potential impacts of the Project would be from pollutants that could be released during operation and maintenance activities in the Project area, as discussed in the sections below. Under the Build Alternatives, adherence to HMBPs and compliance with the various federal, state, and local regulations governing the transport, use, handling, and disposal of hazardous materials (refer to Section 3.8, *Hazards and Hazardous Materials*) would be required during operation and maintenance activities for each proposed component that would include or require the use of hazardous materials.

Operation and maintenance activities at Topanga Lagoon could require weed and pest control operations, as necessary. Periodic earthwork operations could also be required, to maintain the lagoon contour, enhance soil permeability, and remove vegetative growth. Maintenance activities and periodic earthwork outside of normal operations would also be subject to regulations for safe handling, transportation, and disposal. These regulations would require appropriate containerization and labeling, transportation by licensed hazardous materials haulers, and disposal at licensed facilities permitted to accept the waste.

The required compliance with HMBPs and the numerous laws and regulations governing the transportation, use, handling, and disposal of hazardous materials during operation and maintenance of the Proposed Project would limit the potential for pollutants to be released during operation and maintenance activities. Therefore, operational impacts related to inundation risk and release of pollutants would be less than significant.

Operation of the new PCH bridge would not contain any facilities that include or require the use of hazardous materials.

The proposed beach facilities could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals. As discussed above, the Proposed Project would be required to prepare HMBPs and adhere to their requirements. The required compliance with the numerous laws and regulations governing the transportation, use, handling, and disposal of hazardous materials during

operation and maintenance of the Proposed Project would limit the potential for pollutants to be released as a result of flooding, tsunami, or SLR in the Project area.

The proposed visitor facilities could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals. Consistent with the use of hazardous materials at Topanga Lagoon and Beach facilities, the proposed visitor service facilities would be required to comply with laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots.

Potable water delivered to the Project area is regulated by the County. Wastewater generated through Option 1 or Option 2 would percolate through the substrate and recharge the underlying aquifer. Wastewater conveyed through the sewer alignment would be treated and recycled by the County.

Adherence to HMBPs and compliance with the various federal, state, and local regulations governing the transport, use, handling, and disposal of hazardous materials (refer to Section 3.8, *Hazards and Hazardous Materials*) would ensure that potential impacts related to the release of pollutants would be less than significant.

Mitigation Measures

Implement **Mitigation Measures HAZ-1 and HAZ-2** (refer to Section 3.8, *Hazards and Hazardous Materials*)

Significance Determination

Less-than-Significant Impact with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area, which would include at most approximately 5,500 square feet (sf) of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive

pavilion/restroom. A small picnic area as well as day use parking would also be included. Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage.

Portions of the Project area surrounding Topanga Creek are located within the FEMA flood hazard zones where the potential exists for 100-year floods. During the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, all of which are commonly used in construction. The potential would also exist for workers to encounter toxic materials, such as lead paint or asbestos from demolished structures, aerially deposited lead, lead or chromium in shallow soils, or underground storage tanks throughout the Project area. Thus, if the Project area were to be inundated as a result of coastal floods, SLR, or a tsunami during the construction period, pollutants could be released from the Project area into the Pacific Ocean.

As discussed in Section 3.6, *Geology, Soils, Seismicity, Topography, and Paleontology*, and Section 3.8, *Hazards and Hazardous Materials*, construction activities for the Proposed Project would be required to prepare and adhere to HMBPs, as well as NPDES Construction General Permit requirements and its required SWPPP. **Mitigation Measures HAZ-1 and HAZ-2** require that samples of soils on-site be analyzed and appropriately remediated or removed if hazardous quantities of contaminants are detected, and that the Project area be evaluated for the potential presence of underground storage tanks. In addition, State Parks and its construction contractors would comply with the various federal, state, and local regulations related to the removal of asbestos and lead before construction, and the transport, use, handling, and disposal of hazardous materials. Therefore, compliance with applicable laws and regulations that govern hazardous materials would ensure that potential impacts would be less than significant. Further, implementation of **Mitigation Measures HAZ-1 and HAZ-2** would reduce potential construction impacts related to inundation and the resulting release of pollutants to less-than-significant levels.

The potential for flooding, tsunami, and SLR would not change as a result of the Proposed Project. The primary impacts of the Proposed Project would be from pollutants that could be released during operation and maintenance activities for future visitor services. Adherence to HMBPs and compliance with the various federal, state, and local regulations governing the transport, use, handling, and disposal of hazardous materials (refer to Section 3.8, *Hazards and Hazardous Materials*) would be required during operation and maintenance activities for future visitor services that would include or require the use of hazardous materials.

Future visitor services facilities could use and require the transport of *de minimis* quantities of hazardous materials associated with operation and maintenance, such as cleaning agents and maintenance chemicals. Consistent with the use of hazardous materials at Topanga Lagoon and

Beach facilities, proposed visitor services facilities would be required to comply with laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials. Compliance with existing regulations and implementation of mitigation measures would ensure that potential impacts related to the release of pollutants would be less than significant.

Mitigation Measures

Implement **Mitigation Measures HAZ-1 and HAZ-2** (refer to Section 3.8, *Hazards and Hazardous Materials*)

Significance Determination

Less than Significant with Mitigation Incorporated

Water Plans

HYD 3.9-5: The Project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. *No impacts would occur.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project area footprint. Drainage patterns throughout the Project area would not be altered, except through the continued decline of buildings, slope and coastal erosion, and the conditions projected to occur if none of the Build Alternatives were implemented. Therefore, under Alternative 1, potential impacts related to the release of pollutants from deteriorating structures and an increase in human “direct deposits” and trash are anticipated. However, the Project area does not have a specific groundwater management plan and is not subject to the Sustainable Groundwater Management Act. Therefore, no impacts would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential conflicts with or the obstruction of implementation of a water quality control plan or sustainable groundwater management plan would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

Potential impacts on groundwater supplies are evaluated in Impact HYD 3.9-2, above. The Proposed Project would use the local municipal water supply during construction and operations. Such water use would not result in the development of new wells or extraction of additional groundwater. Furthermore, the Project area does not have a specific groundwater management plan and is not subject to the Sustainable Groundwater Management Act. Therefore, there would be no impacts to sustainable groundwater management plans.

As discussed in further detail under Impact HYD 3.9-1, the Proposed Project would comply with applicable federal, state, and local regulations regulating water quality to ensure that water quality would not be substantially affected under the Build Alternatives. As a result, the Proposed Project

would be consistent with the designated beneficial uses and water quality objectives of the Los Angeles RWQCB Basin Plan. Therefore, implementation of the Proposed Project would not conflict with water quality control plans or the applicable sustainable groundwater management plans. No impact would occur.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots.

As discussed in further detail under Impact HYD 3.9-1, the Proposed Project would comply with applicable federal, state, and local regulations regulating water quality to ensure that water quality would not be substantially affected under the Build Alternatives. As a result, the Proposed Project would be consistent with the designated beneficial uses and water quality objectives of the Los Angeles RWQCB Basin Plan. Therefore, implementation of the Proposed Project would not conflict with water quality control plans or the applicable sustainable groundwater management plans. No impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

The Proposed Project would use the local municipal water supply during construction and operations. Such water use would not result in development of new wells or extraction of additional groundwater. Furthermore, the Project area does not have a specific groundwater management plan and is not subject to the Sustainable Groundwater Management Act. Therefore, there would be no impacts related to sustainable groundwater management plans.

Implementation of future visitor services would comply with applicable federal, state, and local regulations regulating water quality to ensure water quality is not substantially affected. As a result, the redevelopment of future visitor services would be consistent with the designated beneficial uses and water quality objectives of the Los Angeles RWQCB Basin Plan. No impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Cumulative Impacts

HYD 3.9-6: The Project could result in a cumulatively considerable impact related to hydrology and water quality. *Impacts would be less than significant with mitigation incorporated.*

This section presents an analysis of the cumulative effects of the Proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts related to hydrology and water quality. Significant cumulative impacts related to hydrology and water quality could occur if the incremental impacts of the Project were to be combined with the incremental impacts of one or more of the cumulative projects identified in Table 3-1.

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts vary based on the environmental resource under consideration. The geographic scope of analysis for cumulative hydrology and water quality impacts encompasses and is limited to the Project site and its immediately adjacent area. This is because impacts relative to hydrology and water quality impacts are generally site-specific. For example, the effect of erosion would tend to be limited to the localized area of a project and could be cumulative only if erosion would occur as the result of two or more adjacent projects that spatially overlap.

The Topanga Lagoon Restoration Project was designed specifically to protect the surfing resource. The bathymetry of the surf break would not be modified in any way and wave breaking patterns are not expected to significantly change. Waves would not be blocked from arriving at the point, so there would be the same exposure to ocean swells as exists today. The beach profile would not be changed because no material would be placed anywhere near the point, meaning that there would not be increased backwash at high tide. Access to the beach would be maintained and likely improved, thereby allowing increased access to the resource. The surfing resource is critical and has been considered in every pertinent design decision of lagoon restoration, with the objectives of maintaining and preserving the quality and experience of surfing at Topanga Point (**Appendix H**).

The time frame during which the Proposed Project could contribute to cumulative hydrology and water quality impacts includes the construction and operations phases. For the Proposed Project, the operations phase would be permanent. However, similar to the geographic limitations discussed above, it should be noted that impacts relative to hydrology and water quality are generally time specific. Hydrology and water quality impacts could be cumulative only if two or more impacts occur at the same time and overlap at the same location.

As discussed previously, the Proposed Project would have no impact with respect to seiches and would not conflict with a water quality control plan (basin plan) or sustainable groundwater management plan. Accordingly, the Proposed Project could not contribute to cumulative impacts related to these topics and they are not discussed further.

Construction

Similar to under the Proposed Project, the cumulative projects listed in Table 3-1 have the potential to disturb more than 1 acre. If the projects are constructed at the same time, the erosion effects could be cumulatively significant and could affect the water quality of nearby surface water bodies. However, the state Construction General Permit would require each project to prepare and implement a SWPPP. The SWPPPs would describe BMPs to control runoff and prevent erosion for each project. Compliance with this requirement would reduce the potential for erosion impacts. Further, compliance with the SWPPP would reduce potential impacts of pollutant inundation in a flood area or tsunami zone.

The Construction General Permit has been developed to address cumulative conditions arising from construction throughout the state. It is intended to maintain cumulative effects of projects subject to this requirement below levels that would be considered significant. For example, two adjacent construction sites would be required to implement BMPs to reduce and control the release of sediment and/or other pollutants in any runoff leaving their respective sites. The runoff water from both sites would be required to achieve the same action levels, measured as a maximum amount of sediment or pollutant allowed per unit volume of runoff water. Thus, even if the runoff waters were to combine after leaving the sites, the sediments and/or pollutants in the combined runoff (by either flood or rain event) would still be at concentrations (amount of sediment or pollutants per volume of runoff water) below action levels. The Proposed Project would implement **Mitigation Measures HAZ-1 and HAZ-2**, which would reduce potential impacts to less-than-significant levels; therefore, the Proposed Project's contribution to potential cumulative impacts to water quality and the release of pollutants by inundation would not be cumulatively considerable. Impacts would be less than significant.

Operation

Once constructed, all cumulative projects would be complete and could no longer affect water quality. Further, operation of the cumulative projects would not contain any facilities that would include or require the use of hazardous materials. Therefore, no operational impacts related to inundation risk and release of pollutants would occur. The Proposed Project would result in less-than-significant impacts; therefore, cumulative projects combined with the Proposed Project would not result in cumulatively considerable impacts, and impacts would be less than significant.

Mitigation Measures

Implement **Mitigation Measures HAZ-1 and HAZ-2** (refer to Section 3.8, *Hazards and Hazardous Materials*).

Significance Determination

Less-than-Significant Impact with Mitigation Incorporated

3.9.4 Summary of Impacts

Table 3.9-3 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to hydrology/floodplain and water quality/stormwater runoff. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.9-3
 SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO HYDROLOGY/FLOODPLAIN AND WATER
 QUALITY/STORMWATER RUNOFF**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
HYD 3.9-1: Water Quality	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures HAZ-1 and HAZ-2	LTSM
	Programmatic Topanga State Park Visitor Services	None Required	LTS
HYD 3.9-2: Groundwater Supplies	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
HYD 3.9-3: Drainage Patterns	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
HYD 3.9-4: Release of Pollutants in Flood Hazard Zone	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measures HAZ-1 and HAZ-2	LTSM
	Programmatic Topanga State Park Visitor Services	Mitigation Measures HAZ-1 and HAZ-2	LTSM
HYD 3.9-5: Water Plans	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
HYD 3.9-6: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Mitigation Measures HAZ-1 and HAZ-2	LTSM

NOTES:
 NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant Impact with Mitigation Incorporated
 SU = Significant and Unavoidable

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3.10 Land Use and Land Use Planning

This section addresses the potential impacts of the Proposed Project related to land use and land use planning. This section summarizes applicable regulations related to land use and planning; describes existing land uses in and around the Project area; and evaluates the potential impacts of the Proposed Project, including cumulative impacts, related to land use and land use planning.

The Proposed Project is complex; to streamline decision-making, it was determined that the California Coastal Commission (CCC) would be the authorizing agency to approve a Consolidated Coastal Development Permit, and that the County would be a responsible reviewing agency. Coordination of the consistency process between the Santa Monica Mountains Local Coastal Program (LCP) implemented by the County and the CCC was formally approved by the County Board of Supervisors in July 2022. Appropriate County departments will review and advise on permitting, but the California Coastal Act will provide the final determination of consistency.

Additionally, State Parks will work with the CCC to ensure that the Proposed Project would comply with the goals and objectives outlined in the Topanga State Park General Plan (State Parks 2012), as well as with both federal and state standards for protection of sensitive cultural and historic resources.

3.10.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

No federal laws, regulations, or policies related specifically to land use apply to the Proposed Project. However, the Project area is located within the Santa Monica Mountains National Recreation Area (NPS 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan identifies the objective to restore wetlands/lagoons and estuaries in the “Actions Common to All Alternatives” section. Topanga Creek and Topanga Lagoon are specifically referenced in that document (NPS 2002).

State

California Planning and Zoning Law

The California Planning and Zoning Law requires each county and city to prepare and adopt “a comprehensive, long-term general plan for the physical development of the county or city” and of any land outside its boundaries that bears relation to its planning (Government Code Section 65300). Under current Government Code Section 65302, each general plan must include the following elements: Land Use Element, Circulation Element, Housing Element, Conservation Element, Open Space Element, Noise Element, Safety Element, and Environmental Justice Element. Government Code Section 65302 also sets forth requirements that must be included in each of the eight elements.

California Coastal Act

Pursuant to the California Coastal Act of 1976 (Coastal Act), the CCC partners with coastal cities and counties, such as the County of Los Angeles, to plan and regulate the use of land and water in the coastal zone. Development activities generally require a coastal permit from either the CCC or the local government. The Coastal Act broadly defines development activities to include (among others) construction of buildings, divisions of land, and activities that change the intensity of land use or public access to coastal waters.

The Coastal Act includes specific policies that address issues such as shoreline public access and recreation, lower-cost visitor accommodations, protection of terrestrial and marine habitats, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the CCC and by local governments.

Regional and Local

Los Angeles County General Plan 2035

A general plan is a basic planning document that, alongside the zoning code, governs development in a city or county. As explained above under California Planning and Zoning Law, the state requires each city and county to adopt a general plan with eight mandatory elements, in addition to a number of optional elements, as appropriate.

Within the Land Use and Conservation Element and Natural Resources Element of the *Los Angeles County General Plan 2035*, the following goals and policies are relevant to the Proposed Project (County of Los Angeles 2015):

Goal LU 3: A development pattern that discourages sprawl and protects and conserves areas with natural resources and SEAs [significant ecological areas].

Policy LU 3.1: Encourage the protection and conservation of areas with natural resources, and SEAs.

Policy LU 6.2: Encourage land uses and developments that are compatible with the natural environment and landscape.

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

Policy C/NR 1.2: Protect and conserve natural resources, natural areas, and available open spaces.

Policy C/NR 1.5: Provide and improve access to dedicated open space and natural areas for all users that consider sensitive biological resources.

Policy C/NR 1.6: Provide open space acquisitions for available lands that contain unique ecological features, streams, watersheds, habitat types and/or offer linkages that enhance wildlife movements and genetic diversity.

Policy C/NR 2.2: Encourage the development of multi-benefit dedicated open spaces.

Policy C/NR 2.3: Improve understanding and appreciation for natural areas through preservation programs, stewardship, and educational facilities.

Goal C/NR 3: Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.

Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources.

Policy C/NR 3.3: Restore upland communities and significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

Policy C/NR 3.6: Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

Policy C/NR 3.7: Participate in inter-jurisdictional collaborative strategies that protect biological resources.

Policy C/NR 3.11: Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

Policy C/NR 5.7: Actively support the design of new and retrofit of existing infrastructure to accommodate watershed protection goals, such as roadway, railway, bridge, and other—particularly—tributary street and greenway interface points with channelized waterways.

Policy C/NR 7.2: Support the preservation, restoration and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for the healthy function of watersheds.

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains LCP consists of the Santa Monica Mountains Land Use Plan (LUP) and implementing actions, including the Santa Monica Mountains Local Implementation Program, a series of ordinance sections added to the Zoning Ordinance, Title 22 of the County Code, and a zoning consistency program within coastal Los Angeles County.

The Santa Monica Mountains LUP, a component of the *Los Angeles County General Plan 2035*, replaced the Malibu LUP, which was certified by the CCC in 1986. The Santa Monica Mountains LUP includes some of the policies of the Malibu LUP, new policies, and many policies from the Santa Monica Mountains North Area Plan (LA County Planning 2022a).

The Local Implementation Program is the primary implementation mechanism for the Santa Monica Mountains LUP and a part of the County's Zoning Ordinance. The Local Implementation

Program establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the Santa Monica Mountains LUP. Zoning changes, which include a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LCP. These changes were mandated by state law to eliminate potential conflicts between the LCP and zoning designations.

Although the LCP provides guidance for the CCC's review of the Consolidated Coastal Development Permit, the Coastal Act is the legal standard of review. Coastal Act policies are the standards used by the CCC in its coastal permit decisions, and for the review of LCPs prepared by local governments and submitted to the CCC for approval. Coastal cities and counties must incorporate these policies into their individual LCPs. The Project area is located within the Santa Monica Mountains Coastal Zone (LA County Planning 2018). The Santa Monica Mountains LCP has been certified by the CCC, and therefore is consistent with Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies.

The following Coastal Act policies incorporated into the Santa Monica Mountains LCP are applicable to the Proposed Project:

- Protection and expansion of public access to the shoreline and recreational opportunities and resources, including commercial visitor-serving facilities.
- Protection, enhancement and restoration of environmentally sensitive habitats, including intertidal and nearshore waters, wetlands, bays and estuaries, riparian habitat, certain wood and grasslands, streams, lakes, and habitat for rare or endangered plants or animals.
- Protection of productive agricultural lands, commercial fisheries and archaeological resources.
- Protection of the scenic beauty of coastal landscapes and seascapes.
- The establishment, to the extent possible, of urban-rural boundaries and directing new housing and other development into areas with adequate services to avoid wasteful urban sprawl and leapfrog development.
- Protection against loss of life and property from coastal hazards.

The following goals and policies of the Santa Monica Mountains LCP are applicable to the Proposed Project:

Goal CO-1: Maintain and restore biological productivity and coastal water quality appropriate to maintain optimum populations of marine and freshwater organisms and to protect human health.

Policies CO-1 through CO-31 are provided in support of **Goal CO-1**.

Goal CO-2: Sensitive Environmental Resource Areas shall be protected against any significant disruption of habitat values. Development in areas adjacent to Sensitive Environmental Resource Areas shall be sited and designed to prevent impacts which would significantly degrade these areas and shall be compatible with the continuance of the habitat.

Policies provided in support of **Goal CO-2** include **Policies CO-33 through CO-67** related to Sensitive Environmental Resource Areas and H3 Habitat Protection; **Policies CO-68 and CO-69** related to stream protection; **Policies CO-70 through CO-73** related to environmental review policies; **Policies CO-74 through CO-95** related to new development; **Policies CO-96 through CO-98** related to fuel modification; **Policies CO-99 and CO-100** related native tree protection; and **Policies CO-101** related to restoration.

Goal CO-4: An integrated open space system that preserves valuable natural resources and provides a variety of recreational opportunities, within a program coordinated among federal, state, local and non-profit agencies.

Policies CO-117 through CO-123 are provided in support of **Goal CO-4**.

Goal CO-7: Shoreline and beaches that are accessible to the public and protected to the greatest extent possible from the impacts of beach sand erosion, development, conflicting uses, sea level rise, and other possible threats.

Policies CO-187 through CO-203 are provided in support of **Goal CO-7**. **Policies CO-191 to CO-195** also correspond to Section 30230 Marine resources; maintenance of the Coastal Act.

Los Angeles County Zoning Code

The County Zoning Code (Title 22–Planning and Zoning) implements the Land Use Element of the *Los Angeles County General Plan 2035* and provides specific development and land use standards (County of Los Angeles 2022). The purpose of the Zoning Code is to provide compatible use of land within the county, consistent with the needs of residential, commercial, and industrial developments, and the public health, safety, welfare, and general prosperity of residents.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the designated regional planning agency for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. SCAG is a joint powers agency with responsibilities pertaining to regional issues. SCAG’s mandated responsibilities include developing plans and policies with respect to the region’s population growth, transportation programs, air quality, housing, land use, sustainability, and economic development.

On September 3, 2020, SCAG’s Regional Council adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2045 RTP/SCS), also known as Connect SoCal. The 2045 RTP/SCS presents the transportation vision for the region through the year 2045. The document builds upon and expands land use and transportation strategies previously established to increase mobility options and achieve a more sustainable growth pattern. The 2045 RTP/SCS includes new initiatives at the intersection of land use, transportation, and technology to close the gap and reach the state’s greenhouse gas (GHG) emissions reduction goals. Also, the 2045 RTP/SCS contains baseline socioeconomic projections that are used as the basis for SCAG’s transportation planning, and the provision of services by other regional agencies.

The 2045 RTP/SCS includes 10 goals that fall into four core categories: economy, mobility, environment, and healthy/complete communities. The 2045 RTP/SCS goals are as follows (SCAG 2020):

- Goal 1:** Encourage regional economic prosperity and global competitiveness.
- Goal 2:** Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Goal 3:** Enhance the preservation, security, and resilience of the regional transportation system.
- Goal 4:** Increase person and goods movement and travel choices within the transportation system.
- Goal 5:** Reduce GHG emissions and improve air quality.
- Goal 6:** Support healthy and equitable communities.
- Goal 7:** Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Goal 8:** Leverage new transportation technologies and data-driven solutions that result in more-efficient travel.
- Goal 9:** Encourage development of diverse housing types in areas that are supported by multiple transportation options.
- Goal 10:** Promote conservation of natural and agricultural lands and restoration of habitats.

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan (State Parks 2012) was developed by State Parks to direct the long-range management, development, and operation of Topanga State Park. The plan provides broad policy and program guidance including goals, guidelines, and objectives for park management. The Topanga State Park General Plan sets aside a number of management zones including a Lower Topanga and Lagoon Zone, Watershed Conservation Zone, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The plan also contains specific proposals to consolidate Topanga State Park's existing trails by eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012).

The purpose of Topanga State Park is to preserve, interpret, and protect a substantial and meaningful portion of its natural and cultural resources, so that the park can:

- Restore and sustain dynamic natural processes.
- Retain its unique, rugged, and inherently majestic character.
- Maintain and enhance wildlife corridors.
- Nurture and promote superior coastal water quality.

- Defend vital open space qualities and ecological integrity.
- Provide a refuge that promotes the physical and mental wellbeing of its visitors.
- Offer high-quality recreation and outdoor experiences.
- Fulfill its highest potential for interpretation and education.
- Present self-sustaining programs, services, and activities.
- Honor and teach awareness, appreciation, and better understanding of the people who lived here before.
- Facilitate the discovery and recognition of our relationships with the natural world and with each other.
- Inspire us and our children to realize the importance of these landscapes to our health and the health of our urban environment.

The following goals of the Topanga State Park General Plan are relevant to the Proposed Project (State Parks 2012):

Goal: Protect, enhance, and restore the Park’s wetlands and hydrologic resources.

Goal: Promote and restore the sustainability of natural ecosystem processes by actively managing plant community health and the protection of cultural resources. Efforts also will address the conservation of sensitive and unique species and the control of exotic invasive species.

Goal: Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native plant communities within the Park.

Goal: Reduce the presence and further invasion of exotic species in the Park.

Goal: Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native terrestrial and aquatic animals within the Park.

Goal: Protect all sensitive wildlife species occurring in the Park including those legally listed under federal and state law as threatened and endangered, those that are Species of Concern (CDFW [California Department of Fish and Wildlife]), and those considered locally sensitive or endemic to the area.

Goal: Work to control exotic animals that are found to upset natural ecological dynamics of native species.

The Lower Topanga and Lagoon Zone section of the Topanga State Park General Plan provides an extensive list of guidelines, goals, and objectives that direct development of a scientifically based lagoon restoration plan. As outlined in the plan, lagoon restoration planning must respect historic, cultural, and archaeological resources; evaluate the opportunity to use the Topanga Ranch Motel; direct visitor services; restrict any impediments to lagoon wildlife and fish passage function; expand educational, interpretive, and recreational activities such as trails; and improve access.

3.10.2 Affected Environment

Regional Setting

With approximately 4,083 square miles, including a 75-mile stretch of the Pacific coast of Southern California, Los Angeles County is geographically one of the largest counties in the United States. Los Angeles County is bordered to the southeast by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County. Los Angeles County includes 88 cities and approximately 2,650 square miles of unincorporated area. The unincorporated areas are home to approximately one million people.

The unincorporated areas in northern Los Angeles County are covered by large amounts of sparsely populated land, including Angeles National Forest and parts of Los Padres National Forest and the Mojave Desert. In the western portion of Los Angeles County, the unincorporated areas include Marina del Rey and the Santa Monica Mountains. The unincorporated areas in southern and eastern Los Angeles County consist of many noncontiguous land areas, often referred to as *unincorporated urban islands*, including areas in South Los Angeles, East Los Angeles, and the San Gabriel Valley.

Approximately 51 percent of the unincorporated area of Los Angeles County is designated for natural resources, followed by rural land (approximately 39 percent of the area), and residential land uses (approximately 3 percent of the area) (County of Los Angeles 2015). The San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains, and Puente Hills shape the topography within the region.

Project Area Setting

Existing Land Use

The Project area is located within both Topanga State Park—managed by State Parks—and Topanga Beach—managed by DBH. Caltrans owns the right-of-way (ROW) of Pacific Coast Highway (PCH) (State Route [SR] 1) and Topanga Canyon Boulevard (TCB) (SR 27) that crosses through the Project area. The park is located in the Santa Monica Mountains of Los Angeles County within the Santa Monica Mountains National Recreation Area, a large area of open space and parklands. The Project area is zoned Open Space–Parks (O-S-P) and has a land use designation of Open Space–Parks (OS-P) (LA County Planning 2022b).

The Project area consists of Topanga Lagoon; a segment of Topanga Creek; a bridge on PCH that spans Topanga Lagoon; a two-story lifeguard and public restroom building; a single-story parking kiosk; paved and unpaved parking areas; several single-story commercial and retail structures; and wooden pole-mounted electrical lines and transformers. The Project area is surrounded by the Santa Monica Mountains to the north; TCB, commercial uses, PCH, and Ratner Beach to the east; the Pacific Ocean to the south; and single-family residences and a retail use to the west in the City of Malibu. Northwest of the Project site is largely undeveloped public open space, with commercial uses and residences along the southern boundary of PCH; the area east of the Project

site is more urbanized and consists of developed land uses with residential neighborhoods north of PCH.

The Coastal Zone is defined in the California Public Resources Code, Division 20 (commencing with Section 30000), pursuant to the Coastal Act. The Proposed Project would be located within the Santa Monica Mountains Coastal Zone (LA County Planning 2018). The Santa Monica Mountains Coastal Zone is the unincorporated portion of the Santa Monica Mountains west of the jurisdictional boundary of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles (LA County Planning 2022a).

The Proposed Project is being reviewed and approved through a Consolidated Coastal Development Permit process led by the CCC.

3.10.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to land use and land use planning. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Physically divide an established community. (Refer to Impact LU 3.10-1.)
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Refer to Impact LU 3.10-2.)
- Result in cumulatively considerable impacts to land use and land use planning. (Refer to Impact LU 3.10-3.)

Divided Communities

LU 3.10-1: The Project would not physically divide an established community. *No impact would occur.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project footprint. Existing functions and conditions throughout the Project area would remain the same. Under this alternative, there would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases. Therefore, no construction or new operational activities with the potential to physically divide an established community would take place. No impact would occur.

Under Alternative 1, there would be no change to Topanga Lagoon and Beach, or the PCH bridge. The current Topanga Ranch Motel structures would continue to deteriorate, and the existing leased buildings, including the non-conforming on-site wastewater systems would remain in operation.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential impacts of physically dividing an established community would be similar under all Build Alternatives, as described in the following sections.

Construction and Operation

The Proposed Project would occur primarily within lands managed by State Parks, DBH, and Caltrans. The exception is a small private parcel within the Project boundary that has been included in the event that activities within Caltrans ROW require use of the parcel for access. The Proposed Project would not involve construction of new roads or facilities that would divide a community.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater levels associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction. Upgrades to existing wastewater facilities would not involve new roads or other facilities above ground that would divide an established community. No impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, consisting of a park office, employee housing, one concession and associated parking, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area as well as day use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. Under Alternative 3, a concession located at the site of the current Reel Inn restaurant would also be kept; under Alternative 4, the concession would be moved slightly. Future State Parks facilities would be constructed and operated on State Parks property and would not divide an established community. No impact would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Conflict with Land Use Plan, Policy or Regulation

LU 3.10-2: The Project could cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, there would be no change to the existing Project footprint. Existing functions and conditions throughout the Project area would remain the same. Under this alternative, there would be no changes to the existing lagoon, lifeguard and public restroom building and helipad, PCH bridge, and Topanga Ranch Motel or existing leases.

The existing conditions are not consistent with the Topanga State Park General Plan, in that they do not meet the stated goals and objectives that direct development of a scientifically based lagoon restoration plan that respects historic, cultural, and archaeological resources; evaluates the opportunity to use the Topanga Ranch Motel; directs visitor services; restricts any impediments to lagoon wildlife and fish passage function; expands educational, interpretive, and recreational activities such as trails; and improves access. Additionally, the existing conditions do not meet the goals of the Coastal Act, the *Los Angeles County General Plan 2035*, the Santa Monica Mountains LCP, or SCAG's 2045 RTP/SCS.

Alternatives 2, 3, and 4 (Build Alternatives)

The adopted plans most relevant to the Proposed Project include the Topanga State Park General Plan, the Coastal Act, and the Santa Monica Mountains LCP, which implements the County's LUP for the Project area. Given the Proposed Project's location in the CCC's retained permit jurisdiction, the CCC also retains authority over determining the Proposed Project's consistency with the Coastal Act. The CCC will review and determine compliance of the Proposed Project with the Coastal Act, with the LCP providing guidance for the CCC's review. **Appendix Q**

provides a consistency analysis of Alternative 1 (No Project/No Build–Managed Decline) and Alternatives 2–4 (the Build Alternatives) relative to the Santa Monica Mountains LCP and the Topanga State Park General Plan.

Construction

Alternative 2

Construction activities for Alternative 2 would remove all structures associated with the Topanga Ranch Motel and all other buildings on State Parks property, including existing leases. Although this alternative would not provide overnight accommodations, it still conforms to the Topanga State Park General Plan, which recognized the challenge and potential unfeasibility of restoring the Topanga Ranch Motel due to wastewater treatment constraints. Existing coastal access would be improved for both park and beach areas by relocating parking along TCB, adding stairs for beach access, and improving the bus stop. Key State Parks facilities would also be relocated to the Gateway Corner, which would include a visitor kiosk, employee residence, park office, and maintenance facility. A new trail loop that would connect to the regional trail network would be developed as part of Alternative 2. A temporary bridge would be constructed to ensure that traffic is not impeded during construction of the new PCH bridge. All utilities would be temporarily relocated to avoid any loss of service. In addition, the lifeguard and public restroom building, and helipad would be relocated farther from the ocean to provide sea level rise resiliency. Coastal access to portions of Topanga Beach would be retained during construction. Temporary and permanent parking areas would be created along TCB to provide coastal access during construction, though parking would be limited compared to existing conditions.

Construction under Alternative 2 would not result in conflicts with relevant land use plans; therefore, impacts would be less than significant.

Alternatives 3 and 4

Construction activities associated with Alternatives 3 and 4 would restore 15–20 structures associated with the Topanga Ranch Motel and one lease. Existing coastal access would be improved for both park and beach areas by relocating parking along TCB, adding stairs for beach access, and improving the bus stop. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities, such as employee housing, a maintenance facility, park offices, and storage. A new trail loop that would connect to the regional trail network would be developed as part of either Alternative 3 or Alternative 4. A temporary bridge would be constructed to ensure that traffic is not impeded during construction of the new PCH bridge. All utilities would be temporarily relocated to avoid any loss of service. However, under Alternative 4, the alignment of PCH would move slightly north, which would result in additional retaining-wall construction. In addition, the lifeguard and public restroom building, and helipad would be relocated farther from the ocean to provide sea level rise resiliency. Coastal access to portions of Topanga Beach would be retained during construction. Temporary and permanent parking areas would be created along TCB for coastal access during construction, although parking would be limited compared to existing conditions.

Construction under Alternative 3 or Alternative 4 would not result in conflicts with relevant land use plans; therefore, impacts would be less than significant.

Operation

Under the Build Alternatives (Alternatives 2–4), the Proposed Project designs would be consistent with the purpose of the Coastal Act and Topanga State Park General Plan as outlined in Section 3.10.1, *Regulatory Setting*. Visitor services would be enhanced. New visitor-serving facilities would be developed at the Gateway Corner, but they would be limited in size and scale to protect the rural/urban interface.

Under the Build Alternatives, general public coastal access parking facilities would be increased over existing conditions, with the addition of parking along TCB. Additionally, all Build Alternatives would provide a new configuration for parking that would better locate parking opportunities relative to beach and park access points. Although there are 390 existing parking spaces, 124 of these are exclusive for use by patrons of the business leases; the remaining 266 spaces are a combination of fee and free spaces. Once constructed, the new parking facilities would accommodate coastal and inland visitors with a total of between 314 and 343 spaces, depending on the alternative. **Appendix S** provides a consistency assessment of Alternative 1 (No Project/No Build–Managed Decline) and Alternatives 2–4 (the Build Alternatives) with relevant policies of the Santa Monica Mountains Coastal LUP, which reflect the requirements of the Coastal Act. As summarized in **Appendix S**, the Build Alternatives would be consistent with the LUP policies.

Appendix Q also provides an evaluation of the consistency of Alternative 1 (No Project/No Build–Managed Decline) and Alternatives 2–4 (the Build Alternatives) with the goals of the Topanga State Park General Plan. Only one inconsistency has been identified for Alternatives 1 and 2. One goal of the Topanga State Park General Plan is to establish overnight lodging on the west side of the lagoon, if possible, but otherwise at other locations if this is infeasible, including exploring use of the Ranch Motel or “nontraditional overnight use such as cabins or yurts.” Alternatives 3 and 4 would provide opportunities for future overnight lodging development, while Alternatives 1 and 2 would not. However, overnight hike-in camping is available at Musch Camp, an inland location within Topanga State Park. Given that overnight accommodations available to the public would not be removed under any of the Build Alternatives, the Proposed Project would enhance visitor services consistent with the Topanga State Park General Plan.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater levels associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress to and egress from businesses and residences along PCH and TCB would be maintained during construction. Upgrades to existing wastewater facilities would not involve new roads or other facilities above ground that would divide an established community. No impact on an established community would occur.

Under each of the Build Alternatives, the Proposed Project designs would be consistent with the purpose of the Coastal Act and Topanga State Park General Plan. As described throughout this Draft EIR, mitigation measures consistent with the policies outlined in the Topanga State Park General Plan would be implemented to reduce impacts to less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities, such as employee housing, a maintenance facility, park offices, and storage. Under Alternative 3, a concession located at the site of the current Reel Inn restaurant would also be kept; under Alternative 4, the concession would be moved slightly. Future State Parks facilities would be constructed and operated on State Parks property. Therefore, a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would not occur and impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination
Less than Significant

Cumulative Impacts

LU 3.10-3: The Project could result in cumulatively considerable impacts to land use and land use planning. *Impacts would be less than significant.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts vary based on the environmental resource under consideration. The geographic scope of analysis for cumulative land use and planning impacts is limited to Los Angeles County. The cumulative impact of the Proposed Project on land use and planning is dependent on the past, present, and reasonably foreseeable future conditions of development and land use in the Project vicinity. The projects to be considered cumulatively with the Proposed Project are identified in Table 3-1, *Project List for Analysis of Cumulative Impacts*.

Other related projects in the area could result in a conflict with existing land use policies or plans or could divide the existing community. Because the Proposed Project would not physically divide an established community, it would not contribute to potential cumulative impacts. Therefore, this issue is not included in the cumulative impact analysis below.

Cumulative projects listed in Table 3-1 include construction and transportation improvements to roadways and associated facilities in the vicinity of the Proposed Project. Proposed roadway construction activities of cumulative projects are not expected to conflict with County land use plans and policies. These projects would be required to obtain all necessary permits and approvals (including CEQA and the National Environmental Policy Act, or NEPA) before construction, and to comply with the County's and Caltrans' development requirements. These projects would also be evaluated based on their consistency with the relevant land use plans, policies, and regulations of the County of Los Angeles, Caltrans, the City of Malibu, and the CCC's Coastal Act, when applicable. In addition, all projects would be required to develop avoidance, minimization, and mitigation measures, if applicable.

With compliance with existing regulations, the combined effects of the Proposed Project and cumulative projects would not result in a cumulatively considerable effect with regard to land use and land use planning, and impacts would be less than significant.

Mitigation Measures
None

Significance Determination
Less than Significant

3.10.4 Summary of Impacts

Table 3.10-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to land use and land use planning. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.10-1
 SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO LAND USE AND LAND USE PLANNING**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
3.10-1: Divided Communities	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
3.10-2: Conflict with Land Use Plan, Policy or Regulation	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
3.10-3: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	None Required	LTS

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less than Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.10.5 References

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3.11 Marine Biological Resources

This section addresses the potential impacts on marine biological resources associated with implementation of the Proposed Project. This section summarizes applicable regulations related to marine biological resources; describes the existing marine biological resources in the Project area; and evaluates the potential impacts of the Proposed Project, including cumulative impacts, related to biological resources in the marine study area. The marine study area includes the coastal waters and intertidal and subtidal habitats occurring immediately offshore of Topanga Beach, extending approximately 1800 feet offshore (**Figure 3.11-1**). The marine study area is sited within the nearshore coastal region of the Southern California Bight.

The information included in this section is based partly on the results of the *Topanga State Park Marine Biological Surveys, August–October 2022 Sediment Reuse Project for Topanga Lagoon* and the *Topanga State Park Seafloor Habitat Characterization and Marine Biological Second Year Studies June–July 2023 Sediment Reuse Project for Topanga Lagoon* prepared by Coastal Resources Management, Inc. (CRM) for the Proposed Project (**Appendix K**).

3.11.1 Regulatory Setting

Federal

Endangered Species Act

The federal Endangered Species Act (FESA) (United States Code Title 16, Section 1531 et seq. [16 USC 1531 et seq.]) provides a program for the conservation of federally listed threatened and endangered plants and animals and the habitats in which they are found. *Endangered* means a species is in danger of extinction throughout all or a significant portion of its range and *threatened* means a species is likely to become endangered within the foreseeable future. The federal agencies responsible for administering the FESA are the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife and anadromous fish.

Section 7 of the FESA requires federal agencies to consult with USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally listed species. The FESA makes it unlawful for a person to take a listed animal without a permit. *Take* is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term *harm* is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Section 10 provides a means whereby a non-federal action with the potential to result in take of a listed species can be allowed under an incidental take permit, which may be issued once a habitat conservation plan is approved. Application procedures are found at Code of Federal Regulations Title 50, Parts 13 and 17 (50 CFR 13, 17) for species under USFWS jurisdiction and at 50 CFR 217, 220, and 222 for species under NMFS jurisdiction.



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SOURCE: Google Earth Pro, 2022; ESA

Topanga Lagoon Restoration Project

Figure 3.11-1
Marine Survey Limits



Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act, known as the Magnuson-Stevens Act (16 USC 1801 et seq.), is the primary law that governs marine fisheries management in U.S. federal waters. Its objectives include:

- Preventing overfishing.
- Rebuilding overfished stocks.
- Increasing long-term economic and social benefits.
- Ensuring a safe and sustainable supply of seafood.
- Protecting habitat that fish need to spawn, breed, feed, and grow to maturity.

The Magnuson-Stevens Act jurisdiction extends to 200 nautical miles and defines *essential fish habitat* (EFH) as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Eight regional fishery management councils, composed of representatives of the fishing industry and state fishery officials, prepare fishery management plans for approval and implementation by NMFS. A fisheries management plan is developed to achieve specified management goals for a fishery and comprises data, analyses, and management measures. EFH identified in a management plan applies to all fish species managed by that plan, regardless of whether the species is a protected species or not. Federal agency actions that fund, permit, or carry out activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of their actions on EFH.

The waters off Topanga Lagoon are designated as EFH for fish managed under three fisheries management plans: the Pacific Coast Groundfish, Coastal Pelagic Species, and West Coast Highly Migratory Species fisheries management plans.

Rivers and Harbors Act Section 10

The Rivers and Harbors Appropriations Act of 1899 (30 Stat. 1151; 33 USC 401, 403), also known as the Rivers and Harbors Act, prohibits the unauthorized obstruction or alteration of any navigable water. *Navigable waters* are tidally influenced waters that are presently used, have been used in the past, or could be used in the future to transport interstate or foreign commerce (33 CFR 3294). The Rivers and Harbors Act was intended for the protection of navigation and navigable capacity and was later amended to include protection of the environment. This law authorizes the U.S. Army Corps of Engineers (USACE) to exercise control over all construction projects (Section 10) and discharge of refuse (Section 13) that occur within navigable waters of the United States. Activities that commonly require Section 10 permits include construction of piers, wharves, bulkheads, marinas, ramps, floats, intake structures, cable and pipeline crossings, and dredging and excavation.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972 (16 USC 1361–1421H), as amended in 1981, 1982, 1984 and 1995, establishes federal responsibility for the protection and conservation of

marine mammal species by prohibiting their take. The MMPA defines *take* as the act of hunting, killing, capture, harassment, or death of any marine mammal. The MMPA also imposes a moratorium on the import, export, or sale of any marine mammals, parts, or products within the United States. These prohibitions apply to any person in U.S. waters and to any U.S. citizen in international waters. All project-related construction activities are prohibited from disturbing marine mammals or disrupting their activities or behavior in known migration routes, feeding areas, or breeding areas. NMFS is the federal agency responsible for enforcing the MMPA's provisions.

The primary authority for implementing the MMPA is shared between USFWS and NMFS. NMFS is responsible for protecting most species that spend most of their time in the ocean (whales, dolphins, porpoises, seals, and sea lions), while USFWS is responsible for protecting all other marine mammals including sea otters, walrus, polar bears, and manatees. The MMPA, and its implementing regulations allow, upon request, the incidental take of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographic region. Incidental take is an unintentional, but not unexpected, "take." Taking is prohibited, with certain exceptions, under the MMPA.

Marine Protection, Research, and Sanctuaries Act

The Marine Protection, Research, and Sanctuaries Act (MPRSA) (16 USC 1431 et seq. and 33 USC 1401 et seq.), also known as the Ocean Dumping Act, generally prohibits (1) transportation of material from the United States for the purpose of ocean dumping; (2) transportation of material from anywhere for the purpose of ocean dumping by U.S. agencies or U.S.-flagged vessels; and (3) dumping of material transported from outside the United States into U.S. territorial seas. Ocean dumping cannot occur unless a permit is issued under the MPRSA. Under the MPRSA, the standard for permit issuance is whether the dumping will "unreasonably degrade or endanger" human health, welfare, or the marine environment. In the case of dredge material, the decision to issue a permit is made by USACE, using environmental criteria set by the U.S. Environmental Protection Agency (USEPA) and subject to USEPA's concurrence.

Coastal Zone Management Act

Coastal Zone Management Act Section 307 (16 USC 1456[c]) mandates that federal agency activities be "consistent to the maximum extent practicable with the enforceable policies of approved state management programs," and that this consistency be documented and coordinated with the state. Applicants for a federal license or permit must submit their own consistency certification to the California Coastal Commission (CCC) and then provide the CCC's concurrence to the federal agency issuing the permit. When a Coastal Development Permit (CDP) is needed, this will be the actual CDP, not the notice of intent to issue a CDP. After receipt of the consistency determination, the state agency informs the federal agency of its concurrence with, or objection to, the federal agency's consistency determination.

The CCC is the state agency charged with administering the Coastal Zone Management Act within the California Coastal Zone. Within the CCC's areas of concern, the Coastal Zone consists of all areas located within the CCC's jurisdiction, which extends 3 miles seaward and inland

generally 1,000 yards (but can extend up to 5 miles) from the mean high-tide line. Any federal activity that affects any natural resources (including wetlands and other waterbodies), land uses, or water uses within the CCC's area of concern will be subject to the consistency requirement. Obligations under the Coastal Zone Management Act must be met through the federal consistency determination process that is outlined in the act's Federal Consistency Regulations, 71 Federal Regulation 787-831 at 15 CFR 930. The CCC and the California Coastal Act are discussed further in *State*, below.

Clean Water Act

The federal Clean Water Act (CWA) and subsequent amendments, under the enforcement authority of USEPA, was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The purpose of the CWA is to protect and maintain the quality and integrity of the nation's waters by requiring states to develop and implement state water plans and policies. The CWA established several programs to regulate and reduce discharges of pollutants into waters of the United States, including wetlands. USACE and the California State Water Resources Control Board (SWRCB) administer the various applicable sections of the CWA with the oversight of the USEPA as follows:

- Section 404, administered by USACE, established a permit program to regulate the discharge of dredged and fill material into waters of the United States.
- Section 401, administered by the state, requires that before a 404 permit can be issued for an activity, the state in which the activity will occur must certify that the activity will not violate state water quality standards.
- Section 402, administered by the state, established the National Pollutant Discharge Elimination System program. This requires a permit for sewer discharges and stormwater discharges from developments, construction sites, or other areas of soil disturbance.
- Section 303, administered by the state, requires states to identify "impaired waters" and to establish total maximum daily loads. A total maximum daily load establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality.

National Invasive Species Act

Under the National Invasive Species Act of 1996, the U.S. Coast Guard established national voluntary ballast water guidelines. The U.S. Coast Guard published regulations on June 14, 2004, establishing a national ballast water management program with requirements for all vessels equipped with ballast water tanks that enter or operate in U.S. waters. The regulations carry reporting requirements to aid in the U.S. Coast Guard's responsibility, under the National Invasive Species Act, to determine patterns of ballast water movement. The regulations also require ships to maintain and implement vessel-specific ballast water management plans.

State

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code [CFGC] Section 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of state-listed threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and FESA, compliance with the FESA program would satisfy the CESA if CDFW determines that the federal incidental take authorization is consistent with the CESA under CFGC Section 2080.1. For projects that would result in take of a species listed under CESA only, an incidental take permit is required under Section 2081(b).

California Fish and Game Code

CFGC Sections 3511, 4700, 5050, and 5515 prohibit take or possession of fully protected species. CDFW does not have the authority to permit incidental take of fully protected species when activities are proposed in areas inhabited by those species.

California Coastal Act

The California Coastal Act (Public Resources Code [PRC] Section 30000 et seq.) governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. Policies relevant to the Proposed Project are as follows:

Section 30230 Marine resources; maintenance. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 Biological productivity; water quality. 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 and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 Diking, filling or dredging; continued movement of sediment and nutrients. (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: (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.

(b) Dredging and spoils placement shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a [Coastal Development Permit] for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30235 Construction altering natural shoreline. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30240 Environmentally sensitive habitat areas; adjacent developments. (a) Environmentally sensitive habitat areas 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.

The Coastal Act defines *Environmentally Sensitive Areas* as follows:

“Environmentally sensitive area” means any area in which plant or animal life, or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Marine Life Protection Act

The Marine Life Protection Act (MLPA) was adopted in 1999 to protect ecosystem structure and function. Specific mandates of the MLPA are to sustain, conserve, and rebuild depleted populations. The MLPA works in concert with the Marine Life Management Act. In California, most of the legislative authority over fisheries management is enacted within the MLPA. This law directs CDFW and the California Fish and Game Commission to issue sport and commercial harvesting licenses, as well as license aquaculture operations. CDFW, through the California Fish and Game Commission, is the state's lead biological resource agency and is responsible for enforcement of the state endangered species regulations and the protection and management of all state biological resources.

An important part of MLPA enactment has been the establishment of marine protected areas along the California coast. Fishing and other consumptive activities are strictly regulated in marine protected areas to provide refuges within which healthy stocks can be maintained to ensure propagation along the entire coast. Three types of designated (or recognized) marine protected areas occur in California: State Marine Reserves, State Marine Parks, and State Marine Conservation Areas. The area between Point Conception and the U.S./Baja California border includes 35 South Coast Region marine protected areas. Additionally, a State Marine Conservation Area and a State Marine Reserve are located at Point Dume in the Malibu region, and a State Marine Conservation Area and a State Marine Reserve are located at the Palos Verdes Peninsula.

Marine Life Management Act

In California, most of the legislative authority over fisheries management is provided by the Marine Life Management Act (CFGF Section 7050 et seq.). This law directs CDFW and the California Fish and Game Commission to issue sport and commercial harvesting licenses and to license aquaculture operations. The department, through the California Fish and Game Commission, is the state's lead biological resource agency and is responsible for enforcing the state's endangered species regulations and protecting and managing biological resources statewide.

CDFW prepared the Nearshore Fishery Management Plan in 2002. The management plan establishes a hierarchical framework within which adjustments to the management of the nearshore fishery can be made in a responsible and timely manner to meet the 1999 Marine Life Management Act mandate for adaptive management. A total of 19 species are managed under the Nearshore Fishery Management Plan.

Nearshore Fishery Management Plan

The goals of the Nearshore Fishery Management Plan are to ensure long-term resource conservation and sustainability; to employ science-based decision-making; to increase constituent involvement in management; to balance and enhance socioeconomic benefits; and to identify implementation costs and sources of funding.

The following measures are employed to meet the primary goal of ensuring sustainability: a fishery control rule including size limits, time/area closures, or gear restrictions; regional management tailored to conditions specific to each of four regions; marine protected areas; restricted fishery access; and allocation of total allowable catch (CDFG 2001). All of the species regulated by the Nearshore Fishery Management Plan are associated primarily with rocky substrate.

Market Squid Fishery Management Plan

The Market Squid Fishery Management Plan aims to manage the market squid resource for long-term conservation and sustainability, reduce overfishing potential, and establish a management framework that will be responsive to environmental and socioeconomic changes (CDFW 2005). The plan includes measures such as seasonal catch limitations, weekend closures to protect spawning periods, gear regulations, and monitoring programs to prevent overfishing and adapt to environmental changes. Additionally, a restricted access program is implemented to control fleet entry, permit types, fees, and transferability. The plan, developed under the Marine Life Management Act, addresses policies and goals for the conservation, sustainable use, and restoration of marine resources, specifically focusing on the market squid resource.

California Ocean Plan

The California Ocean Plan establishes water quality objectives and beneficial uses for waters of the Pacific Ocean adjacent to the California Coast (SWRCB 2019). The California Ocean Plan is a key tool employed by the SWRCB to ensure compliance with the CWA and Porter-Cologne Act for waters of the state and United States. National Pollutant Discharge Elimination System waste discharge permits set discharge limits that are required to prevent exceedances of the water quality objectives in the California Ocean Plan.

The Proposed Project would discharge into Santa Monica Bay and therefore is subject to all California Ocean Plan water quality objectives and National Pollutant Discharge Elimination System requirements. The following are the objectives most relevant to the Proposed Project:

- Marine communities, including vertebrate, invertebrate, and plant species shall not be degraded.
- Waste management systems that discharge into the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- Waste discharged to the ocean must be essentially free of substances that will accumulate to toxic levels in marine waters, sediments, or organisms.

The basis for water quality objectives established in the California Ocean Plan is the protection of beneficial uses designated for each section of coastline by regional water quality control boards. The designated beneficial uses relevant to marine resources in the study area are as follows:

- **Marine Habitat**—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 (e.g., marine mammals, shorebirds).

- **Shellfish Harvesting**—Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption or commercial or sport purposes. This includes waters that have in the past, or may in the future, contain significant shellfisheries.
- **Commercial and Sport Fishing**—Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
- **Rare, Threatened, or Endangered Species**—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 law as rare, threatened, or endangered.

Marine Invasive Species Act

All shipping operations that involve major marine vessels are subject to the Marine Invasive Species Act of 2003 (PRC Sections 71200–71271), which revised and expanded the California Ballast Water Management for Control of Nonindigenous Species Act of 1999 (Assembly Bill [AB] 703). This law is administered by the California State Lands Commission. The Marine Invasive Species Act regulates the handling of ballast water from marine vessels arriving at California ports to prevent or minimize the introduction of invasive species from other regions.

Regional and Local

Los Angeles County General Plan 2035

A general plan is a basic planning document that, alongside the zoning code, governs development in a city or county. The State of California requires that each city and county adopt a general plan with seven mandatory elements—land use, open space, circulation, housing, noise, conservation, and safety—and any number of optional elements as appropriate. The Conservation and Natural Resources Element of the *Los Angeles County General Plan 2035* includes the following goal and policies that are relevant to the Proposed Project (see also Section 3.10, *Land Use and Land Use Planning*) (County of Los Angeles 2015):

Goal C/NR 3: Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs [Significant Ecological Areas].

Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources.

Policy C/NR 3.6: Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

Policy C/NR 3.7: Participate in inter-jurisdictional collaborative strategies that protect biological resources.

Santa Monica Mountains Local Coastal Program

The Los Angeles County Santa Monica Mountains Coastal Zone is the unincorporated portion of the Santa Monica Mountains west of the city of Los Angeles, east of Ventura County, and south of the Coastal Zone boundary, excluding the city of Malibu. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles.

The Santa Monica Mountains Local Coastal Program (LCP), a component of the Los Angeles County General Plan, consists of the land use plan (LUP) and implementing actions included in the local implementation program (LIP). The LIP, a series of ordinance sections added to the County's Zoning Ordinance (Title 22 of the County Code), was created to implement the LUP goals and policies. Implementing actions also include a zoning consistency program. The Santa Monica Mountains LCP was certified by the CCC on October 10, 2014, and was amended on February 9, 2018. The LUP replaced the Malibu LUP, which was certified by the CCC in 1986.

As identified below, the LIP establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the LUP. Zoning changes, which included a new zone (Rural-Coastal), ensure that zoning designations for properties are consistent with the land use categories of the LUP. These changes were mandated by state law to eliminate potential conflicts between the plan and zoning designations.

Goal CO-1: Maintain and restore biological productivity and coastal water quality appropriate to maintain optimum populations of marine and freshwater organisms and to protect human health.

Policies **CO-1** through **CO-31** are provided in support of Goal CO-1.

Goal CO-4: An integrated open space system that preserves valuable natural resources and provides a variety of recreational opportunities, within a program coordinated among federal, State, local and non-profit agencies.

Policies **CO-117** through **CO-123** are provided in support of Goal CO-4.

Goal CO-7: Shoreline and beaches that are accessible to the public and protected to the greatest extent possible from the impacts of beach sand erosion, development, conflicting uses, sea level rise, and other possible threats.

Policies **CO-187** through **CO-203** are provided in support of Goal CO-7. Policies **CO-191** to **CO-195** also correspond to Section 30230 Marine resources; maintenance of the Coastal Act.

3.11.2 Affected Environment

In 2022, Coastal Resources Management, Inc. (CRM) conducted nearshore seafloor habitat mapping surveys and a subtidal and intertidal marine biological survey along the Topanga Beach shoreline. This work was done to identify seafloor and rocky intertidal habitat types and their biological components to determine whether sensitive marine resources are present within the

area of the Proposed Project. Seafloor habitat mapping surveys included sidescan sonar and downlooking sonar to identify marine habitat types and organisms, bottom types, and aquatic vegetation using a remotely deployed underwater video system.

To further assess the potential presence of marine resources, surveys were conducted by CRM in 2022 and 2023. The surveys followed transects to assess the effects of beach material placement on marine resources in two areas: within the Topanga Beach subtidal habitat proposed for material placement (receiver area), and in subtidal/intertidal areas east of Mastro's Point, down current (east) of the Topanga Beach receiver site. Based on a visual survey of the intertidal zone, an inventory of algae, vascular plants, invertebrates, and vertebrates observed in the area within the Project boundaries was compiled. These subtidal surveys also identified key components of the shallow-water habitats at depths between -5 and -15 feet mean lower low water (MLLW) at Topanga Beach and Ratner Beach.

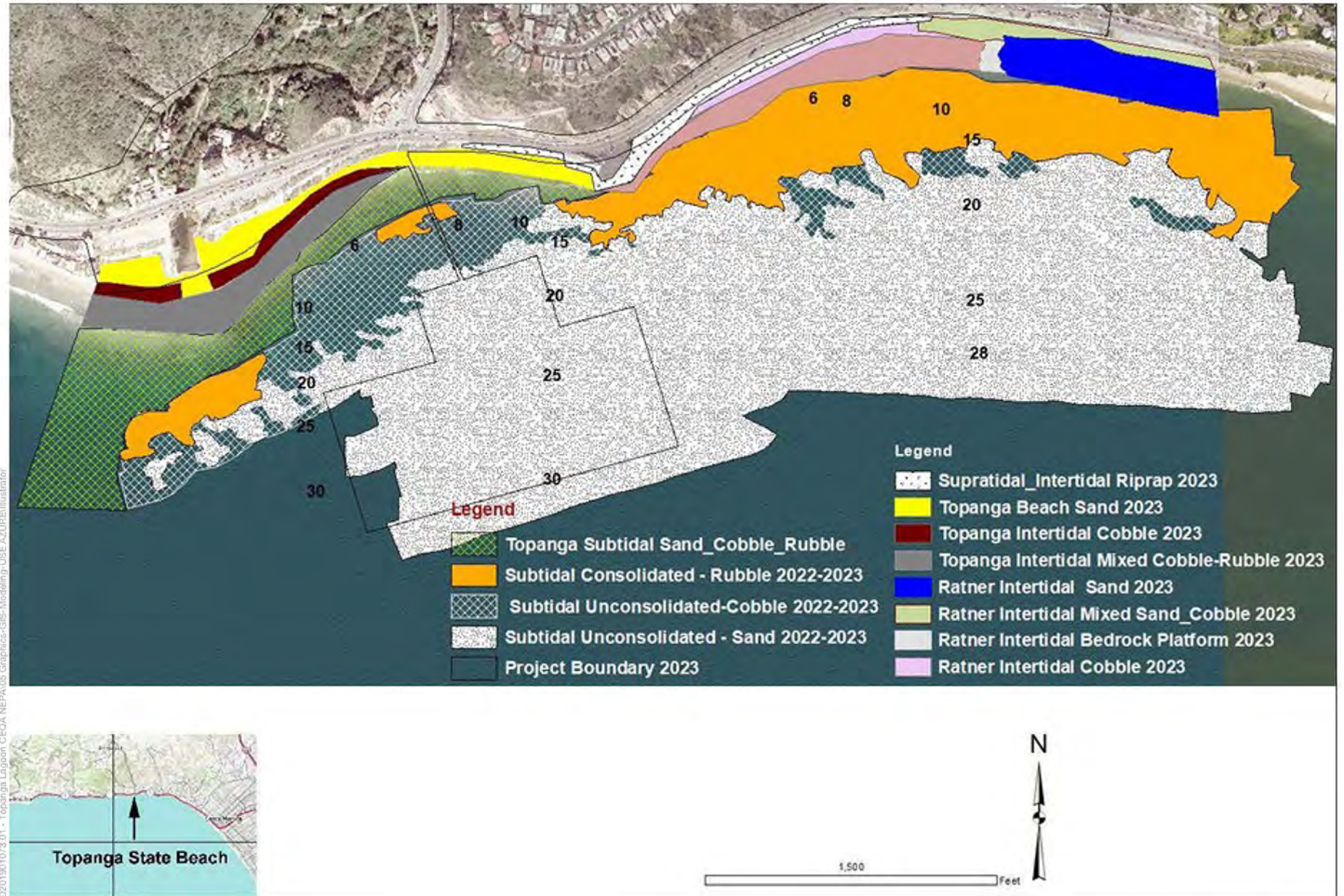
Marine Habitats and Communities

The Southern California Bight coastal environment extends more than 600 kilometers from Point Conception (USA) to Punta Banda (Mexico) and represents a unique ecological resource. The Southern California Bight coastal region is physically affected by the cold, southward-flowing California Current mixing with the warm, northward-flowing Davidson Countercurrent (Hickey et al. 2003). The Southern California Bight is home to more than a dozen threatened or endangered marine mammals and birds, several estuaries that provide fish nurseries and overwintering stops for birds along the Pacific Flyway, and highly productive reefs that include the giant kelp *Macrocystis* (Dailey et al. 1993)

Before field surveys, CRM conducted a literature review of existing databases and reports including the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979), CDFW Marine Region 7 GIS data downloads, the Kelpwatch online database, and Google Earth aerial photos.

Intertidal Habitats

The *intertidal zone* is located between the highest and lowest tide elevations. Intertidal zones along the Southern California coast include rocky shores, sandy beaches, coastal wetlands, and tidal flats/marshes located within estuaries and lagoons. Four marine habitat types encompassing 34 acres were mapped by CRM crews within the intertidal zone, including the sand/beaches (**Figure 3.11-2**). A total of 74 taxa of marine plants and invertebrates were observed during the 2023 intertidal survey. Of these, 59 were present at Topanga Beach and 65 were observed at Ratner Beach. In comparison, 47 species were recorded during the July 2022 survey at Topanga Beach. During both the 2022 and 2023 surveys, the combined total number of taxa observed in the intertidal environment was 82.



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SOURCE: Resource Conservation District

Topanga Lagoon Restoration Project

Figure 3.11-2
Marine Habitat Types

Topanga Beach

The rocky intertidal habitat at Topanga Beach is composed primarily of relatively unstable cobble beds. The upper intertidal zone is composed mostly of sand, although periodic seasonal erosion uncovers areas of cobble. Small to medium-sized cobbles dominate the mid-intertidal zone and most of the lower intertidal zone. The lower intertidal zone has a patchy distribution of large, stable boulders and bedrock.

The mid-shore rocky intertidal community at Topanga Beach is largely composed of short-lived, ephemeral, and opportunistic macroalgae including sea lettuce (*Ulva* sp.), ephemeral algae (*Gelidium coulteri/pusillum*), and *Polysiphonia/Ceramium/Centroceras* sp., *Scytosiphon lomentaria*, *Colpomenia peregrina*, and *Endarachne binghamiae*. Psammophytic macroalgae (*Taonia lennebackeriae* and *Zonaria farlowii*), along with the sand-resistant brown algae species (*Ralfsia* sp., *Lithothamnion* sp., *Lithothrix aspergillum*, and *Corallina vancouveriensis/pinnatifolia*) are also common.

In addition to many of the species observed on the mid-shore, the lower intertidal zone is characterized by longer-lived taxa including surfgrass (*Phyllospadix torreyi*), feather boa kelp (*Egregia menziesii*), and mussels (*Mytilus californianus*), along with red algae such as *Laurencia pacifica* and *Pterocladia capillacea*. Large boulders in the area are home to extensive colonies of the sandcastle tube worm (*Phragmatopoma californica*) and smaller colonies of the scaled wormsnail (*Thylacodes squamigerus*).

Ratner Beach

The backshore of Ratner Beach is armored with large riprap. Below the riprap, the substrate is composed of a mixture of cobbles, boulders, and bedrock reefs. The upper intertidal zone is dominated by sea lettuce, isopods (*Ligia* sp.), barnacles (*Chthamalus* sp. and *Balanus glandula*), shore crabs (*Pachygrapsus crassipes*), hermit crabs (*Pagurus samuelis*), and several species of limpets (*Lottia scutum*, *L. limatula*, and *L. scabra*).

The mid-intertidal zone is composed primarily of cobbles, sand, and low-relief boulders. As a result of frequent disturbance by the movement of unstable rocks and sand, the community is dominated by psammophytic macroalgae, along with sand-resistant brown algae species. Colonial anemones (*Anthopleura elegantissima*) and turban snails (*Chlorostoma funebris*) are highly abundant on the larger rocks.

The large boulders and bedrock in the lower intertidal zone support a high cover of mussels, anemones (*Anthopleura* sp.), red algae (*Chondracanthus canaliculatus* and *Gastroclonium subarticulatum*), and sandcastle worms. Expansive beds of surfgrass occur on the lower-relief boulders.

Unconsolidated–Sand

Unconsolidated–Sand was the primary habitat observed offshore of the -20 feet contour. Most of the seafloor exhibited similar characteristics with the occasional minor sand waves. Sand dollar (*Dendraster excentricus*) beds were also observed in low to high densities, ranging from 200 to

1,100 per square meter. California grunion (*Leuresthes tenuis*) spawning habitat is also present along both Topanga and Ratner beaches.

Unconsolidated–Cobble

Unconsolidated–Cobble habitat was observed either in transition between Consolidated–Rubble and Unconsolidated–Sand or as isolated patches surrounded by Unconsolidated–Sand. The Unconsolidated–Cobble bottom can be seasonally covered by a thin overlay of sand during lower energy periods of the year. During high-energy periods, more of the rock bottom is exposed. Rocks were observed with various algae colonies and tunicates on their surfaces.

Unconsolidated–Cobble habitat is considered an EFH–Rocky Reef Habitat Area of Particular Concern (HAPC) with a low-moderate value; due to regular periods of accretion and erosion, it generally supports short-lived, sand-tolerant, and sand-loving species of algae (i.e., coralline algae, encrusting red/brown algae, low turf algae [i.e., *Gelidium* and *Zonaria*] opportunistic green algae).

Consolidated–Rock (Rubble)

Consolidated–Rock (Rubble) was observed primarily inshore of the -15 feet contour and is designated EFH–Rocky Reef HAPC with a moderate-high value. In the survey area, rubble bottom typically takes the form of patch reefs that are no greater than 3 feet high and mostly isolated. In the eastern end of the survey area, extending to Mastro’s Point, 3- to 6-foot-high reefs were observed and appeared to be quarry rock from Mastro’s Point. The reef had high cover of the California gorgonian (*Muricea californica*). Consolidated–Rock (Rubble) habitat is more common at Ratner Beach than at Topanga Beach. There are more tidepool depressions that support intertidal invertebrates (such as colonial tube worms [*Phragmatopoma* sp.]) and a greater diversity of Aquatic Bed–Algae (i.e., foliose red and brown algae) and small sand tolerant/loving algae.

The Consolidated–Rock (Rubble) habitat also supports Aquatic Bed–Rooted vascular plants such as surfgrass. Surfgrass is considered an EFH and HAPC and is described in greater detail below (see 3.11.2.3 *Special-Status Marine Resources*).

Aquatic Bed–Algae

The distribution of benthic (bottom) algae was determined by a combination of the downlooking sonar submerged aquatic vegetation survey and biological observations made during the August 2022 and July 2023 surveys. The dominant forms of algae attached to low-relief subtidal boulders are forms such as articulated and encrusting coralline algae that are known to be opportunistic, sand resistant, or psammophytic due to constant scour or sand deposition. This habitat is characteristic of Topanga and Ratner beaches’ intertidal and subtidal habitat to depths of approximately -17 feet. A high diversity of foliose red algae and understory kelp species (i.e., *Egregia* and *Desmarestia*) is more commonly associated with more stable boulder and bedrock reefs, particularly off of Ratner Beach, as compared to Topanga Beach. Larger brown algal taxa were rarely observed. Brown algae (*Sargassum muticum* and *Cystoseira osmundacea*) were occasionally observed mixed in with other types of algae on the upper areas of the boulder reefs.

Aquatic Bed–Rooted Vascular (Surfgrass)

This habitat is common to rocky intertidal areas on both Topanga and Ratner beaches, although healthier intertidal surfgrass beds are found in the Ratner Beach intertidal area. In the Topanga Beach intertidal area, the intertidal habitat is less stable because of the presence of Unconsolidated–Cobble habitat type and the effects of runoff from Topanga Creek and Lagoon. This habitat provides protective cover and nursery habitat for many invertebrates and fish and is a designated EFH–Rocky Reef HAPC with a moderate-high value.

Subtidal Habitats

Subtidal zones are those habitats that occur below the low-tide line and can have a soft or hard substrate. Three marine habitat types encompassing 210.6 acres were mapped by CRM crews within the subtidal seafloor zone (Figure 3.11-2).

A total of 54 taxa of marine plants and invertebrates were identified along eight dive transects in 2023. Forty-two taxa were observed at Topanga Beach and 51 were observed at Ratner Beach. The combined list for both areas included 21 species of algae, one seagrass, 22 species of invertebrates, and 10 species of fish. Forty-three taxa were associated with rock, nine were associated with sand, and two were associated with both habitat types.

At Topanga Beach in 2022, 35 taxa were observed along four dive transects set perpendicular to shore at depths between -9 and -30 feet MLLW. The taxa observed in 2022 included seven algae, one seagrass, 21 invertebrates, and six species of fish. Twenty taxa were found in low-relief reef habitat and 15 were associated with sandy substrate.

Rhodophytes (red algae), chordates (fish), phaeophytes (brown algae), and mollusks (snails, bivalves, octopus, sea hares, and nudibranchs) were the most abundant groups. Ratner Beach subtidal habitat exhibited greater numbers of red algae and fish, while other taxonomic groups were generally similar in the numbers contributed at each site.

Unconsolidated–Sand

Species of interest in the sand habitat include the sand dollar, which forms extensive, low-to-dense beds offshore of Topanga Beach and Ratner Beach, and the sea pansy (*Renilla kollekerii*), which is present in a low-density aggregation off Topanga Beach at an approximate depth of -15 feet MLLW. Other species found within this habitat include a community of benthic infauna as well as macro-epibenthic sand stars (*Astropecten armatus*) and cancer crabs (*Romaleion antennarium*) (Refer to the *Topanga Marine Habitat Characterization Study* in **Appendix K**)

Sea Pansy

The sea pansy, a relative of the jellyfish, was found in the nearshore sand habitat offshore of Topanga Beach at depths between -12 and -15 feet MLLW immediately west of the proposed fill material placement site. This sessile cnidarian anchors itself in the sand with a peduncle and its flat, oval body is situated just below the surface. Stinging cells on the dorsum are activated to kill

small prey; it also has a mucous net that aids in capturing small organisms. This species is not considered a sensitive species, but it is a unique species within the sand bottom habitat.

Sand Dollar

Sand dollar beds are found in Unconsolidated–Sand habitat. They are present in low-density to high-density beds offshore of both Topanga and Ratner beaches in clean sand habitat. This is described in more detail below (see *Special-Status Marine Resources*).

Ornate Tube Worm/Sand Star/Cancer Crab

The most abundant sand dwelling invertebrates in the nearshore Topanga Beach area during the surveys were polychaete tube worms of the *Diopatra* species complex (*D. ornata* and *D. splendidissima*); this complex forms one of the most abundant nearshore group of invertebrates found throughout Southern California sand bottom habitat. *Diopatra* was distributed at depths between -15 and -30 feet MLLW. *Diopatra* is a suspension-feeding worm that constructs parchment tubes to live in and cements debris such as algae, other organic material, and shells on their tubes. The tubes also act as refuges, or "islands" of stable habitat for many small invertebrates such as other worms, clams, amphipods, and caprellids. *Diopatra* was also commonly aggregated around the bases of reefs, where surge and eddy currents trap large amounts of detritus and particulates. *Diopatra* is preyed upon by sand stars and sea stars.

Other regular occurring members of the sand bottom community present off Topanga Beach included the sand star, the sea star (*Pisaster giganteus*), the sea pen (*Virgularia* sp.), and juvenile and subadult cancer crabs.

Unconsolidated–Cobble

Similar to the intertidal areas, Unconsolidated–Cobble habitat generally supports short-lived sand-tolerant and sand-loving species of algae (i.e., coralline algae, encrusting red and brown algae, low turf algae, and opportunistic green algae) because of the regular periods of habitat instability including sand accretion and erosion. This habitat is dominant but not continuous and is mixed with sand from the Topanga Point Break to areas approaching Mastro's Point to depths of about -17 feet. It is considered an EFH–Rocky Reef HAPC and is considered to be of low-moderate value.

Consolidated–Rock (Rubble)

Consolidated–Rock (Rubble) habitat is more common offshore of Ratner Beach than Topanga Beach. This habitat supports a greater biodiversity of marine life, including invertebrates and algae, than finer cobble/gravel habitats do. It supports Aquatic Bed–Algae (foliose reds and brown algae) and Aquatic–Bed Rooted vascular plants (surfgrass). Surfgrass is considered an EFH and HAPC and is described in greater detail below (see *Special-Status Marine Resources*). Lobsters were also commonly observed in Consolidated–Rock (Rubble) habitat off both Topanga and Ratner beaches in 2023.

Sandcastle Tube Worms

The sandcastle tube worm is a common reef-building polychaete worm that forms colonies in rocky intertidal and rocky subtidal habitats. They commonly occur at the rock/sand interface and in low reef areas where turbulence suspends sediments. They actively cement suspended sand grains and particles to form extensive masses on rocks. In doing so, they also increase biological diversity and habitat for other invertebrates. Healthy colonies were observed between the low-tide zone and depths of -12 feet MLLW off both Topanga and Ratner beaches.

Gorgonians

Gorgonians (sea whips) (*Muricea californica* and *M. fruticose*) are colonial, suspension-feeding sessile invertebrates that attach to rocks in areas of moderate to high water movement. Gorgonians dominated the upper surfaces of the low-relief reefs at Topanga and Ratner beaches.

Aquatic Bed–Algae

Algae less than 3 feet in height, including turf covering and upright red and brown algae, is common to both Topanga and Ratner Beach subtidal habitats. Aquatic Bed–Algae provides cover as well as breeding and foraging habitat for invertebrates and fish. Giant kelp (*Macrocystis pyrifera*) is absent from both areas, although as recently as 2012 it formed a canopy off the Topanga point break in front of Topanga Creek and, to a much smaller degree, off Ratner Beach. Canopy-kelp, when present, is considered Essential Fish Habitat Area of Particular Concern. Other taller kelps (more than 3 feet high) are uncommon and include feather boa kelp and brown alga (*Desmarestia ligulate*). Invasive seaweeds present include brown algae, which was uncommon at Topanga and Ratner beaches during the 2023 dive surveys.

Aquatic Bed–Rooted Vascular (Surfgrass)

This habitat is present in the Topanga and Ratner Beach subtidal areas, extending from -2 feet to approximately -15 feet MLLW. Surfgrass beds found off Ratner Beach are larger and healthier than those found off Topanga Beach. This habitat was observed in low-relief habitat that was partially covered by sand as well as in higher relief Consolidated–Rock (Rubble) habitat. This habitat provides protective cover and nursery habitat for many invertebrates and fish, including the California spiny lobster (*Panulirus interruptus*), and is a designated EFH–Rocky Reef HAPC with a moderate-high value.

General Marine Resources

Fish

Thirteen species of fish were observed off Topanga and Ratner beaches in 2022 and 2023. In 2022, because of low visibility, only a few species were observed. Those observed over sand bottom habitat included pipefish (*Sygnathus leptorhynchus*), California halibut (*Paralichthys californicus*), speckled sand dab (*Citharichthys stigmaeus*), round stingray (*Urobatis californica*), barred sand bass (*Paralabrax nebulifer*), and spotted sand bass (*Paralabrax maculatofasciatus*). In rocky areas, painted greenlings (*Oxylebius pictus*) were present in the rocky habitat at the east end of the survey area. Additional species observed near rocky bottom habitat during the 2023 dive survey were kelp perch (*Brachyistius frenatus*), black perch (*Embiotoca jacksoni*), sargo

(*Anisotremus davidsonii*), kelp bass (*Paralabrax clathratus*), garibaldi (*Hypsypops rubicundus*), and horn sharks (*Heterodontus franciscanus*). Bait fish balls were frequently observed in both the sidescan sonar and downlooking sonar data. Most sightings were over sand bottom habitat.

Special-Status Marine Resources

Special-status species are those species that are federally, or state listed as endangered, threatened, proposed, and candidate species. The federally listed endangered tidewater goby (*Eucyclogobius newberryi*) is known to be present within Topanga Lagoon as well as the nearshore area when the creek is connected to the ocean; this species is discussed further in Section 3.3, *Biological Resources*. In addition, there can be state or local species of concern. For the purposes of this analysis, special-status marine species include:

- Marine and anadromous species that are listed or proposed for listing or are candidate species for listing as threatened or endangered by NMFS or USFWS pursuant to the FESA.
- Marine species listed as rare, threatened, or endangered by CDFW pursuant to the CESA.
- Marine species managed and regulated under the Magnuson-Stevens Act.
- Marine species protected under the MMPA of 1972.
- Marine species are managed and regulated by CDFW under the Nearshore Fishery Management Plan and the Market Squid Fishery Management Plan.
- Marine species designated by CDFW as California Species of Concern.
- Marine species not currently protected by statute or regulation but considered rare, threatened, or endangered under CEQA (CEQA Guidelines Section 15380).

The following special-status marine resources and managed fish species were identified during surveys: surfgrass, California spiny lobster, California grunion, California halibut, harbor seal (*Phoca vitulina*), and bottlenose dolphin (*Tursiops truncatus*). Special-status marine resources and managed fish species not observed but with a moderate or high potential to occur within the marine survey area are giant kelp, bocaccio (*Sebastes paucispinis*), green sea turtle (*Chelonia mydas*), and California gray whale (*Eschrichtius robustus*). Eelgrass (*Zostera pacifica*) beds do not occur within the Topanga Beach area; the nearest beds are located 7 miles to the west of Topanga Beach off Malibu at depths of approximately -26 to -33 feet MLLW.

Giant Kelp

Giant kelp is considered an HAPC under the Magnuson-Stevens Act. Giant kelp beds historically have been present on the reefs at the west end of Topanga Beach at depths of -5 to -40 feet MLLW and immediately east of Mastro's Point. These beds are located in CDFW Kelp Administrative Area #15. The kelp canopy has undergone major changes since 1989. Data analyzed from 2003 to 2016 indicate periods of extremely low surface canopy (2003–2009) followed by kelp maxima years (2010–2014), and a return to a period of low kelp surface canopy (2015–2016). No data are provided for 2017–2023. CRM did not observe any surface canopy of giant kelp during either the sidescan or dive surveys in August 2022 or during the July 2023 surveys; however, the hard bottom is favorable for reestablishment.

Surfgrass

Surfgrass is a non-listed, sensitive marine resource that occurs in rocky shoreline and rocky subtidal habitat. It provides protective cover and nursery habitat for many invertebrates and fish, some of which, such as the California spiny lobster, are commercially important (Engle 1979). It is considered a HAPC for fishery management plan species under the Magnuson-Stevens Act. Surfgrass has been a constant in the low intertidal field surveys within the CDFW database for Topanga Beach and was present intertidally in 1994 and 1997. It was subtidally present in 1974 and 1994 but absent in 1997. It was present in the lower intertidal zone at Topanga Beach in 2022, and subtidally offshore of Topanga Beach in 2022, but its distribution was only sporadic in the low relief and sand-influenced areas at depths of -15 feet MLLW. During 2023 dive surveys, surfgrass beds were observed at depths between -5 and -15 feet MLLW. It was not a major component of the rock bottom areas at Topanga Beach in 2022 or 2023, nor has it been historically. However, it was recorded east of Mastro's Point in surveys conducted between 1974 and 1997, and the 2023 dive surveys off of Ratner Beach confirmed that it is more abundant east of Mastro's Point than at Topanga Beach. Its depth distribution is between the lower intertidal zone and approximately -20 feet MLLW.

Invertebrate

California Spiny Lobster

California spiny lobsters are an important keystone predator in the Southern California nearshore ecosystem and support a valuable commercial fishery and a significant recreational fishery. On April 13, 2016, the California Fish and Game Commission adopted the final California Spiny Lobster Fishery Management Plan to guide future management of the fishery. As part of the fishery management plan, a Harvest Control Rule (HCR) is implemented to monitor the status of the fishery and prescribe adjustments in harvest regulations if necessary. California spiny lobsters comprise 3.1 percent of the total recreational catch from San Diego to Malibu Point.

Spiny lobsters were commonly found during the 2023 transect dives off both Topanga and Ratner beaches at depths between -5 and -15 feet MLLW. Individuals were sheltered in crevices but were also observed out in the open on reef surfaces and the sand bottom.

Fish

California Grunion

California grunions use the high intertidal sandy beach habitat of many Southern California beaches as spawning habitat (Walker 1952). They spawn along open coastal beaches between Cabrillo Beach and Malibu, using both Topanga Beach and the shoreline east of Mastro's Point (Ratner Beach) as spawning areas (Martin, pers. comm., 2023). This species is known to be present and use Topanga Beach for annual spawning; the species was documented on-site between 2020 and 2023 (Martin et al. 2021). Grunion are therefore assumed to be present within the nearshore and beach areas of the Proposed Project between March and August.

The grunion is a member of the silversides family, Atherinidae, along with the jacksmelt and topsmelt. They normally occur from Point Conception, California, to Point Abreojos, Baja

California. Occasionally, they are found farther north to Monterey Bay, California, and south to San Juanico Bay, Baja California. They inhabit the nearshore waters from the surf to a depth of 60 feet. The grunion is a non-migratory species. Grunions use the energy of waves to strand themselves onto sandy beaches generally over a three- to four-night period following the highest semi-lunar tides. Typically, grunion “runs” last about one to two hours (Walker 1952). Females dig themselves tail-first into wet sand. The males then curl around the females and deposit milt. Normally, the eggs develop above the water line, buried in moist sands, and are triggered to hatch in nine days at the high tide of the next new or full moon by waves that reach high enough on shore to wash out the sand and carry the eggs into the ocean (Walker 1952; Middaugh et al. 1983; Darken et al. 1998). If the eggs are washed out to sea during the next high tides, they hatch rapidly into free-swimming larvae (Walker 1952). If the waves do not reach the eggs, as happens frequently along the Southern California coast, the eggs are able to remain viable for at least two more weeks (Walker 1952) and up to 35 days (Darken et al. 1998). This period encompasses the next two highest semi-lunar tides. However, hatching success decreases over time (Darken et al. 1998).

Spawning occurs from March through August, and occasionally in February and September. Peak spawning period is between late March and early June. After July, spawning is erratic, and the number of fish observed in a grunion run greatly decreases (Walker 1952). The California grunion is not formally federally, or state listed as rare, threatened, or endangered. Sandy beaches, however, are considered sensitive habitat because of the potential conflict between grunion spawning and activities or processes that can damage eggs such as erosion, pollution, beach nourishment, harbor construction, debris removal, and beach grooming.

Marine Reptiles

Sea turtles are air-breathing marine reptiles with streamlined bodies and large flippers. These reptiles inhabit tropical and subtropical ocean waters. Of the seven species of sea turtles, six are found in U.S. waters, and all six species are afforded protection under FESA. Five species of sea turtle are known to occur in the nearshore waters off Southern California: the green sea turtle, the loggerhead sea turtle (*Caretta caretta*), the leatherback sea turtle (*Dermochelys coriacea*), the hawksbill sea turtle (*Eretmochelys imbricata*), and the olive ridley sea turtle (*Lepidochelys olivacea*). These five species have broad geographic ranges and are highly migratory. Green and loggerhead sea turtles are the most commonly encountered turtles nearshore in the Southern California Bight and have been known to occur off the Ventura County coastline, while the olive ridley sea turtle has been observed offshore of San Diego. There is no evidence that these species breed in Santa Monica Bay or the area between Santa Monica and Malibu.

Green sea turtle strandings have occurred in Santa Monica Bay, indicating that it is at least an occasional visitor. Among other observations, at least four green sea turtle strandings have been reported in Redondo Beach since the mid-1980s, three of which were entrainments at the Redondo Beach Generating Station within King Harbor. In 2017, one sea turtle was found floating dead in the water just offshore of Redondo Beach.

There is no information on specific sites within Santa Monica Bay that may be preferred by green sea turtles. Because adult green sea turtles are strictly herbivorous (Ernst et al. 1994), they spend most of their time feeding on algae and seagrasses that grow in shallow waters, which may be an attractant for individuals. While eelgrass is present along the Malibu coastline, it does not occur in the Topanga Beach Project area, although surfgrass does. Both plant species represent a possible food source for green sea turtles. In addition to eating plants, juvenile sea turtles eat other organisms such as jellyfish, crabs, sponges, snails, and worms. Given available habitat in the area, it is possible that a green sea turtle may pass by Topanga Beach, but it would be an extremely rare event.

Marine Mammals

Gray Whale

The eastern Pacific population of gray whale, including the gray whale in California, was removed from the federal Endangered Species List in 1994 because the species' population numbers had recovered to near the estimated sustainable population size. Gray whales traveling between their feeding grounds in Alaska and their breeding grounds in Baja California migrate through the Southern California Bight twice each year. Gray whales migrate within 125 miles of the shoreline and many are sighted within 9 miles of shore.

The southern migration between Point Conception and the Mexican border occurs from December through February, with pregnant females moving through the area first.

The northward migration begins in February, peaks in March, and lasts through May (Bonnell and Dailey 1993). Solitary animals generally lead the northbound migration, with cow-calf pairs following one to two months later (Foster and Schiel 1985). On the northbound migration, cow-calf pairs more closely follow the shoreline rather than the offshore route (Bonnell and Dailey 1993).

Gray whales have a moderate-to-high potential to be present offshore of Topanga Beach between December and May and individuals could be found nearshore near or passing through the Project area. The potential for individuals to be closer to shore is greatest between March and May, when some cow-calf pairs travel closer to shore on their northbound migration, sometimes as close as the surf zone. The vast majority of whales travel between Palos Verdes and Point Dume on a more direct route that bypasses the inshore waters of western Los Angeles County.

Bottlenose Dolphin

Bottlenose dolphins are found both offshore and in coastal waters, including harbors, bays, gulfs, and estuaries. In the United States, bottlenose dolphins are found along the West Coast off California, Oregon, and Washington; in the Hawaiian Islands; along the East Coast from Massachusetts to Florida; throughout the Gulf of Mexico; and in the Caribbean. Bottlenose dolphins can thrive in many environments and feed on a variety of prey such as fish, squid, crabs, and shrimp. This species was observed offshore of the Biological Study Area (BSA) during the 2023 subtidal surveys conducted by CRM.

Harbor Seal

Harbor seals are one of the most common marine mammals in temperate coastal habitats along the northern Atlantic and Pacific coasts of North America, Europe, and Asia. In western North America, they are found from Baja California to the Bering Sea. The harbor seal's diet consists mainly of fish, shellfish, and crustaceans. This species was observed offshore of the BSA during the 2023 subtidal surveys conducted by CRM.

Managed Fish Species

The Proposed Project is located in an area designated as EFH for the Pacific Groundfish Fishery Management Plan (PFMC 2016). The fishery management plan lists 107 fish species, eight fish species groups, one invertebrate species, and two invertebrate groups as managed or as ecosystem component species. Of the 107 fish species, only two fish species, bocaccio and California halibut, have the potential to occur in the area of the Proposed Project.

Bocaccio

Bocaccio are found throughout Southern California reef and soft bottom habitats. While they are typically found at depths below 60 feet, some fish, especially juveniles, can occasionally be found at shallower depths. Bocaccio populations are endangered in the Northwest, but the species is common in California and is a federal Groundfish Fishery Management Plan species. Bocaccio are caught both commercially and recreationally. They have a moderate potential to be in the general area off Topanga Beach, but they are unlikely to be present in the Topanga sediment nourishment project area because of a lack of quality reef habitat.

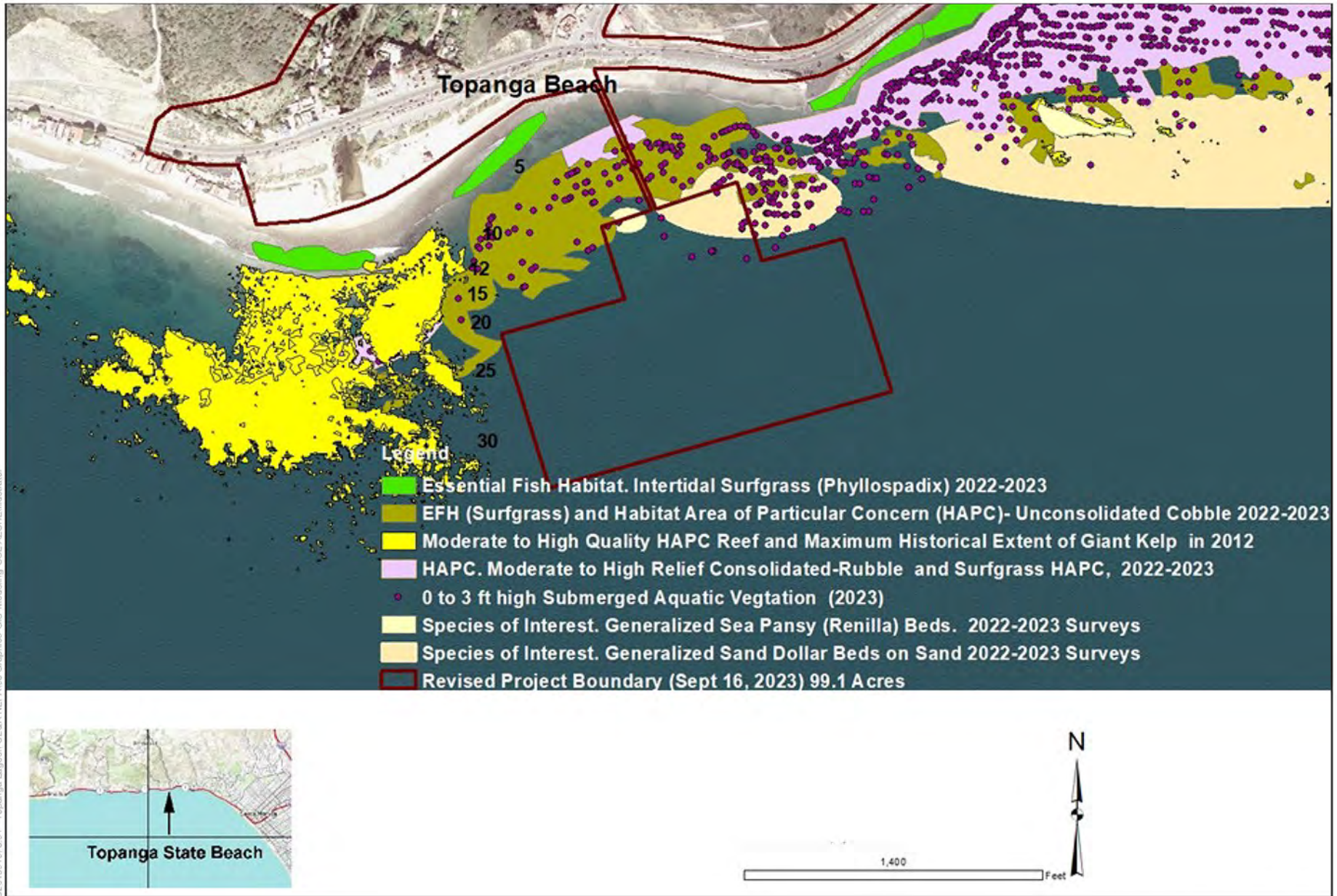
California Halibut

California halibut was observed during CRM surveys and can occur in the shallow sandy-bottom habitats of the Project area (**Appendix K**). The California halibut does not have a formal special-species status, but it is considered a sensitive species by resource agencies because of both its commercial value and a continued region-wide reduction of its nursery habitat in bays and wetlands. Through the Marine Life Management Act, the California Fish and Game Commission regulates the fishery in state waters, and CDFW manages this fishery through the Northern and Central California Finfish Research and Management Project.

Areas of Special Biological Significance

The SWRCB designates Areas of Special Biological Significance (ASBS) for the protection of species or biological communities where alteration of natural water quality is undesirable. In total, 34 ocean areas are monitored and maintained for water quality by the SWRCB. These areas cover much of the length of California's coastal waters and support an unusual variety of aquatic life, and they often host unique individual species (**Figure 3.11-3**).

The coastline from Mugu Lagoon south to Latigo Point is included in the Mugu Lagoon–Latigo Point ASBS (SWRCB 2018). Other ASBSs in the region include the San Clemente Island Area and Santa Catalina Island Area. All ASBS are outside of the area of the Proposed Project.



SOURCE: Resource Conservation District

Topanga Lagoon Restoration Project

Figure 3.11-3
Marine Special-Status Habitats and Species of Interest



Parks, Sanctuaries, and Significant Ecological Areas

Areas of ecological importance, such as parks, sanctuaries, or Significant Ecological Areas (SEAs), may be designated by state or local agencies to enhance public awareness and provide a level of protection to local resources. State Parks include preservation and protection of natural resources as part of its management responsibilities. At a local level, counties or cities may also designate status to local resources. The Project area falls within the Santa Monica Mountains National Recreation Area.

Marine Protected Areas

The Marine Life Protection Act is intended to protect the natural diversity and abundance of marine life and marine ecosystems in California. There are three types of marine protected areas designated (or recognized): State Marine Reserves, State Marine Parks, and State Marine Conservation Areas. No marine protected areas are located along the shoreline or within the nearshore coastal waters of the Project area. The closest marine protected area is located at Point Dume to the west in Los Angeles County.

Environmentally Sensitive Habitat Areas

The California Coastal Act defines an Environmentally Sensitive Habitat Area (ESHA) as “any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.” The only ESHA documented in the area of the Proposed Project in 2023 is surfgrass, but canopy kelp has been documented in the past and has a potential to be present in the future.

Critical Habitat in Marine Study Area

The beaches and shoreline in the area of the Proposed Project are designated as federal Critical Habitat for the Southern California steelhead (*Oncorhynchus mykiss*) distinct population segment (DPS) and the tidewater goby. Critical habitat for tidewater goby and Southern California steelhead is discussed further in Section 3.3, *Biological Resources*. See **Figure 3.3-4, Designated Critical Habitat**.

In July 2023, the National Oceanic and Atmospheric Administration (NOAA) proposed critical habitat for the green sea turtle in nearshore waters (from the mean high-water line to 20 meters depth), including the U.S. West Coast. The proposed critical habitat covers a large amount of the nearshore water habitat in the Southern California region between the Mexican border and Santa Monica Bay, including the entire Topanga Beach Project area (**Figure 3.11-4**).



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Topanga Lagoon Restoration Project

Figure 3.11-4
Proposed Critical Habitat for Green Sea Turtle

Essential Fish Habitat

EFH encompasses all types of aquatic habitat, including wetlands, coral reefs, seagrasses, and rivers, where fish breed, spawn, feed, and grow to maturity. NOAA and the regional Fishery Management Councils identify EFH for all life stages of every federally managed fish species. Under the provisions of Magnuson-Stevens Act Section 305(b), consultation with NMFS for impacts on EFH is required only for projects with a federal nexus, which, for the Proposed Project, is through the Clean Water Act Section 404 and Rivers and Harbors Act Section 10 permit issued by USACE. The Proposed Project is located within the Pacific Region for the Pacific Groundfish Fishery Management Plan.

Invasive Aquatic Species

The introduction of invasive aquatic species is one of the greatest threats to subtidal and intertidal habitats within the nearshore coastal waters and estuaries of California. The introduction of non-native species can result in large-scale changes to aquatic communities. California's estuaries, in particular, have become home to many non-native or introduced species that have dominated local intertidal and subtidal marine communities. The following invasive species were documented: the brown algae *Sargassum muticum*, the red algae *Caulacanthus ustulatus*, the mussel *Mytilus galloprovincialis*, and the bryozoan (ectoproct) *Bugulina neritina*. In addition, the brown algae *Undaria pinnatifida* could potentially occur. Other invasive species that have not been found near Topanga Beach but are known to be potential threats to the marine and estuarine environment include the green algae *Caulerpa taxifolia* and *Caulerpa prolifera*.

3.11.3 Environmental Consequences

The criteria used to determine the potential significance of impacts related to marine resources are based on Appendix G of the CEQA Guidelines, Environmental Checklist form. The issues presented in the environmental checklist for marine biological resources have been considered and tailored as applicable for use as thresholds of significance in this section. In addition to the CEQA Guidelines Appendix G thresholds, the following Project thresholds have been taken into consideration: the Governor's Office of Planning and Research's *CEQA Guidelines Preliminary Discussion Draft* (released August 11, 2015) and the *California Ocean Plan Final Amendment* (released in May 2015).

Based on these statutory, regulatory, and guidance provisions, the Proposed Project would have a significant adverse environmental impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, including direct disturbance, removal, filling, hydrological interruption, or discharge, on any species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, EFH) or as identified by CDFW, USFWS, or NMFS. (Refer to Impact MARINE-M 3.11-1.)
- Threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels. (Refer to Impact MARINE 3.11-2.)

- Interfere substantially with the movement of any native resident or migratory fish or marine wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native marine wildlife nursery sites. (Refer to Impact MARINE 3.11-3.)
- Introduce or spread an invasive aquatic species. (Refer to Impact MARINE 3.11-4.)

This section provides an overview of the anticipated impacts on marine resources for each alternative for the construction phase, with a particular focus on the effects of sediment placement on nearshore marine communities. No operational activities are expected to occur within the nearshore marine communities. The significance of these impacts is described, as are the mitigation measures to be implemented to reduce impacts to a less-than-significant level.

Impacts on upland, brackish, and freshwater components of the Proposed Project—the bridge improvements, lagoon restoration, the improvement and enhancement of facilities along the beach and within Topanga State Park, programmatic Topanga State Park visitor services, and wastewater treatment system upgrades—are not addressed in this section. See Section 3.3, *Biological Resources*, for potential impacts on the upland, brackish, and freshwater resources in the Project area.

The following regulatory approvals are required before implementation of the Proposed Project. These approvals would facilitate the implementation of measures to avoid or minimize the Proposed Project’s impacts on marine biological resources.

Section 404 Clean Water Act and Section 10 Rivers and Harbors Act permits from USACE, and a **Section 401 water quality certification** from the Los Angeles Regional Water Quality Control Board are required. Before restoration activities involving impacts on wetlands or waters, State Parks would obtain the appropriate permits from USACE and the Los Angeles Regional Water Quality Control Board and would implement the permit conditions.

Section 7 consultation under the FESA with NMFS/NOAA is required to avoid and minimize effects on green sea turtle and steelhead trout, and proposed and designated critical habitat for these species, respectively. The Proposed Project’s compliance measures may include additional or modified requirements by NMFS/NOAA, as identified during the Section 7 consultation process. The conservation measures required by the agencies during the consultation would be implemented.

A coastal development permit (CDP) pursuant to the California Coastal Act from the CCC is required. Before restoration activities involving impacts on coastal wetlands or waters, State Parks would obtain a consolidated CDP and implement the permit conditions. Pursuant to Section 22.44.1950 et seq. of the LIP, State Parks would consult with the CCC, Caltrans, and the County to confirm that the Proposed Project would provide an adequate amount of on-site natural habitat creation and enhancement to offset any impacts on coastal wetlands/waters and/or ESHA. In the event additional mitigation actions or acreages are required for coastal wetlands and waters and/or ESHA, State Parks would coordinate with CCC, Caltrans, the County, and the City of Malibu to identify on-site or off-site opportunities.

Approval from the Southern California Dredged Material Management Team is required for placement of material in the nearshore area. In addition, a permit from the California State Lands Commission is likely required because the placement of material in the nearshore area would occur within submerged lands.

Special-Status Marine Species

MARINE 3.11-1: The Project could have a substantial adverse effect, either directly or through habitat modifications, including direct disturbance, removal, filling, hydrological interruption, or discharge, on any species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, EFH) or as identified by CDFW, USFWS, or NMFS. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions would remain as is for marine habitats, hydrological conditions, natural communities, and candidate, sensitive, or special-status marine resources. Therefore, under Alternative 1, no construction or operational impacts on these sensitive marine resources would occur; however, existing limitations on fish passage and limited refugia habitat would continue to affect tidewater gobies and southern steelhead trout.

Alternatives 2, 3, and 4 (Build Alternatives)

The Proposed Project's potential impacts on marine habitats, hydrologic conditions, natural communities, and candidate, sensitive, or special-status marine resources would be similar under all Build Alternatives (Alternatives 2, 3, and 4). The Proposed Project could provide up to 156,000-256,000 CY of suitable grain size material to renourish severely eroded areas between Mastro's Point and Will Rogers State Beach. The bottom substrate within the proposed placement area is primarily sand and the range of contours facilitates transport downcoast. The actual methods of placing materials within the nourishment area would be dictated by modeled dispersal and degradation rates, potential for turbidity, placement geometry, and the intent to minimize impacts on Essential Fish Habitat and other sensitive marine habitats (Refer to the *Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration* Appendix C).

Six special-status marine species, managed fish species, and ESHAs are present in the Project area: surfgrass habitat, California spiny lobster, California grunion, California halibut, harbor seal, and bottlenose dolphin. Additional not observed species but have a moderate to high potential to occur include giant kelp, bocaccio, green sea turtle, and California gray whale.

The Proposed Project includes nearshore sediment placement. The identified recipient site is located primarily in lower-quality sand habitat; however, the potential exists for substantial adverse effects on special-status marine species or managed fish species and their habitats through direct sediment placement or subsequent littoral drift. Hard-bottom habitats would be more susceptible to being buried, which could cause species mortality for plants or sessile organisms. Temporary habitat degradation or habitat loss may occur, which may include temporary effects on proposed critical habitat for green sea turtles, EFH, and ESHA.

Mitigation Measure MAR-1 would be implemented to reduce potential direct impacts related to habitat loss and species mortality. This measure requires that preconstruction surveys be conducted to ensure that sediment is not placed on hard-bottom habitats or on other sensitive

marine resources. It also requires that appropriate sediment placement methods be followed to control sediment flow and placement, thus ensuring even placement and natural wildlife movement throughout the nearshore Project area.

Mitigation Measure MAR-1 also would be implemented to reduce other potential direct impacts of sediment placement activities, which include damage to marine habitats caused by pipeline placement and the anchoring of support vessels. This measure includes pipeline placement requirements, requirements related to the anchoring of support vessels, and the presence of a qualified marine biologist to monitor these activities and ensure compliance. With implementation of this mitigation measure, impacts of Proposed Project construction on special-status marine species and their habitat would be less than significant.

Although giant kelp is not currently present in the Project area and would not be directly affected by sediment placement activities, giant kelp is present down current and could be indirectly affected by turbidity and sedimentation that affect sporophyll production (Foster and Schiel 1985). Surfgrass can also be indirectly affected by turbidity and reduced light levels. This species is also found in the Project area and should be avoided. **Mitigation Measure MAR-1** would be implemented to reduce these potential direct and indirect impacts related to sediment placement activities. This measure requires that preconstruction surveys be conducted to ensure that sediment is not placed on surfgrass, kelp bed habitats, or other sensitive marine resources. It also requires that appropriate sediment placement methods be followed to minimize turbidity and sedimentation effects on nearshore and adjacent nearshore habitats outside of the Project area.

California grunion is known to spawn along Topanga Beach. California grunion could be directly affected during sediment placement activities, through direct mortality of egg masses and potential temporary loss of suitable spawning habitat. The temporary loss of spawning habitat could potentially be a significant impact if the placement activities were to occur during California grunion spawning season (usually late February through July) and if the sediment placement equipment were located below the mean high-tide line. **Mitigation Measure MAR-2** would be implemented to avoid potential significant impacts on California grunion during Proposed Project construction. This measure requires the Proposed Project to avoid sediment placement activities during the spawning season and ensure that sediment placement equipment and activities remain above the mean high-tide line, or that the equipment be installed and not need to be maintained until after the spawning season. With implementation of this mitigation measure, impacts of Proposed Project construction on California grunion would be less than significant.

California spiny lobster, bocaccio, California halibut, green sea turtle, harbor seal, bottlenose dolphin, and California gray whale are unlikely to be directly affected by the sediment placement activities as they could move out of harm's way. The Proposed Project could increase the use of support vessel traffic, which could indirectly affect green sea turtle, harbor seal, bottlenose dolphin, and California gray whale, but would represent a small increase in the normal vessel traffic present in the nearshore Project area. Hence, the support vessel movements required for the sediment placement activities would not be expected to significantly increase the risk of vessel

collisions. California spiny lobsters may be temporarily displaced until rock surfaces or crevices resurface from the sand as a result of the migration of natural sediment. In addition, some habitats used by green sea turtle, bocaccio, and California halibut may be temporarily disturbed, but the sediment placement activities affecting the marine habitats would be restricted to short-term, localized impacts, and recolonization of the disturbed habitat is expected to occur shortly after construction is completed.

Mitigation Measures

MAR-1: Marine Resources Protection Measures. The following measures will be implemented to protect and minimize impacts on special-status marine species or managed fish species and their habitats during construction. Additional measures required by regulatory agencies as part of Project approvals will also be incorporated. When a conflict exists between specific measures, the most protective measure will be implemented.

1. Before the initiation of Project construction, focused surveys will be conducted for marine biological habitats and communities within a suitable buffer of the shoreline and the nearshore nourishment area (including the proposed pipeline corridor) to identify marine resources and potential Project impacts. Consultation with the resource agencies will occur to implement the best methods for avoiding and minimizing resource impacts.
2. Placement of pipeline will avoid rocky intertidal boulder fields, subtidal rocky reefs, surfgrass beds, kelp beds, gorgonian and sandcastle tubeworm beds, and sand dollar beds, if present, to the maximum extent feasible. If possible, risers will be used to avoid impacts on these areas or pipelines will be rerouted into sand channels.
3. Support vessels will avoid anchoring over hard-bottom habitat to minimize damage to sensitive habitat and surfgrass beds.
4. Only clean sediment will be used to enrich nearshore environments. Sediment will be sampled and disposed off site if deemed unclean.
5. Sediment placement methods will include controlling the flow of sediment into different parts of the nearshore nourishment area to allow natural movement of material and minimize direct burial and mortality of sensitive marine resources. Sediment placement should be conducted farther from shore to reduce the depth of sediment deposition down the coast.
6. A qualified monitor will monitor the placement of marine equipment and structures, including support vessels, to ensure that sensitive marine resources are avoided to the extent practicable and are in compliance with all resource agency permits. If marine resources are threatened by Project activities, the qualified monitor will have the authority to stop work until resource agency consultation occurs and the threat has been resolved,

MAR-2: Avoidance of California Grunion Spawning Season. The following measures will be implemented to protect and minimize impacts on California grunion spawning season (March through August) during construction.

1. Bright lights at night will not be permitted. To avoid spawning impacts, night lighting on the beach face would be avoided during spawning season.

2. Construction will avoid work within 10 feet of the higher high-tide line (as represented by the highest limit of dry wrack), as this area can be used for grunion spawning. If avoidance of this area during construction is infeasible, a qualified biologist will permit work within the avoidance zone only if it can be confirmed that spawning has not occurred in that area since the last full or new moon. Spawning runs can be forecast within four nights after a full or new moon, at the highest tides and for two hours beyond. If significant spawning is documented, the areas should be marked and protected from disturbance until the next full or new moon.
3. Grunion monitoring will be conducted by a qualified biologist for 30 minutes before and two hours after the predicted start of each nightly spawning event. Sufficient qualified biologists shall be employed to ensure that the entire construction site is monitored during the predicted grunion run. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale. Every individual fish shall be counted to determine the Walker Scale value (e.g., 0, 1, 2, 3, 4, or 5) of each 300-foot segment within the proposed work area.
4. Education programs developed for the Project shall incorporate grunion to both minimize and mitigate impacts on grunion associated with the anticipated increase in beach use and provide regional educational resources about the grunion that addresses a gap in statewide programs. Recommended elements include:
 - i. Post interpretive signage that provides information about grunion, rules and regulations for recreational fishing, and ways to protect the species.
 - ii. Develop and implement grunion run education programs similar to those in place at Cabrillo Beach in San Pedro with the Cabrillo Marine Aquarium, and at La Jolla Shores with the Birch Aquarium at Scripps.
5. The following management measures shall be implemented after construction:
 - i. To retain the natural deposition of wrack along the beach, mechanical beach grooming will not occur on-site. Trash and debris should be removed by hand as necessary.
 - ii. Vehicle use on the beach shall be limited to that required for emergency response and occasional required maintenance. All vehicles must drive above the higher high-tide line during March–September unless no grunion spawning occurred in the task location during the last full or new moon.

Significance Determination

Less than Significant with Mitigation Incorporated

Loss of a Marine Plant or Animal Community

MARINE 3.11-2: The Project could threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions would remain as is for marine plant or animal wildlife communities and fish or marine wildlife populations. Therefore, under Alternative 1, no construction or operational impacts related to existing marine plant or animal wildlife communities and fish, or marine wildlife populations would occur; however, existing conditions

would continue to limit fish passage opportunities for southern steelhead trout and limit refugia habitat for tidewater goby.

Alternatives 2, 3, and 4 (Build Alternatives)

The Proposed Project's potential impacts on marine habitats, hydrologic conditions, natural communities, and candidate, sensitive, or special-status marine resources would be similar under all Build Alternatives (Alternatives 2, 3, and 4). The Proposed Project could provide up to 156,000-256,000 CY of suitable grain size material to renourish severely eroded areas between Mastro's Point and Will Rogers State Beach. The bottom substrate within the proposed placement area is primarily sand and the range of contours facilitates transport downcoast. The actual methods of placing materials within the nourishment area would be dictated by modeled dispersal and degradation rates, potential for turbidity, placement geometry, and the intent to minimize impacts on Essential Fish Habitat and other sensitive marine habitats (Refer to the *Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration Appendix C*).

The Proposed Project's sediment placement activities are not expected to result in a loss or substantial decrease in population numbers of marine fish, mammals, invertebrates, or sea turtles that are all mobile organisms; see Impact MARINE 3.11-1. Therefore, populations of these organisms are not expected to fall below self-sustaining levels. The organisms and species inhabiting the Project area are common throughout the coastline. As also described in Impact MARINE 3.11-1, the Project design is anticipated to avoid sensitive marine resources such as surfgrass and kelp beds during construction activities. The common organisms are expected to reestablish themselves and return to pre-disturbance distributions and species compositions shortly after disturbance. The Proposed Project would result in a temporary loss of the invertebrates inhabiting areas in and on the seafloor sediments, but as noted in the preceding discussion, they are not expected to fall below self-sustaining levels given the duration and level of sediment placement activities.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Movement of Marine Organisms

MARINE 3.11-3: The Project could interfere substantially with the movement of any native resident or migratory fish or marine wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native marine wildlife nursery sites.

Impacts would be less than significant.

Alternative 1 (No Build)

Under Alternative 1, existing conditions would remain as is for native resident or migratory fish or marine wildlife species, native marine wildlife nursery sites, and established native resident or migratory wildlife corridors. Existing conditions currently limit fish passage opportunities for southern steelhead trout and limit refugia habitat for tidewater goby. Therefore, under Alternative

1, no construction or operational impacts would occur related to existing native resident or migratory fish or marine wildlife species, native marine wildlife nursery sites, and established native resident or migratory wildlife corridors.

Alternatives 2, 3, and 4 (Build Alternatives)

The Proposed Project's potential impacts on marine habitats, hydrologic conditions, natural communities, and candidate, sensitive, or special-status marine resources would be similar under all Build Alternatives (Alternatives 2, 3, and 4). The Proposed Project could provide up to 156,000-256,000 CY of suitable grain size material to renourish severely eroded areas between Mastro's Point and Will Rogers State Beach. The bottom substrate within the proposed placement area is primarily sand and the range of contours facilitates transport downcoast. The actual methods of placing materials within the nourishment area would be dictated by modeled dispersal and degradation rates, potential for turbidity, placement geometry, and the intent to minimize impacts on Essential Fish Habitat and other sensitive marine habitats (Refer to the *Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration* Appendix C).

As discussed under Impact MARINE 3.11-1 (Special-Status Marine Species), sediment placement impacts could result from pipeline construction, sediment placement, or the anchoring of support vessels. These temporarily altered areas are expected to return to preconstruction conditions through the migration of natural sediment to the surrounding area and recolonization within months to a few years, depending on the sediment placement area and sediment discharge amount. Impacts on the marine habitats would be short term and localized and recolonization of the disturbed habitat is expected to occur shortly after construction is completed; therefore, potential impacts on marine habitat, including temporary loss of fish or marine mammal foraging habitat, would also be less than significant. Additionally, the amount of time a swimming fish, fish larva, marine mammal, or sea turtle might spend transiting the Project area would be relatively short, and the Proposed Project's sediment deposit activities would not be expected to pose any restriction or limitation to their movement. Therefore, this impact would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Invasive Aquatic Species

MARINE 3.11-4: The Project could introduce or spread an invasive aquatic species. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions would remain as is for invasive aquatic species. Current invasive species would continue to be present and may expand within the Project area. Therefore, under Alternative 1, no additional construction or operational impacts related to invasive aquatic species would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

The Proposed Project's potential impacts on marine habitats, hydrologic conditions, natural communities, and candidate, sensitive, or special-status marine resources would be similar under all Build Alternatives (Alternatives 2, 3, and 4). The Proposed Project could provide up to 156,000-256,000 CY of suitable grain size material to renourish severely eroded areas between Mastro's Point and Will Rogers State Beach. The bottom substrate within the proposed placement area is primarily sand and the range of contours facilitates transport downcoast. The actual methods of placing materials within the nourishment area would be dictated by modeled dispersal and degradation rates, potential for turbidity, placement geometry, and the intent to minimize impacts on Essential Fish Habitat and other sensitive marine habitats (Refer to the *Nearshore Dispersal Modeling for Sediment Beneficial Reuse for Topanga Lagoon Restoration Appendix C*).

The Proposed Project would include the use of support vessels to place the pipeline required to conduct sediment deposition activities. Many non-native and invasive species are introduced by vessels and boats, either as encrusted organisms on the hulls or on other submerged parts of the vessels, or when ballast water is discharged from the vessels. The introduction of such species could permanently alter aquatic communities, including through changes in species composition or relationships among species recognized for their scientific, recreational, ecological, or commercial importance. Ultimately, changes in these communities could prevent the re-establishment of native biological populations. Support vessels from outside of Southern California or docked at ports and harbors are typically most vulnerable to invasive species.

All shipping operations that involve major marine vessels are subject to the Marine Invasive Species Act of 2003 (PRC Sections 71200–71271), which revised and expanded the California Ballast Water Management for Control of Non-Indigenous Species Act of 1999 (AB 703). The California State Lands Commission administers this law. The Marine Invasive Species Act regulates the handling of ballast water from marine vessels arriving at California ports to prevent or minimize the introduction of invasive species from other regions. Despite these limitations, support vessels could spread invasive marine species through ballast water and biofouling, which would pose a risk to marine habitats and marine biota, including special-status species, and thus would pose a significant impact. **Mitigation Measure MAR-3** would be implemented to minimize the Proposed Project's potential contribution to the spread of invasive species and reduce any resulting adverse impact on marine biological resources to less than significant with mitigation.

Mitigation Measures

MAR-3: Invasive Aquatic Species Control Measure. All Project support vessels will have underwater surfaces cleaned before entering Southern California waters and immediately before transiting to the offshore construction area. Additionally, and regardless of vessel size, ballast water for all Project vessels will be managed consistent with the California State Lands Commission's ballast management regulations, and Biofouling Removal and Hull Husbandry Reporting Forms will be submitted to State Lands Commission staff.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

MARINE 3.9-5: The Project could result in a cumulatively considerable impact on marine resources. *Impacts would be less than significant with mitigation incorporated.*

This discussion presents an analysis of the cumulative effects of the Proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts on marine resources. Significant cumulative impacts on marine resources could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more of the cumulative projects identified in Table 3-1 would be cumulatively considerable. Altering benthic habitat and associated infaunal and epifaunal communities can be expected to result in the temporary loss or reduction of habitat suitable for fish foraging, including any special-status fish species utilizing the Proposed Project's marine study area. However, the Project area is expected to return to preconstruction conditions through the migration of natural sediment to the surrounding area and recolonization within months to a few years, depending on the sediment deposit area and sediment discharge amount.

The increased presence of vessels and their movements can also be expected to pose additional risks to marine mammals, caused by surface and underwater noise, the potential for collisions with marine mammals or sea turtles, and the preclusion of commercial fishing activities. However, vessel movements required for the proposed sediment placement construction activities would not be expected to substantially increase the risk of vessel collisions. The use of supporting vessels from outside of Southern California for the offshore construction activities could be potential vectors for introducing invasive aquatic species to the Project area.

Species temporarily disturbed by ocean construction are expected to recover relatively quickly; therefore, the Proposed Project would result in less-than-significant impacts related to the loss of a marine organism community. Because alteration of marine habitats from the Proposed Project would not be substantial, impacts on the movement of marine species within wildlife corridors or marine nursery sites would be less than significant. Implementation of Mitigation Measures MAR-1 through MAR-3, would ensure that marine resources are not cumulatively affected from construction. Therefore, when considering the Proposed Project and other cumulative projects in the area, the incremental effect on cumulative marine resources of the Proposed Project would not be cumulatively considerable and would not result in a significant cumulative impact on marine resources.

Mitigation Measures

Implement **Mitigation Measures MAR-1, MAR-2, and MAR-3** (see Impacts MARINE 3.11-1 and MARINE 3.11-3).

Significance Determination

Not Cumulatively Considerable with Mitigation Incorporated

3.11.4 Summary of Impacts

Table 3.11-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to marine biological resources. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.11-1
SUMMARY OF PROPOSED PROJECT IMPACTS ON MARINE BIOLOGICAL RESOURCES**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
MARINE 3.11-1: Special-Status Marine Species	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measure MAR-1, MAR-2	LTSM
	Programmatic Topanga State Park Visitor Services	Refer to Section 3.3, <i>Biological Resources</i>	—
MARINE 3.11-2: Loss of a Marine Plant or Animal Community	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	Refer to Section 3.3, <i>Biological Resources</i>	—
MARINE 3.11-3: Movement of Marine Organisms	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	Refer to Section 3.3, <i>Biological Resources</i>	—
MARINE 3.11-4: Invasive Aquatic Species	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measure MAR-3	LTSM
	Programmatic Topanga State Park Visitor Services	Refer to Section 3.3, <i>Biological Resources</i>	—
MARINE 3.11-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives)	Mitigation Measure MAR-1 through MAR-3	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less-than-Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

3.11.5 References

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3.12 Noise and Vibration

This section evaluates the potential for noise and groundborne vibration impacts that may result from construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to noise and vibration; an overview of the fundamental principles of noise and vibration and describes the existing noise environment in the Project vicinity; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to noise and vibration.

Noise Principles and Descriptors

An understanding of the physical characteristics of noise is useful for evaluating environmental noise impacts. The methods and metrics used to quantify noise exposure, human response, and relative judgment of loudness are also discussed, and noise levels of common noise environments are presented.

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity and interferes with or disrupts normal activities. The effects of noise on people can be grouped into four general categories:

- Subjective effects (dissatisfaction, annoyance).
- Interference effects (communication and sleep interference, learning).
- Physiological effects (startle response).
- Physical effects (hearing loss).

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and amplitude. Frequency describes the sound's pitch (tone) and is measured in cycles per second (Hertz [Hz]), while amplitude describes the sound's pressure (loudness). Because the range of sound pressures that occurs in the environment is extremely large, it is more convenient to express these pressures on a logarithmic scale that compresses the wide range of pressures into a more useful range of numbers. The standard unit of sound measurement is the decibel (dB). Hz is a measure of how many times each second the crest of a sound pressure wave passes a fixed point. For example, when a drummer beats a drum, the skin of the drum vibrates a given number of times per second. If the drum vibrates 100 times per second, it generates a sound pressure wave that is oscillating at 100 Hz, and this pressure oscillation is perceived by the ear/brain as a tonal pitch of 100 Hz. Sound frequencies between 20 and 20,000 Hz are within the range of sensitivity of the healthy human ear.

Sound levels are expressed by reference to a specified national/international standard. The sound pressure level is used to describe sound pressure (loudness) and is specified at a given distance or specific receptor location. In expressing sound pressure level on a logarithmic scale, sound pressure (dB) is referenced to a value of 20 micropascals (μPa). Sound pressure level depends not

only on the power of the source but also on the distance from the source to the receiver and the acoustical characteristics of the sound propagation path (absorption, reflection, etc.).

Outdoor sound levels decrease logarithmically as the distance from the source increases. This decrease is due to wave divergence, atmospheric absorption, and ground attenuation. Sound radiating from a source in a homogeneous and undisturbed manner travels in spherical waves. As the sound waves travel away from the source, the sound energy is dispersed over a greater area, decreasing the sound pressure of the wave. Spherical spreading of the sound wave from a point source reduces the noise level at a rate of 6 dB per doubling of distance in a soft medium such as air.

Atmospheric absorption also influences the sound levels received by an observer. The greater the distance traveled, the greater the influence of the atmosphere and the resultant fluctuations. Atmospheric absorption becomes important at distances greater than 1,000 feet. The degree of absorption varies depending on the frequency of the sound as well as the humidity and temperature of the air. For example, atmospheric absorption is lowest (i.e., sound carries farther) at high humidity and high temperatures, and lower frequencies are less readily absorbed (i.e., sound carries farther) than higher frequencies. Over long distances, lower frequencies become dominant as the higher frequencies are more rapidly attenuated. Turbulence, gradients of wind, and other atmospheric phenomena also play a significant role in determining the degree of attenuation. For example, certain conditions, such as temperature inversions, can channel or focus the sound waves, resulting in higher noise levels than would result from simple spherical spreading.

Sound from a tuning fork contains a single frequency (a pure tone), but most sounds in the environment do not consist of a single frequency. Instead, they are a broad band of many frequencies differing in sound level. Because of the broad range of audible frequencies, methods have been developed to quantify these values into a single number representative of human hearing. The most common method used to quantify environmental sounds consists of evaluating all frequencies of a sound according to a weighting system that is reflective of human hearing characteristics. Human hearing is less sensitive at low frequencies and extremely high frequencies than at the mid-range frequencies. This process is termed “A weighting,” and the resulting dB level is termed the A-weighted decibel (dBA).

Because A-weighting is designed to emulate the frequency response characteristics of the human ear and reflect the way people perceive sounds, it is widely used in local noise ordinances and state and federal guidelines, including those of the State of California and Los Angeles County. Unless specifically noted, the use of A-weighting is always assumed with respect to environmental sound and community noise, even if the notation does not include the “A.”

In terms of human perception, a sound level of 0 dBA is the threshold of human hearing and is barely audible by a healthy ear under extremely quiet listening conditions. This threshold is the reference level against which the amplitude of other sounds is compared. Normal speech has a sound level of 60 dBA at a distance of 3 feet. Sound levels above about 120 dBA begin to be felt inside the human ear as discomfort, progressing to pain at still higher levels. Humans are much

better at discerning relative sound levels than absolute sound levels. The minimum change in the sound level of individual events that an average human ear can detect in an outdoor environment is about 1 to 3 dBA. A 3 to 5 dBA change is readily perceived. An increase (or decrease) in sound level of about 10 dBA is usually perceived by the average person as a doubling (or halving) of the sound's loudness.

Because of the logarithmic nature of the decibel, sound levels cannot be added or subtracted directly. However, some simple rules are useful in dealing with sound levels. First, if a sound's acoustical energy is doubled, the sound level increases by 3 dBA, regardless of the initial sound level (e.g., 60 dBA + 60 dBA = 63 dBA; 80 dBA + 80 dBA = 83 dBA). However, an increase of 10 dBA is required to double the perceived loudness of a sound, and a doubling or halving of the acoustical energy (a 3 dBA difference) is at the lower limit of readily perceived change.

Although dBA may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most ambient environmental noise includes a mixture of noise from nearby and distant sources that creates an ebb and flow of sound, including some identifiable sources plus a relatively steady background noise in which no particular source is identifiable. A single descriptor, termed the equivalent continuous sound level (L_{eq}), is used to describe sound that is constant or changing in level. L_{eq} is the energy-mean dBA during a measured time interval. It is the "equivalent" sound level produced by a given constant source equal to the acoustic energy contained in the fluctuating sound level measured during the interval. In addition to the energy-average level, it is often desirable to know the acoustic range of the noise source being measured. This is accomplished through the maximum instantaneous (L_{max}) and minimum instantaneous (L_{min}) noise level indicators that represent the root-mean-square maximum and minimum noise levels measured during the monitoring interval. The L_{min} value obtained for a particular monitoring location is often called the acoustic floor for that location.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{10} , L_{50} , and L_{90} may be used; these represent the noise levels equaled or exceeded during 10 percent, 50 percent, and 90 percent of the measured time interval, respectively. Sound levels associated with L_{10} typically describe transient or short-term events, L_{50} represents the median sound level during the measurement interval, and L_{90} levels are typically used to describe background noise conditions.

The Day-Night Average Sound Level (L_{dn}) represents the average sound level for a 24-hour day and is calculated by adding a 10 dBA adjustment to sound levels during the night period (10:00 p.m. to 7:00 a.m., the sleeping hours). The L_{dn} is the descriptor of choice and used by nearly all federal, state, and local agencies throughout the United States to define acceptable land use compatibility with respect to noise. Within California, the community noise equivalent level (CNEL) is often used in lieu of the L_{dn} scale. CNEL is very similar to L_{dn} , except that an additional 5 dBA adjustment is applied to the evening hours (7:00 p.m. to 10:00 p.m., the relaxation hours). Because of the time-of-day penalties associated with the L_{dn} and CNEL descriptors, the dBA value of L_{dn} or CNEL for a continuously operating sound source during a

24-hour period will be numerically greater than the dBA value of the 24-hour L_{eq} . Thus, for a continuously operating noise source producing a constant noise level operating for periods of 24 hours or more, the L_{dn} will be 6 dBA higher than the 24-hour L_{eq} value.

Although exposure to high noise levels has been demonstrated to cause physical, and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur (Caltrans 2013):

- Except in carefully controlled laboratory experiments, a change of 1 dBA or less in ambient noise levels cannot be perceived.
- Outside of the laboratory, a 3 dBA change in ambient noise levels is considered to be a barely perceivable difference.
- A change in ambient noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in ambient noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel scale. The human ear perceives sound in a non-linear fashion; therefore, the dBA scale was developed. Because the dBA scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. Under the dBA scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two sources are each producing sound of the same loudness, the resulting sound level at a given distance would be approximately 3 dBA higher than one of the sources under the same conditions. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. Under the dBA scale, three sources of equal loudness together produce a sound level of approximately 5 dBA louder than one source, and ten sources of equal loudness together produce a sound level of approximately 10 dBA louder than the single source (Caltrans 2013).

Fundamentals of Vibration

Vibration can be interpreted as energy transmitted in waves through the ground or built structures, which generally dissipate with distance from the vibration source. Because energy is lost during the transfer of energy from one particle to another, vibration becomes less perceptible with increasing distance from the source.

As described in the FTA's *Transit Noise and Vibration Impact Assessment*, groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard (FTA 2018). In contrast to airborne noise, groundborne vibration is not a common environmental problem, as it is unusual for vibration from sources such as (rubber-tired) buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, heavy trucks traveling on rough roads, and construction activities, such as blasting, pile-driving, and operation of heavy-duty earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal in inches per second (in/sec) and is most frequently used to describe vibration impacts to buildings.

Groundborne noise is a result of groundborne vibration and specifically refers to the rumbling noise emanating from the motion of building room surfaces due to the vibration of floors and walls; it is perceptible only inside buildings (FTA 2018). The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration and the acoustical absorption characteristics of the receiving room. For typical buildings, groundborne vibration that causes low frequency noise (i.e., the vibration spectrum peak is less than 30 Hz) results in a groundborne noise level that is approximately 50 decibels lower than the velocity level. For groundborne vibration that causes mid-frequency noise (i.e., the vibration spectrum peak is 30 to 60 Hz), the groundborne noise level will be approximately 35 to 37 decibels lower than the velocity level (FTA 2018:126, 146). Therefore, for typical buildings, the groundborne noise decibel level is lower than the groundborne vibration velocity level.

3.12.1 Regulatory Setting

Federal

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare.

Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety, commonly referenced as the "Levels Document," 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 (USEPA 1974). This document identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations.

The Federal Energy Regulatory Commission Guidelines on Noise Emissions from Compressor Stations, Substations, and Transmission Lines, 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 L_{dn} of 55 dBA (“A-weighted decibel”) at any preexisting noise-sensitive area (such as schools, hospitals, or residences).”

This policy was adopted based on the 55 L_{dn} dBA level of significance, as identified by the U.S. Environmental Agency.

Code of Federal Regulations

As described in Chapter 2, *Project Description*, under Build Alternative 4, the alignment of the Pacific Coast Highway PCH would move north. Build Alternatives 2 and 3 would not change the existing alignment of PCH. Title 23, Part 772 of the Code of Federal Regulations provide procedures for noise studies and noise abatement measures to help protect the public’s health, welfare and livability, 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. Section 772.5 defines projects as Type I, Type II, or Type III based on the following:

Type I Project.

1. The construction of a highway on new location; or,
2. The physical alteration of an existing highway where there is either:
 - i. Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - ii. Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
3. The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV [high-occupancy vehicle] lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane; or,
4. The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
5. The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
6. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
7. The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
8. If a project is determined to be a Type I project under this definition then the entire project area as defined in the environmental document is a Type I project.

Type II Project.

A federal or federal-aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for federal-aid funding, the highway agency must develop and implement a Type II program in accordance with Section 772.7(e).

Type III Project.

A federal or federal-aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

The Proposed Project would not construct a new highway, would not result in substantial horizontal or vertical physical alterations as defined, would not add lanes, and would not result in new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza. The Proposed Project is not a federal or federal-aid highway project for noise abatement on an existing highway. While Alternative 4 would adjust the alignment of PCH towards the north, the alignment change towards the north would be minimal and would not halve the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition. Therefore, the Proposed Project would meet the Type III definition.

Federal Highway Administration

The purpose of the Federal Highway Administration (FHWA) Noise Abatement Procedure is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, supply noise abatement criteria, and 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 equivalent continuous sound level (L_{eq}) as the criterion metric for evaluating traffic noise impacts.

Department of Housing and Urban Development

The Department of Housing and Urban Development regulations set forth the following exterior noise standards for new home construction assisted or 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

The Department of Housing and Urban Development's regulations do not contain standards for interior noise levels. Rather a goal of 45 dBA is set forth, and attenuation requirements are geared to achieve that goal.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration Occupation Noise Exposure Hearing Conservation Amendment (*Federal Register* Volume 48, No. 46, pages 9738–9785, March 1983) stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to

acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.

Federal Transit Administration and California Department of Transportation

The criteria for environmental impact from groundborne vibration are based on the maximum levels for a single event. **Table 3.12-1** lists the potential vibration damage criteria associated with construction activities, as suggested in the *Transit Noise and Vibration Impact Assessment* (FTA 2018).

**TABLE 3.12-1
 CONSTRUCTION VIBRATION DAMAGE CRITERIA**

Building Category	Peak Particle Velocity (PPV (in/sec))	Approximate Vibration Level (VdB)^a
I. Reinforced-concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

NOTES: PPV = peak particle velocity; RMS =; VdB = vibration velocity decibels.
^a RMS velocity in decibels, VdB re 1 micro-in/sec.
 SOURCE: FTA 2018.

As shown in Table 3.12-1, Federal Transit Authority (FTA) guidelines illustrate that a vibration level of up to 102 vibration velocity decibels (VdB) (equivalent to 0.5 inch/sec in root mean square (RMS) (FTA 2018) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in RMS).

The FTA has also adopted criteria for assessing potential human annoyance impacts caused by groundborne vibration for the following three land-use category receptors: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional (FTA 2018:124). The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations (FTA 2018:124). Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and optical microscopes (FTA 2018:124). Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals (FTA 2018:124). Category 3 refers to institutions and offices that have vibration-

sensitive equipment and have the potential for activity interference such as schools, churches, doctors' offices. Commercial or industrial locations including office buildings are not included in this category unless there is vibration-sensitive activity or equipment within the building (FTA 2018:124). The groundborne vibration thresholds associated with human annoyance for these three land-use categories are shown in **Table 3.12-2, *Groundborne Vibration Impact Criteria for General Assessment***.

**TABLE 3.12-2
GROUNDBORNE VIBRATION IMPACT CRITERIA FOR GENERAL ASSESSMENT**

Land Use Category	Frequent Events^a	Occasional Events^b	Infrequent Events^c
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB ^d	65 VdB ^d	65 VdB ^d
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

NOTES: VdB = vibration velocity decibels.

^a "Frequent Events" is defined as more than 70 vibration events of the same source per day.

^b "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

^c "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day.

^d This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

SOURCE: FTA 2018.

Based on Table 8-3 in the FTA's *Transit Noise and Vibration Impact Assessment* (2018), interpretation of vibration criteria for detailed analysis is 78 VdB for residential uses during daytime hours. During nighttime hours, the vibration criterion is 72 VdB. For office and office buildings, the FTA guidelines suggest that a vibration level of 84 VdB should be used for detailed analysis.

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan species that noise from construction activities would be limited according to the appropriate sections of the City of Los Angeles Noise Ordinance (National Park Service 2002).

State

Surface Land Use Impact

California Code of Regulations (CCR) Title 24 establishes the California Building Code (CBC). The most recent building standard adopted by the legislature and used throughout the state is the 2019 version, which took effect on January 1, 2020. The State of California's noise insulation standards are codified in the CBC (Title 24, Part 2, Chapter 12). These noise standards are for new construction in California for the purposes of interior compatibility with exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residences, schools, or hospitals, are near major transportation noises, and

where such noise sources create an exterior noise level of 60 dBA CNEL, or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels.

All new multi-family housing must comply with Title 24 of the California Code of Regulations, included in the CBC, Section 1207, "Sound Transmission." The CBC underwent a major reform in 2013 whereby Sections 1207.1 to 1207.13, which were in effect since 1974, were repealed and Section 1207 from the International Building Code (IBC) was adopted instead. The IBC and hence the CBC, however, does not have any requirements for interior noise attributable to exterior sources, instead relying on local general plan requirements. The California Department of Housing and Community Development later amended Section 1207 of the CBC by re-incorporating, under subsection 1207.4, Allowable interior noise levels the requirement limiting interior noise to no more than 45 Ldn or CNEL, as applicable so as to be consistent with the local jurisdiction's Noise Element requirements. The new language reads as follows:

1207.4 Allowable interior noise levels. Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either the day-night average sound level (Ldn) or the community noise equivalent level (CNEL), consistent with the noise element of the local general plan.

Thus, our acoustical analysis uses 45 dBA CNEL as the limiting metric for CBC compliance indoors.

The California Historical Building Code (CCR, Title 24, Part 8) applies to qualified historical buildings and structures. The purpose of the California Historical Building Code is to provide regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historical Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide ADA access, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

Hydroacoustic Impact

Projects that involve pile driving in or near water can contribute to increased underwater sound pressure in marine and freshwater environment. Underwater sound pressure is an issue of concern, particularly for listed fish species under the authority of the California Department of Fish and Wildlife (CDFW), National Oceanic and Atmospheric Administration (NOAA) Fisheries, and the U.S. Fish and Wildlife Service (USFWS), and for projects within jurisdiction of the California Coastal Commission. Underwater sound pressure levels are not weighted (expressed as decibels [dB]) and thus measure all frequencies unmodified within the range of interest, which may extend below and above the audible range of many organisms.

The dual metric criteria, per the 2008 Interim Criteria agreement (Caltrans 2008), are the instantaneous peak sound pressure level (SPL) and the accumulative sound exposure level (cSEL).

The peak is the single-strike maximum anticipated sound pressure level. The cSEL is a measure of 90% of the total energy of the peak strike, which accumulates throughout the driving event. It equates to the total sound pressure energy that a fish would be exposed to if it remained within the pile driving action area throughout the entire event. These criteria are used to determine the potential for physical injury to fishes. NOAA Fisheries also uses the RMS (dBRMS) to describe disturbance-related effects (i.e., harassment, behavioral impacts) to fish from exposure to underwater sound pressure.

- SPL of 206 dB for all sizes of fish
- cSEL of 187 dB - fish two grams or greater and 183 dB - fish less than two grams
- 150 dB –RMS assumed background levels

Although there are many sources of underwater sound pressure in the aquatic environment (e.g., boat noise, offshore oil/wind, dock building, revetment projects), the most common sources of underwater sound pressure associated with the California Department of Transportation’s (Caltrans’) construction activities is impulsive sound pressure generated from pile driving. Underwater sound pressure from pile driving is generated using different types and sizes of piles and hammers, and in varied substrate types. Each project-specific configuration can produce differing underwater sound pressure levels.

Underwater sound pressure generated by impact pile driving has the potential to affect listed fish in several ways. The range of effects potentially includes alteration of behavior to physical injury or mortality, depending on the intensity and characteristics of the underwater sound pressure, the distance and location of fish in the water column relative to the sound source, the size and mass, and the anatomical characteristics (Yelverton et al. 1975). For more information on the effects of underwater sound, refer to *Technical Guidance for Assessment and Mitigation of Hydroacoustic Effects of Pile Driving on Fish* (Caltrans 2020a). Beginning in 2002, various experts and studies had recommended a range of injury and behavioral effects thresholds for salmon. Based on consideration of expert recommendations, in June of 2008, Caltrans, FHWA, Washington Department of Transportation, Oregon Department of Transportation, Regions 1 and 8 of the U.S. Fish and Wildlife Service (USFWS), and NOAA Fisheries reached agreement on interim fish sound exposure thresholds.

The 2008 Interim thresholds for onset of injury from impact pile driving for fish are:

- SPL – onset of injury to fishes.
 - 206 dB for all sizes of fish.
- cSEL – accumulated, daily dose onset of injury for 2 class sizes of fish.
 - 187 dB – fish two grams or greater.
 - 183 dB – fish less than two grams.

For the analysis, the number of strikes is estimated by Geotechnical and Structures engineering, based on the number of strikes estimated to occur in an accumulation period, which is defined as

the daily driving action, with a break of 12 or more hours before the next driving event. The clock resets only after a break of 12 or more hours. The break allows fish to move out of the affected areas and to recover from sub-injurious accumulation of underwater sound pressure energy.

If the cumulative SEL threshold is exceeded, physical injury to fish is unlikely (no research or projects with data to support any physical injuries associated with the cSEL threshold currently exist). However, the 2008 interim criteria remain until agencies work together to develop needed updates to the current interim criteria. A project's specifics, site-specific factors (e.g., local habitat conditions), and species-specific factors influence whether physical injury occurs from exceedances of the Peak metric. A key consideration is whether the fish being analyzed are stationary or are migrating through an area. USFWS assumes that single strike SELs below 150 dB RMS do not accumulate to cause injury ("effective quiet") and thus set a limit on the maximum distance from a pile that a fish could incur potential injuries. However, the best available science demonstrates no physical injuries associated with the accumulated sound elevation level (cSEL). The dual metric criteria, particularly the cSEL, continues to be overly conservative. Without expert consideration, particularly when negotiating California Endangered Species Act consultation, mitigation for assumed injuries within this isopleth should use the best available science and data and should not indicate elevated ratios of mitigation for assumed physical injury within the cSEL area.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. There are no policies relevant to noise and vibration.

California Department of Transportation

Section 14-8.02, Sound Control Requirements, of Caltrans Standard Specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Regional and Local

Los Angeles County General Plan 2035

A general plan is a basic planning document that, alongside the zoning code, governs development in a city or county. The State of California requires each city and county to adopt a general plan with seven mandatory elements—land use, open space, circulation, housing, noise, conservation, and safety—and any number of optional elements as appropriate. According to the *Los Angeles County General Plan 2035*, the purpose of the Noise Element is to reduce and limit the exposure of the general public to excessive noise levels (County of Los Angeles 2015). The Noise Element sets the goals and policy direction for the management of noise in the unincorporated areas.

The following policy in the Noise Element is applicable to the Proposed Project (County of Los Angeles 2015):

Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL, and above, when unavoidable impacts are identified.

Therefore, the 65 dBA CNEL is used in this analysis as the exterior noise standard. This is similar to the exterior noise standard recommended for residential uses in the state's guidelines as will be discussed below in this noise impact analysis.

County of Los Angeles Noise Ordinance

The County of Los Angeles Noise Ordinance, contained in County Code, Chapter 12.08 Noise Control, identifies exterior noise standards for any source of sound at any location within the unincorporated areas of the County, and specific noise restrictions, exemptions, and variances for exterior noise sources. Several of the ordinance requirements are applicable to aspects of the Proposed Project and are discussed below.

Section 12.08.390 – Exterior noise standards, establishes the following exterior noise standards and as summarized in **Table 3.12-3**.

TABLE 3.12-3
EXTERIOR NOISE STANDARDS, L₅₀

Noise Zone	Designated Noise Zone Land Use	Time Interval	Exterior Noise Level (dBA)
I	Noise Sensitive Area	Anytime	45
II	Residential Area	10:00 p.m.–7:00 a.m.	45
		7:00 a.m.–10:00 p.m.	50
III	Commercial Area	10:00 p.m.–7:00 a.m.	55
		7:00 a.m.–10:00 p.m.	60
IV	Industrial Area	Anytime	70

NOTE: dBA = A-weighted decibels; L₅₀ = median sound level during the measurement interval.

As stated in the descriptions after the exterior noise levels in its Section 12.08.390 – Exterior noise standards, the above noise level limits may not be exceeded for a cumulative period of more than 30 minutes in any hour. If the existing ambient L₅₀ exceeds these levels, then the ambient L₅₀ becomes the exterior noise levels. For events shorter than 30 minutes, higher noise limits are used for the exterior noise standards. For example, 5, 10, and 15 dBA are added to the above noise limits for events less than 15, 5, and 1 minutes, respectively. Twenty dBA above noise limits (70 dBA L_{max} during the day and 65 dBA L_{max} during the night) may not be exceeded for any period of time.

Similarly, for interior noise standards, the County in its County Code, Section 12.08.400 – Interior noise standards, sets an allowable interior noise level of 45 dBA for the period from 7:00 a.m. to 10:00 p.m. and 40 dBA for the period from 10:00 p.m. to 7:00 a.m. for all multifamily residential uses. In Section 12.08.400, after the identification of the above interior noise levels, it also states that, for events shorter than 5 minutes in any hour, the noise standard is increased in 5 dBA increments in each standard. For example, 5 and 10 dBA are added to these noise limits for events less than 5 minutes and 1 minute, respectively. If the measured ambient noise reflected by the L₅₀ exceeds that permissible within any of the interior noise standards, the allowable interior noise level shall be increased in 5 dBA increments in each standard, as appropriate, to reflect said ambient noise level.

As part of Specific Noise Restrictions in Part 4 of the County Code, Section 12.08.440 – Construction noise, the County also has the following construction noise restrictions:

- A. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound there from creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.
- B. Noise Restrictions at Affected Structures. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:

1. At Residential Structures.

- a. Mobile Equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) or of mobile equipment:

	Single-family Residential	Multi-family Residential	Semiresidential/ Commercial
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all-day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

- b. Stationary Equipment. Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:

	Single-family Residential	Multi-family Residential	Semiresidential/ Commercial
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60 dBA	65 dBA	70 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all-day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

2. At Business Structures.
 - a. Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:
Daily, including Sunday and legal holidays, all hours: maximum of 85 dBA.
- C. All mobile or stationery internal-combustion-engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.
- D. In case of a conflict between this chapter [Chapter 12.08, Section 12.08.440, Construction Noise] and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities shall control.

For planning purposes, the 24-hour average sound levels (CNEL) are roughly equivalent to L_{eq} measurements plus 5 dBA when traffic is the dominant noise source (USEPA 1976:21).

3.12.2 Affected Environment

Existing Ambient Noise and Vibration Environment

Noise

The Project site is located in a rural/suburban area, with commercial and residential uses located to the northeast (north of PCH and east of Topanga Canyon Boulevard [TCB], and to the southwest (south of PCH and west of TCB) of the Project area. Vehicular traffic on PCH, TCB, and other local streets (South Malibu Vista Drive, Coastline Drive, Wakecrest Drive, and West Clifftop Way) is the main noise sources in the Project area.

There are noise-sensitive land uses in and around the Project area that include the following:

- Recreational areas such as picnic tables located within Topanga State Park and Topanga Beach
- Single-family homes west of Topanga State Park, approximately 100 feet from the Project boundary
- Single-family homes east of TCB, approximately 200 feet and greater from the Project boundary

Vibration

Aside from periodic construction work occurring throughout the county, field observations noted that other sources of groundborne vibration in the Project area are limited to heavy-duty vehicular travel (trucks and buses, etc.) on local roadways. Rubber-tired vehicles traveling at a distance of 50 feet typically generates groundborne vibration velocity levels of approximately 0.006 in/sec PPV (approximately 63 VdB) (FTA 2018). As stated earlier, groundborne noise impacts would generally be 25 to 40 dB lower than the velocity level depending on the frequency level of the source (Caltrans 2020b:38).

3.12.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to noise and vibration. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the Proposed Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Refer to Impact NOISE 3.12-1.)
- Generate excessive groundborne vibration or groundborne noise levels. (Refer to Impact NOISE 3.12-2.)
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels. (Refer to Impact NOISE 3.12-3.)
- Result in cumulatively considerable impacts to noise and vibration. (Refer to Impact NOISE 3.12-4.)

Temporary or Permanent Increase of Ambient Noise Levels

NOISE 3.12-1: The Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. *Impacts would be less than significant with mitigation incorporated.*

Consistent with provisions of the County of Los Angeles Noise Ordinance as described above, construction activities lasting more than 10 days would result in a significant noise impact should on-site construction activities exceed the applicable noise threshold established by the Los Angeles County Code (LACC) Chapter 12.08 – Noise Control, of 60 dBA L_{eq} at single-family residences and mobile homes, 65 dBA L_{eq} at multi-family residences, or 70 dBA L_{eq} at semi-residential/commercial land uses. Off-site construction traffic impacts would be considered significant if construction traffic noise associated with the Proposed Project would exceed 75 dBA L_{eq} at single-family residences and mobile homes, 80 dBA L_{eq} at multi-family residences, or 85 dBA L_{eq} at transient lodging.

Section 14-8.02, Sound Control Requirements, of Caltrans Standard Specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.

Vehicle traffic noise during operation of the Proposed Project would have a significant noise impact if it would increase existing traffic noise levels by 5 dBA CNEL or more at a sensitive land use currently experiencing “normally acceptable” or “conditionally acceptable” noise levels; or increase ambient noise levels by 3 dBA CNEL or more at a sensitive land use currently experiencing “normally unacceptable” or “clearly unacceptable” noise levels.

Table 3.12-4 lists construction equipment expected to be used during construction of the Proposed Project, and the noise levels are taken from the FHWA Roadway Construction Noise Model (RCNM) Default Noise Emission Reference Levels and Usage Factors which lists typical construction equipment noise levels recommended for noise impact assessments, based on a reference distance of 50 feet between the equipment and a noise receptor (FHWA 2006).

**TABLE 3.12-4
ROADWAY CONSTRUCTION NOISE MODEL DEFAULT NOISE EMISSION REFERENCE LEVELS AND USAGE FACTORS**

Equipment Description	Impact Device?	Acoustical Usage Factor (%)	Spec. 721.560 L _{max} at 50 Feet (dBA, slow) ^a	Actual Measured L _{max} at 50 Feet (dBA, slow) ^b	Number of Actual Data Samples (Count)
All other equipment >5 HP	No	50	85	N/A	0
Backhoe	No	40	80	78	372
Compressor (air)	No	40	80	78	18
Concrete mixer truck	No	40	85	79	40
Concrete pump truck	No	20	82	81	30
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Dump truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flatbed truck	No	40	84	74	4
Forklift	No	10	75	N/A	N/A
Frontend loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25 kVA, variable-message signs)	No	50	70	73	74
Grader	No	40	85	N/A	0
Jackhammer	Yes	20	85	89	133
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Other Equipment	No	50	85	N/A	0
Paver	No	50	85	77	9
Pickup truck	No	40	55	75	1
Pumps	No	50	77	81	17
Roller	No	20	85	80	16
Scraper	No	40	85	84	12
Tractor	No	40	84	N/A	0
Welder/torch	No	40	73	74	5

NOTES: CA/T =; dBA = A-weighted decibels; HP = horsepower; Lmax = maximum instantaneous sound level; kVA = ; N/A = not applicable.

^a The specification "Spec" limit for each piece of equipment expressed as an Lmax level in dBA "slow" at a reference distance of 50 feet from the loudest side of the equipment.

^b The measured "Actual" emission level at 50 feet for each piece of equipment based on hundreds of emission measurements performed on CA/T work sites.

SOURCE: FHWA 2006, Table 9.1.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services, which could result in noise impacts. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel), eroding lifeguard and public restroom building, and potential on-site advanced on-site wastewater treatment system upgrades, that would result in temporary use of construction equipment; however, such equipment usage would be minimal and substantially less than the Build Alternatives. Therefore, Alternative 1 would not generate substantial noise and impacts would be less than significant.

Alternatives 2, 3, and 4 (Build Alternatives)

Build Alternative 4 along with certain elements of Alternative 2 were chosen for a quantitative construction analysis because it would utilize the most equipment that would operate simultaneously and the most overlapping construction phases. As shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Build Alternative 4 has the greatest amount of Topanga Lagoon grading acreage, Topanga Beach expansion acreage, and total number of parking spaces, and would relocate PCH slightly to the north. As shown in Table 6-1, Alternative 2 has the greatest amount of Topanga Lagoon fill removal volume and debris volume from the removal of all 25 Topanga Ranch Motel structures. Therefore, Alternative 4 combined with the Alternative 2 elements discussed above were combined to identify a worst-case analysis. Build Alternative 3 has considerably less fill removal volume than either Build Alternatives 2 or 4 and thus would have less noise impacts than either Build Alternatives 2 or 4.

Construction

Surface Land Use Impacts

For all Build Alternatives, demolition and construction activities are expected to temporarily increase ambient noise levels within the Project area. Construction noise associated with the Proposed Project that exceeds state and federal standards could interfere with human daily activities, including recreational activities on Topanga Beach. Construction-related noise levels would be higher than current existing ambient noise levels in the Project vicinity, and construction crew commutes and the transport of construction equipment and materials would intermittently increase noise levels on PCH and TCB. As discussed in Chapter 2, *Project Description*, removal of the existing fill materials on-site for beneficial reuse in the nearshore environment to renourish the littoral cell would be added to any of the three Build Alternatives. Thus, the analysis of the Build Alternatives accounts for the beneficial reuse options. As discussed in Chapter 2, *Project Description*, the Build Alternatives include options for supporting the wastewater needs. Once a final preferred alternative is selected, only one of the wastewater options would be carried forward to final design. For the purposes of this analysis, Option 1 (SDI) is accounted for in the Build Alternatives impact analysis. Option 2 (Seepage Pits) and Option 3 (Sewer) are also analyzed to determine if selection of either of these options would result in noise impacts.

The noise impacts attributed to Project-generated traffic volumes on local roadways were evaluated based on the methodologies provided in FHWA Traffic Noise Model Technical Manual. Trucks passing a noise receiver along a roadway would generate a high single-event noise exposure potential at a maximum level of approximately 84 dBA maximum instantaneous sound level (L_{max}) from trucks passing at a reference distance of 50 feet. The noise level approaching the L_{max} level would only occur for a few seconds while a truck passes by a receptor and would attenuate to much lower levels as the distance from the passing truck increases from the receptor at a reduction rate of 3 dBA per doubling of distance for a line source (i.e., roadway noise source). The Project area is located within a segment of PCH that consists of a four-lane state scenic highway with an average daily traffic volume of approximately 44,500 vehicles per day. According to the County Mobility Element, PCH is designated as a major highway (refer to Section 3.16, *Transportation and Circulation*). The Project area is also located within a segment of TCB that consists of three travel lanes (one northbound and two southbound) with one right-turn lane for southbound turns heading west on PCH and two left-turn lanes for southbound turns heading east on PCH. According to the County Mobility Element, TCB is designated as a major highway. The average daily traffic volume on TCB within the Project limits is approximately 13,700 vehicles per day (refer to Section 3.16, *Transportation and Circulation*). Based on the worst-case analysis of Alternative 4 combined with the Alternative 2 elements discussed above, the maximum number of daily trucks for the Build Alternatives would be up to approximately 502 truck trips per day (up to approximately 251 outbound truck trips per day carrying exporting fill material and 251 inbound truck trips to collect and load fill material), associated with the Topanga Lagoon fill removal activities, conservatively assuming the fill material is trucked to a landfill. Fewer daily truck trips would occur during other construction activities. Also, if nearshore placement of the Topanga Lagoon fill is approved, the number of daily trucks estimated above that would travel on PCH and TCB would be reduced. The maximum number of daily trucks for the Build Alternatives would contribute a minimal number of new trips on PCH and TCB when compared to existing traffic volumes on PCH and TCB and would not be a perceptible increase in roadway noise. Under the dBA scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, a doubling of vehicle and truck traffic volumes on a roadway corresponds to a 3 dBA increase. The Build Alternatives would not cause a doubling of traffic-related sound energy. Therefore, the noise impacts attributed to Project-generated traffic volumes on local roadways would be less than significant.

Noise generated from on-site construction activities including for the PCH bridge, construction and demolition of the temporary bridge, lagoon excavation and demolition (removal of 25 structures for Alternative 2), and potential restoration of some of the Topanga Ranch Motel structures (20 for Alternative 3, 15 for Alternative 4) and other facilities would generate noise from on-site construction equipment and vehicles that may be heard by noise-sensitive receptors, depending on the time of day, phase of Proposed Project construction, and the distance of the construction activities relative to the noise-sensitive receptor locations. In general, noise from a point source decreases approximately 6 dBA for each doubling of distance. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment would operate concurrently. The estimated noise levels at the sensitive

receptors were calculated using the FHWA’s RCNM and were based on a maximum concurrent operation of equipment, which represents a worst-case evaluation. **Table 3.12-5** lists the projected construction noise levels at sensitive receptors in the Project area (refer to **Appendix N** for more details).

**TABLE 3.12-5
 ESTIMATED CONSTRUCTION NOISE LEVELS AT EXISTING OFF-SITE SENSITIVE RECEPTORS**

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site (feet)	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase, ^{a,b,c} Hourly L _{eq} (dBA)
R1 This location represents the noise-sensitive residential uses to the southwest, south of the Pacific Coast Highway.	A. Demolition/Renovation of structures (Alternative 2: 25/0 Topanga Ranch Motel structures, Alternative 3: 5/20 structures, and Alternative 4: 10/15 structures) & Temporary Parking Provisions	100–1,840	A. 74
	B. Unsuitable Material Replacement		B. 72
	C. Relocate Utilities		C. 71
	D. Construct Temporary Road/Bridge		D. 75
	E. Construct Temporary Road/Bridge		E. 76
	F. Construct Temporary Road/Bridge		F. 68
	G. Demolition Northbound Road/Bridge		G. 74
	H. Construct Northbound Road/Bridge		H. 71
	I. Construct Northbound Road/Bridge		I. 76
	J. Construct Northbound Road/Bridge		J. 72
	K. Demolition Southbound Road/Bridge		K. 74
	L. Construct Southbound Road/Bridge		L. 71
	M. Construct Southbound Road/Bridge		M. 76
	N. Construct Southbound Road/Bridge		N. 66
	O. Demolition Temporary Bridge		O. 74
	P. Construct DBH Facilities (Lifeguard/Restroom/Helipad)		P. 76
	Q. Lagoon Grading and nearshore placement		Q. 71
	R. Restore Beach Area		R. 68
	S. Gateway Corner Site Preparation		S. 68
	T. Gateway Corner Grading		T. 75
	U. Gateway Corner Building Construction		U. 67
V. Gateway Corner Paving	V. 75		
W. Gateway Corner Architectural Coating	W. 68		
X. Wastewater Option 2	X. 71		
Y. Wastewater Option 3	Y. 60		
Z. Maximum Overlapping Phases	Z. 78.2		

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site (feet)	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase, ^{a,b,c} Hourly L _{eq} (dBA)
R2 This location represents the noise-sensitive residential uses to the east, on the east side of Topanga Canyon Boulevard.	A. Demolition/Renovation of structures (Alternative 2: 25/0 Topanga Ranch Motel structures, Alternative 3: 5/20 structures, and Alternative 4: 10/15 structures) & Temporary Parking Provisions	80–2,685	A. 68
	B. Unsuitable Material Replacement		B. 66
	C. Relocate Utilities		C. 65
	D. Construct Temporary Road/Bridge		D. 69
	E. Construct Temporary Road/Bridge		E. 70
	F. Construct Temporary Road/Bridge		F. 62
	G. Demolition Northbound Road/Bridge		G. 68
	H. Construct Northbound Road/Bridge		H. 65
	I. Construct Northbound Road/Bridge		I. 70
	J. Construct Northbound Road/Bridge		J. 66
	K. Demolition Southbound Road/Bridge		K. 68
	L. Construct Southbound Road/Bridge		L. 65
	M. Construct Southbound Road/Bridge		M. 70
	N. Construct Southbound Road/Bridge		N. 60
	O. Demolition Temporary Bridge		O. 68
	P. Construct DBH Facilities (Lifeguard/Restroom/Helipad)		P. 70
	Q. Lagoon Grading and nearshore placement		Q. 65
	R. Restore Beach Area		R. 62
	S. Gateway Corner Site Preparation		S. 62
	T. Gateway Corner Grading		T. 69
	U. Gateway Corner Building Construction		U. 61
V. Gateway Corner Paving	V. 69		
W. Gateway Corner Architectural Coating	W. 62		
X. Wastewater Option 2	X. 65		
Y. Wastewater Option 3	Y. 77.8		
Z. Maximum Overlapping Phases	Z. 77.8		
R3 This location represents the noise-sensitive beach area to the southeast, south of the Pacific Coast Highway.	A. Demolition/Renovation of structures (Alternative 2: 25/0 Topanga Ranch Motel structures, Alternative 3: 5/20 structures, and Alternative 4: 10/15 structures) & Temporary Parking Provisions	50–1,350	A. 80
	B. Unsuitable Material Replacement		B. 77
	C. Relocate Utilities		C. 77
	D. Construct Temporary Road/Bridge		D. 81
	E. Construct Temporary Road/Bridge		E. 82
	F. Construct Temporary Road/Bridge		F. 73
	G. Demolition Northbound Road/Bridge		G. 80
	H. Construct Northbound Road/Bridge		H. 77

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site (feet)	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase, ^{a,b,c} Hourly L _{eq} (dBA)
	I. Construct Northbound Road/Bridge		I. 82
	J. Construct Northbound Road/Bridge		J. 78
	K. Demolition Southbound Road/Bridge		K. 80
	L. Construct Southbound Road/Bridge		L. 77
	M. Construct Southbound Road/Bridge		M. 82
	N. Construct Southbound Road/Bridge		N. 72
	O. Demolition Temporary Bridge		O. 80
	P. Construct DBH Facilities (Lifeguard/Restroom/Helipad)		P. 82
	Q. Lagoon Grading and nearshore placement		Q. 77
	R. Restore Beach Area		R. 74
	S. Gateway Corner Site Preparation		S. 74
	T. Gateway Corner Grading		T. 81
	U. Gateway Corner Building Construction		U. 73
	V. Gateway Corner Paving		V. 81
	W. Gateway Corner Architectural Coating		W. 74
	X. Wastewater Option 2		X. 77
	Y. Wastewater Option 3		Y. 74.8
	Z. Maximum Overlapping Phases		Z. 84.2

NOTES: dBA = A-weighted decibel; DBH = County of Los Angeles Department of Beaches and Harbors; L_{eq} = equivalent continuous sound level.

^a Estimated construction noise levels represent the worst-case condition when noise generators are located closest to the receptors and are expected to last the entire duration of each construction phase.

^b Noise levels shown here included the noise attenuation effect from the elements of the Proposed Project as described in the Standard Compliance Measures that reduce noise levels to 75 dBA L_{eq} or lower.

^c Noise levels include a 5 dBA reduction from acoustic shielding from intervening buildings between the Project site and off-site sensitive receivers analyzed.

SOURCE: ESA 2022, 2023 (refer to noise calculations provided in Appendix T of this Draft EIR).

The representative off-site sensitive receivers are described as follows:

- R1: This location represents the residential uses to the southwest, south of PCH.
- R2: This location represents residential uses to the east, on the east side of TCB.
- R3: This location represents the beach area to the southeast, south of PCH.

The County's noise threshold for stationary construction equipment that is repetitively scheduled, and relatively long-term operation (periods of 10 days or more) is 60 dBA for single-family residences during the daytime hours of 7:00 a.m. and 8:00 p.m. For mobile equipment, the noise threshold is 75 dBA for single-family residences during the daytime hours between 7:00 a.m. and 8:00 p.m. Recreation areas such as parks and beaches are considered noise sensitive land uses that are similar in sensitivity as residential uses. Table 3.12-5 shows that projected construction noise

levels at off-site sensitive receptor locations would exceed the County's noise thresholds for construction activity. Maximum overlapping construction noise levels would reach 78.2, 72.2, and 84.2 dBA Leq at R1, R2, and R3, respectively. Therefore, mitigation measures are required. Implementation of **Mitigation Measures NOISE-1** and **NOISE-2**, discussed below, would be required to reduce potential impacts to less than significant levels.

With respect to Section 14-8.02, Sound Control Requirements, of Caltrans Standard Specifications, the Proposed Project would comply with County Code, Section 12.08.440, which restricts construction noise to between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound there from creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited. Construction activities would generally be limited to 7:00 a.m. to 7:00 p.m., Monday through Friday; however, some nighttime work may be required to accommodate certain construction elements and/or construction schedule, and contractors are anticipated to have full access to the Project site at all times. For construction activities occurring outside of the 7:00 a.m. to 7:00 p.m., Monday through Friday time period, the Proposed Project would be required to implement mitigation measures to obtain a variance in accordance with County Code, Section 12.08.440 and comply with applicable specifications as issued by the health officer. Thus, the Proposed Project would not exceed the criteria in Section 14-8.02, Sound Control Requirements, of Caltrans Standard Specifications, with implementation of **Mitigation Measures NOISE-1** and **NOISE-2**, discussed below.

Hydroacoustic Impact

No high-impact activities, such as pile driving or blasting, would be used during Proposed Project construction. Cast-in-drilled-hole (CIDH) piles are planned to be used for the bridge work instead of pile driving. Based on the noise level for a mounted impact hammer (hoe ram) shown in Table 3.12-4 (90 dB at a reference distance of 50 feet), it is not expected that construction of the Proposed Project would result in peak sound pressure level (SPL) exceeding 206 dB or Accumulated Sound Elevation Level (cSEL) to exceed 183 dB. Equipment used for demolition and removal of the existing bridge would generate noise as shown in Table 3.12-5, which would not exceed the SPL or cSEL levels. Furthermore, the Proposed Project would not include fill removal and work in existing wetted areas is prohibited. Mitigation Measure **NOISE-2** is required to ensure noise impacts from placement of piles would be mitigated to less than significant given the bridge work involved with the Proposed Project.

Operation

Operation of the Proposed Project would generate noise from vehicle trips traveling to the Project site from within the region. As discussed above, existing operations at the Project site including the lifeguard and public restroom building would be relocated, as would the helipad. All Build Alternatives would replace the existing lifeguard and public restroom building with new buildings of the same size. Thus, current noise levels from these sources would be comparable to existing noise levels under the Proposed Project for these uses. The Proposed Project would also include a new two-car garage, which would not generate noise increases. The five currently operating

businesses would be shut down with only one anticipated to be replaced for Alternative 2. All Build Alternatives would remove Topanga Ranch Motel structures, with Alternative 2 removing all 25 buildings; but Alternative 3 would retain 20 buildings, and Alternative 4 would retain 15 buildings. All Build Alternatives would develop the Gateway Corner, which would be limited in size to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park and could include park facilities (such as park office/ranger house/ maintenance storage), small outdoor interpretive pavilion/restroom, and a small picnic area. Thus, the Build Alternatives would not introduce substantial new sources of stationary noise, such as large machinery.

The Proposed Project could include creation of a trail loop through the Project site and provision of pedestrian access under PCH on the east and west sides of Topanga Lagoon. All Build Alternatives would not provide new recreational facilities or substantial additional beach area that would result in additional visitors traveling to the area and would provide improved bus stops, pedestrian access, and bicycle access, which would reduce VMT (see Section 3.16, *Transportation and Circulation*, for additional details). Thus, traffic-related noise associated with the Proposed Project would be slightly less than existing traffic-related noise due to the shutdown of the five current businesses and overall reduced VMT. Given that noise would be slightly less under the Proposed Project compared to existing conditions for all Build Alternatives, impacts would be less than significant.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks' property along TCB. All construction and operation activities would occur within State Parks' property or within Caltrans right-of-way (ROW). Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

Topanga Beach is expected to be open during all phases of the Proposed Project and point source noise related impacts could occur to visitors of Topanga Beach. Implementation of Mitigation Measures **NOISE-1** and **NOISE-2** would be required to reduce potential impacts to less than significant levels.

Mitigation Measures

NOISE-1: Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 6:00 p.m. and 6:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited. For construction activities occurring outside of the 6:00 a.m. to 6:00 p.m., Monday through Friday time period, the Proposed Project would be required to obtain a variance in accordance with County Code, Section 12.08.440 and comply with applicable specifications as issued by the health officer. The Project would comply with Caltrans requirements 14-8.02 NOISE CONTROL. Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

NOISE-2: Monitor construction noise to verify compliance with the limits. Provide the contractor the flexibility to meet the applicable construction noise limits in the most efficient and cost-effective manner. The contractor would have the flexibility of either prohibiting certain noise-generating activities during daytime and/or nighttime hours or providing additional noise control measures to meet the applicable noise limits. To meet required noise limits, the following noise control mitigation measures will be implemented as necessary, for daytime and/or nighttime only as needed to meet the applicable noise limits:

- Monitor and maintain equipment to meet noise limits.
- Install a temporary construction site sound barrier near a noise source.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Use moveable sound barriers at the source of the construction activity.
- Use low-noise emission equipment.
- Minimize the use of generators to power equipment.
- Limit conducting noisy nighttime construction activities in or within 100 feet of residential neighborhoods.
- Prohibit aboveground jackhammering and impact pile driving during nighttime hours.
- Limit the use of public address systems and loudspeakers.
- During nighttime work, use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with spotters.
- Locate stationary construction equipment as far as possible from noise-sensitive sites.
- Implement noise-deadening measures for truck loading and operations.
- Line or cover storage bins, conveyors, and chutes with sound-deadening material.
- Use high-grade engine exhaust silencers and engine-casing sound insulation.
- To mitigate noise related to pile driving, cast-in-drilled-hole (CIDH) piles will be used instead of pile driving to reduce noise levels substantially. CIDH piles will meet applicable U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service standards and conditions.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel and one concession would be retained. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Construction noise impacts would be similar as described above and implementation of Mitigation Measures **NOISE-1** and **NOISE-2** would be required. Implementation and operation of the Gateway Corner visitor services would not create new noise sources in the Project area. Further, with the removal of Topanga Ranch Motel and existing concessions, operational noise in the area would be similar to or less than existing conditions.

Mitigation Measures

Implement Mitigation Measures **NOISE-1** and **NOISE-2**.

Significance Determination

Less than Significant with Mitigation Incorporated

Groundborne Vibration

NOISE 3.12-2: The Project would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

The PPV vibration velocities for several types of construction equipment that can generate perceptible vibration levels are identified in **Table 3.12-6**.

**TABLE 3.12-6
 VIBRATION SOURCE AMPLITUDES FOR CONSTRUCTION EQUIPMENT**

Equipment	Reference PPV/L _v at 25 Feet	
	PPV (inch/sec)	L _v (VdB)
Vibratory Roller	0.210	94
Earth Mover	0.011	69
Excavator	0.047	81
Wheel Loader	0.076	86
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58

NOTES: PPV = peak particle velocity; L_v = velocity in decibels; inch/sec = inches per second; VdB = vibration velocity decibels.
 SOURCE:FTA 2018, Table 12-2.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel), eroding lifeguard and public restroom building, and advanced on-site wastewater treatment system upgrades, that would result in temporary use of construction equipment; however, such equipment usage would be minimal and substantially less than the Build Alternatives. As a result, Alternative 1 would not generate excessive groundborne vibration or groundborne noise levels and impacts would be less than significant.

Alternatives 2, 3, and 4 (Build Alternatives)

Build Alternative 4 along with certain elements of Alternative 2 were chosen for a quantitative construction analysis because it would utilize the most equipment that would operate simultaneously and the most overlapping construction phases. As shown in Table 6-1 of Chapter 6, *Alternatives Analysis*, Build Alternative 4 has the greatest amount of Topanga Lagoon grading acreage, Topanga Beach expansion acreage, and total number of parking spaces, and would relocate PCH slightly to the north. As shown in Table 6-1, Alternative 2 has the greatest amount of Topanga Lagoon fill removal volume and debris volume from the removal of all 25 Topanga Ranch Motel structures. Therefore, Alternative 4 combined with the Alternative 2 elements discussed above were combined to identify a worst-case analysis. Build Alternative 3 has considerably less fill removal volume than either Build Alternatives 2 or 4 and thus would have less noise impacts than either Build Alternatives 2 or 4.

Construction

Construction under all the Build Alternatives has the potential to generate low levels of groundborne vibration from the operation of heavy equipment. No high-impact activities, such as pile driving or blasting, would be used during construction of the Proposed Project. CIDH piles are planned to be used for the bridge work instead of pile driving. Proposed construction activities would occur throughout the Project area and would not be concentrated at the point closest to the nearest structure on the west for any length of time. Bulldozers and other heavy-tracked construction equipment generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the *Transit Noise and Vibration Impact Assessment* (FTA 2018), Table 3.12-6. This level of groundborne vibration exceeds the threshold of vibration impact general assessment, which is around 65 VdB, as shown in Table 3.12-2. Although this range of groundborne vibration levels would result in potential annoyance to sensitive receptors within the Project area, no building damage would occur. While groundborne vibration levels diminish rapidly from the source and the range of vibration concern is usually limited to 50 feet from the vibration source, Mitigation Measure **NOISE-3** is required to ensure vibration impacts would be mitigated to less than significant given the bridge work involved with the Proposed Project.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks' property along TCB. All construction and operation activities would occur within State Parks' property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

Option 2 and Option 3 would utilize similar equipment as described for the Build Alternatives and thus would generate similar groundborne vibration from the operation of heavy equipment. No high-impact activities, such as pile driving or blasting, would be used during construction. Bulldozers and other heavy-tracked construction equipment generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the *Transit Noise and Vibration Impact Assessment* (FTA 2018), Table 3.12-6. This level of groundborne vibration exceeds the threshold of vibration impact general assessment, which is around 65 VdB, as shown in Table 3.12-2. Although this range of groundborne vibration levels would result in potential annoyance to sensitive receptors within the Project area, no building damage would occur.

As shown in Table 3.12-1, FTA guidelines demonstrate that a vibration level of up to 102 VdB (an equivalent to 0.5 inch/sec in PPV) (FTA 2018) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in PPV). Table 3.12-5 further shows the PPV values at 25 feet from the construction vibration source as well as vibration levels in terms of VdB at 25 feet from the construction vibration source.

The Los Angeles County Noise Ordinance, Section 12.08.350, provides a presumed perception threshold of 0.01 in/sec RMS. The vibration level of 0.01 in/sec RMS is equivalent to 0.04 in/sec PPV.

Hydroacoustic Impact

No high-impact activities, such as pile driving or blasting, would be used during construction of the Proposed Project. CIDH piles are planned to be used for the bridge work instead of pile driving.

The Proposed Project would not include fill removal and work in existing wetted areas is prohibited outside of bridge removal activities. Nonetheless, Mitigation Measure **NOISE-3** is required to ensure vibration impacts from placement of piles would be mitigated to less than significant given the bridge work involved with the Proposed Project.

Operation

Upon completion of the Proposed Project, groundborne vibrations would be similar to existing conditions. No operational enhancements are proposed that would increase groundborne vibrations. Therefore, impacts would be less than significant.

Mitigation Measures

NOISE-3: To mitigate vibration related to pile driving, cast-in-drilled-hole (CIDH) piles will be used instead of pile driving to reduce vibration levels substantially. CIDH piles will meet applicable U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service standards and conditions.

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction and Operation

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel and one concession would be retained. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Groundborne vibrations could occur from construction equipment, however, it would be temporary and localized within State Parks property. Therefore, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Excessive Noise Levels Near Airports

NOISE 3.12-3: The Project would not expose people residing or working in the Project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport). *No impacts would occur.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be minor interim repair activities to the degrading structures (Topanga Ranch Motel), eroding lifeguard and public restroom building, and potential advanced on-site wastewater treatment system upgrades, that would result in temporary workers; however, the number and duration of temporary workers would be minimal and substantially less than the Build Alternatives. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Santa Monica Airport is located approximately 9 miles to the southeast of the Project area, and the Project area is not within the airport's 60, 65, or 70 dBA CNEL noise contours. Additionally, the Los Angeles International Airport is located approximately 18 miles to the southeast of the Project area. The Project area may be affected by the overflight of airplanes from these airports but is not within the 60 dBA CNEL of these airports. As a result, Alternative 1 would not expose people residing or working in the Project area to excessive noise levels.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential exposure of people residing or working in the Project area to excessive noise levels near airports or airstrips would be similar for all the Build Alternatives.

Construction and Operation

Santa Monica Airport is located approximately 9 miles to the southeast of the Project area, and the Project area is not within the airport's 60, 65 and 70 dBA CNEL noise contours. Additionally, the Los Angeles International Airport is located approximately 18 miles to the southeast of the Project area. The Project area may be affected by the overflight of airplanes from these airports but is not within the 60 dBA CNEL of these airports. The Proposed Project would result in no impacts relevant to airport land use plans, airports, or private airstrips as the Project area is not located within the vicinity of a private airstrip, airport land use plan, or public or public use airport.

Mitigation Measures

None Required

Significance Determination

No Impact

Programmatic Topanga State Park Visitor Services

Construction and Operation

The Project area is not located within the vicinity of a private airstrip, airport land use plan, or public or public use airport; therefore, no impacts would occur.

Mitigation Measures

None Required

Significance Determination

No Impact

Cumulative Impacts

NOISE 3.12-4: The Project could result in cumulatively consider impacts to noise and vibration. *Impacts would be less than significant with mitigation incorporated.*

Noise and vibration impacts are localized issues and cumulative project impacts on areas outside of the immediate vicinity would be less than significant. Should cumulative projects undergo construction at the same time as the Proposed Project, the cumulative projects would be required to comply with the construction hours allowed by the Coastal Commission, County and Caltrans or comply with Coastal Commission, County and Caltrans restrictions imposed if a variance to the allowable construction hours for these projects is issued. With the implementation of Mitigation Measures **NOISE-1** and **NOISE-2**, noise impacts would be less than significant. Therefore, the Proposed Project, when combined with the identified cumulative projects, would not cause a cumulatively considerable noise impact. With regard to groundborne vibration, the construction vibration levels generated by the Proposed Project would be below the FTA thresholds for structure damage or human annoyance. While groundborne vibration levels diminish rapidly from the source and the range of vibration concern is usually limited to 50 feet from the vibration source, as discussed above for the Proposed Project regarding potential hydroacoustic vibration, Mitigation Measure **NOISE-3** is required to ensure vibration impacts would be mitigated to less than significant given the bridge work involved with the Proposed Project; thus, the Proposed Project, when combined with the identified cumulative projects, would not cause a cumulatively considerable vibration impact with implementation of mitigation. As a result, cumulative impacts would be less than significant.

Mitigation Measures

Implement **Mitigation Measures NOISE-1** through **NOISE-3**.

Significance Determination

Less than Significant with Mitigation Incorporated

3.12.4 Summary of Impacts

Table 3.12-7 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to noise. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.12-7
 SUMMARY OF PROPOSED PROJECT IMPACTS OF NOISE AND VIBRATION**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
NOISE 3.12-1: Temporary or Permanent Increase of Ambient Noise Levels	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures NOISE-1 and NOISE-2.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures NOISE-1 and NOISE-2.	LTSM
NOISE 3.12-2: Groundborne Vibration	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures NOISE-3	LTSM
	Programmatic Topanga State Park Visitor Services	None Required	LTS
NOISE 3.12-3: Excessive Noise Levels Near Airports	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	NI
	Programmatic Topanga State Park Visitor Services	None Required	NI
NOISE 3.12-4: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures NOISE-1 through NOISE-3.	LTSM

NOTES:
 NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less-than-Significant Impact with Mitigation Incorporated
 SU = Significant and Unavoidable

3.12.5 References

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3.13 Public Services

This section addresses the potential impacts of the Proposed Project on public services, including fire protection, emergency services, and law enforcement. Park and Beach services are addressed in Section 3.14, *Parks and Recreation*. This section describes the physical environmental and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment.

3.13.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan provides goals to increase fire and safety awareness for visitors, and for siting new facilities with adequate water supplies and wastewater disposal (National Park Service 2002).

State

California Coastal Zone Management Act of 1972

The California Coastal Zone Management Act (CZMA) requires any non-federal applicant for a federal license or permit to conduct an activity affecting land or water uses in the state's coastal zone to furnish a certification that the proposed activity will comply with the state's coastal zone management program. Generally, no permit will be issued until the State has concurred with the non-federal applicant's certification. If the California Coastal Commission issues a CDP for the project, that counts as a CZMA certification. If the LCP issues the CDP, then a separate CZMA certification needs to be signed by the California Coastal Commission. Los Angeles County has approved pursuing a consolidated CDP for the Proposed Project.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. Goals potentially relevant to the Proposed Project are as follows:

Section 30252 Maintenance and enhancement of public access. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the

amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

California Health and Safety Code (Section 13000 et seq.)

Section 13000 et seq. of the California Health and Safety Code outlines state fire regulations such as building standards, fire notification systems, fire protection devices (extinguishers and smoke alarms), high-rise building standards and childcare facilities standards. All state-occupied buildings, state owned buildings and state institutions must comply with these regulations and building standards. The State Fire Marshall is responsible for enforcing the regulations and standards outlined in Section 13000 et seq. of the California Health and Safety Code,

California Code of Regulations Title 24, Part 2 and Part 9

Part 2 of title 24 California Code of Regulations contains regulations and building standards set forth by state agencies. These regulations and standards include fire, life safety and field inspection guidelines. Part 9 was updated in 2021 and refers to the California Fire Code, which outlines fire safety related building standards.

California Public Resource Code, Sections 4201–4204

California Public Resource Code, Sections 4201–4204, was amended in 1982 and requires all land within State Responsibility Areas (SRAs) to be classified into fire hazard severity zones. Each fire hazard severity zone is given a rating that reflects the severity of fire hazards that can be expected in each zone. This information is used to inform response tactics and reduce the spreading and intensity of uncontrolled fires.

State Responsibility Area Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry and Fire Protection)

Title 14, also known as the SRA Fire Safe Regulations, was amended by the California Board of Forestry and Fire Protection in 2020. These regulations guide basic wildfire protection standards in California. Title 14 establishes minimum wildfire protection to support building and development in SRAs. These measures require sufficient emergency access, sufficient and accessible water supply for containing fires, clear building signage and numbering, and vegetation modification to reduce fire risk.

2019 California Fire Code

The California Fire Code is contained within Title 24, Chapter 9 of the California Code of Regulations. Based on the International Fire Code, the California Fire Code was created by the California Buildings Standards Commission and regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. Like the International Fire Code, the California Fire Code and the California Building Code (CBC) use a hazards classification system to determine the appropriate measures to incorporate to protect life and property. Section 1206 of the California Fire Code outlines provisions for applicable stationary and mobile energy storage systems, including threshold quantities.

The California Public Resources Code includes fire safety provisions that apply to either mountainous, forest, brush, and/or grass covered lands that are deemed necessary by the director or agency with primary responsibility for fire protection in the area. During the fire hazard season, these regulations restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on equipment that has an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire-suppression equipment that must be provided on-site for various types of work in fire-prone areas. Additional codes provided in Public Resources Code Sections 4294–4296 require that any person who owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such areas, and maintain a firebreak clearing around and adjacent to any pole, tower, and conductors that carry electric current as specified in Public Resources Code Sections 4292 and 4293. Section 4292 requires that PG&E maintain a 10-foot firebreak clearance around the base of a utility pole, with tree limbs within the 10-foot radius of the pole being removed up to 8 feet above ground. The State’s Fire Prevention Standards for Electric Utilities (14 California Code of Regulations Sections 1250–1258) provide specific exemptions from electric pole and tower firebreak and electric conductor clearance standards and specifies when and where standards apply.

Executive Order B-52-18

Governor Edmund G. Brown Jr. signed Executive Order (EO) B-52-18 on May 10, 2018. EO B-52-18 recognizes that the size and intensity of wildfires have dramatically increased and orders the California Department of Forestry and Fire Protection (CAL FIRE) to work with landowners to accelerate prescribed fire projects across jurisdictions and integrate fire prevention activities into landscape reforestation efforts in and near wildland-urban interface areas (State of California 2018).

2018 Strategic Fire Plan for California

Developed by the Board of Forestry and Fire Protection, the 2018 Strategic Fire Plan for California outlines goals and objectives to implement CAL FIRE’s overall policy direction and vision (CAL FIRE 2018). The 2018 plan demonstrates CAL FIRE’s focus on: (1) fire prevention and suppression activities to protect lives, property, and ecosystem services; and (2) natural resource management to maintain the state’s forests as a resilient carbon sink to meet California’s climate change goals and serve as important habitat for adaptation and mitigation. CAL FIRE provides direction for fire prevention and enforcement within the SRAs using fire resource assessments, a variety of available data, mapping, and other tools. Pre-fire management activities, including prescribed burning, fuel breaks, forest health treatments, and removal of hazardous vegetation, are conducted at the unit level under the guidance of CAL FIRE program managers. Through the 2018 Strategic Plan, CAL FIRE also delivers land use planning and defensible space inspection programs to the local level across the state.

The 2018 Strategic Fire Plan for California outlines operational units, which geographically follow County lines and consist of one operational unit to three counties. Because each

operational unit varies greatly in size, terrain, and fire suppression strategies, individual unit strategic fire plans are completed annually to address how each unit is achieving the goals and objectives of the California Strategic Fire Plan.

Governor’s Forest Management Task Force

On January 8, 2021, Governor Gavin Newsom’s Forest Management Task Force released *California’s Wildfire and Forest Resilience Action Plan* (CFMTF 2021), a comprehensive plan to reduce wildfire risk for vulnerable communities, improve the health of forests and wildlands, and accelerate action to combat climate change. Implementation of the plan is intended to guide the state’s efforts going forward with an overall goal to increase the pace and scale of forest management and wildfire resilience efforts by 2025 and beyond. The plan contains four goals: Goal 1, to increase the pace and scale of forest health projects; Goal 2, to strengthen the protection of communities; Goal 3, to manage forests to achieve the state’s economic and environmental goals; and Goal 4, to drive innovation and measure progress.

State of California Emergency Response Plan

Pursuant to the Emergency Services Act (Government Code Section 8550 et seq.), the California Office of Emergency Services (Cal OES) developed the *State of California Emergency Plan* (State Emergency Plan) to coordinate how emergency services are provided by federal, state, and local governmental agencies and private persons in response to natural and human-caused emergencies (Cal OES 2017). The State Emergency Plan recognizes that “climate impacts, including extreme weather events, sea level rise, changing temperature, precipitation patterns, and severe and frequent wildfires, present new risks that impact all phases of emergency management” and outlines how Cal OES coordinates the emergency responses of other agencies. For example, the Cal OES Fire and Rescue Branch coordinates all interregional and state agency activity related to mutual aid under the California Fire Service and Rescue Mutual Aid Plan; this mutual aid and multiagency coordination mitigates the effects of fire and other disasters, whether they are natural or human-caused (Cal OES 2019). The State Emergency Plan also defines the “policies, concepts, and general protocols” for proper implementation of the California Standardized Emergency Management System, which agencies in California must follow during multiagency response efforts whenever state agencies are involved.

Regional and Local

Los Angeles County Operational Area Emergency Response Plan

Adopted in 2012, the LA County Operational Area Emergency Response Plan identifies how the emergency response plan aligns with other local, state, and federal authorities. The Plan identifies various emergency management phases, incident management systems, and identifies operational priorities.

2021 LACFD Strategic Plan

The Los Angeles County Fire Department (LACFD) is one of six contract counties that have executed a contract with the State of California to provide wildland fire protection on SRAs.

LACFD has the responsibility as a contract County to implement the State Strategic Fire Plan and functionally operates as a unit of CAL FIRE and is responsible for Strategic Fire Plan activities in the county. The 2021 LACFD Strategic Plan includes three goals: emergency operations, public service, and organizational effectiveness. The 2021 LACFD Strategic Plan includes goals related to analyzing the threat of wildfire to communities in the wildland urban interface, fuel reduction projects, developing battalion specific asset maps, strategies, and tactics, and identifying fire prevention strategies that are consistent with the County's land use planning strategies. LACFD also includes goals to support local Fire Safe Councils and to work with communities to develop Community Wildfire Protection Plans (LACFD 2021).

Los Angeles County General Plan 2035

The Public Services and Facilities Element of the *Los Angeles County General Plan 2035* provides the following goals and policies potentially relevant to the Proposed Project:

Goal PS/F 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

Policy PS/F 1.1: Discourage development in areas without adequate public services and facilities.

Policy PS/F 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.

Policy PS/F 1.4: Ensure the adequate maintenance of infrastructure.

Policy PS/F 1.5: Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains Local Coastal Program (LCP) was adopted by the County of Los Angeles and California Coastal Commission in 2018 and includes both a land use plan and implementing measures. The LCP provides the following goals and policies potentially relevant to public services for the Proposed Project:

Goal PF-3: Adequate fire and paramedic services to meet existing and future demand.

Policy PF-18: Continue to consult and coordinate with the Fire Department as part of the project review process.

Policy PF-19: Reduce fire hazards by:

- Reviewing new development for adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel.
- Requiring, where appropriate, on-site fire suppression systems for all new residential and commercial development to reduce the dependence on Fire Department equipment and personnel.

- Limiting the length of private access roads to reduce the amount of time necessary for the Fire Department to reach residences and to minimize risk to firefighters.
- Requiring project design to provide clearly visible (during the day and night) address signs for easy identification during emergencies.
- Cooperating with the Fire Department to ensure compliance with the Fire Code.
- Facilitating the formation of volunteer Fire Departments and volunteer EMS providers such as the Malibu Search and Rescue Team.

Goal PF-4: Adequate police services to meet local needs and provide safe and secure environment for people and property.

Policy PF-21: Continue to consult and coordinate with the Sheriff's Department and CHP as part of the environmental review process for projects subject to CEQA.

Topanga State Park General Plan

The Topanga State Park General Plan (State Parks 2012) provides the following goals potentially relevant to the Proposed Project:

- As regional development pressures increase, establish, maintain, and protect buffers adjacent to the Park.
 - Plan with neighboring land and business owners, communities, and city, county, state, and federal agencies to develop and maintain a buffer system along the outer edge of park boundaries. This buffer system should discourage dense urban development and include the potential use of deed restrictions dealing with fire along the edges of park property.

Topanga Community Wildland Fire Evacuation Plan

The Topanga Community Wildland Fire Evacuation Plan identifies Los Angeles County's approach to ensure, in cooperation with public agencies, a safe and effective community response to a wildland fire evacuation (CEO OEM 2009).

City of Malibu Mass Evacuation Plan

The City of Malibu Mass Evacuation Plan was developed through a collaborative, multiagency process. In August 2019, a multiagency evacuation exercise was held with representatives from LACFD, the County Sheriff's Department, DPW, DBH, the California Department of Transportation (Caltrans), the California Highway Patrol, Pepperdine University, the Topanga Coalition for Emergency Preparedness, the Santa Monica Police Department, and County Supervisor Sheila Kuehl's office. The City of Malibu is vulnerable to a variety of hazards that could require a mass evacuation of all or part of the city, including fire, flooding, landslide, and tsunami hazards. The 2018 Woolsey Fire, which caused significant damage and involved the full evacuation of the city, demonstrated the need for a comprehensive and coordinated plan (City of Malibu 2020).

3.13.2 Affected Environment

The Proposed Project is located in the Santa Monica Mountains, within the boundaries of Topanga State Park and Topanga Beach within unincorporated Los Angeles County. A small portion of the Proposed Project is also within the City of Malibu and activities there are anticipated to be limited to Caltrans right of way (ROW). The Proposed Project is within the Santa Monica Mountains National Recreation Area. For the purposes of this analysis, public services within a 10-mile radius of the Proposed Project area were evaluated.

Fire Protection

Fire protection services that serve the Project area are primarily provided by the LACFD. LACFD provides firefighting, emergency medical services, air and wildland operations, lifeguards, fire prevention, public education, urban search and rescue, and hazardous materials regulatory enforcement services within unincorporated Los Angeles County.

LACFD is responsible for providing fire protection and emergency medical service delivery to 4.1 million residents living in 1.25 million housing units in 59 cities and all unincorporated areas of Los Angeles County, along with the city of La Habra located in Orange County (LACFD 2022). LACFD currently employs approximately 4,700 personnel, including firefighters, dispatchers, lifeguards, nurses, and administrative support. With approximately 4,000 firefighters, LACFD also includes the following fire and rescue resources: 176 fire stations; 251 engine companies; 73 paramedic units; 34 truck companies. In addition, LACFD has the following specialized resources five swift water rescue units; three hazardous materials squads; two urban search and rescue squads; and two fire boats. The nearest LACFD stations are Station 70 located at approximately 3.75 miles west of the Project area at 3970 Carbon Canyon Road in the City of Malibu, Station 69 located approximately 4 miles north of the Project area at 401 S. Topanga Canyon Blvd, in the town of Topanga. Additional resources nearby include the Los Angeles City Fire Department Station 23 located 2 miles east of the Project area at 17281 Sunset Boulevard in Pacific Palisades and LACFD Station 88 at 23720 Malibu Road located in the city of Malibu, approximately 6 miles west of the Project area. Additionally, LACFD has air support from station Bravo 69 located on Saddle Peak Road, as well as super scoopers and other aerial resources.

LACFD follows the following standards for response times (County of Los Angeles 2014):

- 5 minutes or less for response times for urban areas.
- 8 minutes or less for suburban areas.
- 12 minutes or less for rural areas (LACFD 2021).

Firefighting efforts within Topanga State Park are conducted as a multiagency effort. While the County Fire Station #69 and City Fire Station #23 are the primary responders for the Project area, State Parks also has agreements with a few agencies such as the Mountains Recreation and Conservation Authority (MCRA), for providing joint use of fire crews for fire protection.

In addition to fire prevention and suppression, LACFD is also the primary provider of paramedic, lifeguard, and fire inspection services within the study area. LACFD also provides specialized services such as hazardous materials control, air rescue helicopter, air ambulance helicopter, and fire suppression helicopters. Helicopter response to heavy trauma incidents is available when street congestion and/or other factors preclude timely response by ground-based units. Los Angeles County Lifeguards are a division of the LACFD and are responsible for first response at the County beaches. According to the LACFD's 2021 Statistical Summary, the LACFD currently operates 24 lifeguard stations and 159 lifeguard towers with 174 full-time ocean lifeguards and 614 recurrent ocean lifeguards. Within the Project area, Topanga County Beach includes a lifeguard and public restroom building and helipad that provide emergency services for the County beach.

Police Protection

Los Angeles County Sheriff's Department (LASD), California Highway Patrol (CHP), and State Parks are primarily responsible for police patrol and protection services in the Project area.

LASD would primarily serve land managed by DBH. LASD is the largest sheriff's department in the United States, with more than 17,000 employees, including approximately 9,800 sworn personnel (LASD 2022). LASD serves as general law enforcement for the unincorporated areas of Los Angeles County, as well as cities within the county. The LASD also has established an optimal service response time of 10 minutes or less for emergency response incidents (a crime that is presently occurring and is a life-or-death situation), 20 minutes or less for priority response incidents (a crime or incident that is currently occurring, but which is not a life or death situation), and 60 minutes or less for routine response incidents (a crime that has already occurred and is not a life or death situation).

The Malibu/Lost Hills Sheriff's Station, located at 27050 Agoura Road in Agoura Hills, is the closest station and is approximately 10 miles northwest of the Project site. The Lost Hills Station has specialized units, including the Juvenile Intervention Team and Malibu Search and Rescue. Supplemental enforcement on local beaches is provided during peak summer months by the Malibu Beach Team, and the Volunteers on Patrol, which assists deputies with parking enforcement, traffic control, and disaster response (City of Malibu 2022).

The California Highway Patrol (CHP) has jurisdiction on highways and freeways within the state of California, including Pacific Coast Highway within the Proposed Project site. There are no CHP facilities within the Proposed Project site; however, the closest CHP office (580) West Valley is at 5825 De Soto Avenue in Woodland Hills, approximately 9 miles north of the Proposed Project site (CHP 2022). The West Valley area office has a patrol area of approximately 400 square miles, providing services to the City of Los Angeles, Hidden Hills, Calabasas, Agoura Hills, Westlake Village, Malibu, Lake Manor, Twin Lakes, San Fernando, and Topanga Canyon, reaching approximately 2.1 million community members and those traveling through the area.

State Parks rangers address all state, county, and local laws except major investigations using specialized detective services. Rangers respond from Trippet Ranch in Topanga State Park located at 20828 Entrada Road, Topanga, approximately 5.9 miles north of the Project area.

3.13.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to public services. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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 following public services:
 - Fire Protection and Emergency Services (Refer to Impact PSF 3.13-1.)
 - Sheriff Protection (Refer to Impact PSF 3.13-2.)
 - Schools
 - Parks
 - Libraries
- Result in a cumulatively considerable impacts to public services. (Refer to Impact PSF 3.13-3.)

Parks and recreational services, including beaches, trails, and open space, are analyzed in Section 3.14, *Parks and Recreation*. There are no libraries or schools within the Project area and the Proposed Project does not include any uses that would have the potential to result in population growth or increase in use of public services including libraries and schools. Therefore, library and school services would not be affected by the Proposed Project and are not discussed further.

Fire and Emergency Services

PSF 3.13-1: The Project could create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of 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 fire protection and emergency services. *Impacts would be less than significant with mitigation incorporated.*

As described in Section 3.13.2, *Affected Environment*, fire protection and emergency services in the Project area are primarily provided by the LACFD. The Los Angeles County Lifeguards are members of the LACFD and along with State Parks rangers are often the first responders within the Project area. In addition to the lifeguards and State Parks rangers, the nearest LACFD station is located approximately 3.75 miles away from the Project area and additional services are also

provided by LAFD, which has a station located approximately 2 miles way from the Project area. The Proposed Project would have the potential to impact fire protection and emergency services in the Project area due to disruptions/road closures or detours that could congest local roadways as well as the use of flammable construction materials during construction. As described below, the various components for the Proposed Project would not require the establishment of new public service facilities or cause physical impacts associated with the provision of new or altered facilities.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not cause an increase in residences or population as a result of construction or operation, there would be no increase in the need for new fire protection or emergency service facilities. As a result, no impacts would occur because construction and new or expanded fire or emergency service facilities would not be required.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts to fire and emergency services would be similar under all Build Alternatives. The Proposed Project would not require the establishment of new fire and emergency service facilities, however the existing lifeguard and public restroom building, and helipad would be removed and relocated to provide more efficient emergency services. As no new or additional facilities would be required beyond the planned improvements, the Build Alternatives would not cause physical impacts associated with the provision of new or altered facilities, as discussed in the sections below.

Construction

Construction activities associated with the Build Alternatives could increase the temporary potential for accidental on-site fires from such sources as the operation of mechanical equipment and use of flammable construction materials. Excavation and construction of the lagoon bank habitat would involve removing invasive vegetation and stockpiling for proper deposition, creating a source of combustible material on-site. Structures associated with the Topanga Ranch Motel are made of wood and possibly flammable paint and chemicals. Demolition and stockpiling of the construction debris could also create a source of combustible material on-site.

Implementation of safe construction practices and compliance with California Occupational Safety and Health Administration (Cal/OSHA) requirements would reduce short-term potential impacts from fire to less than significant.

Construction of all Build Alternatives would temporarily increase workers and traffic in the area through daily commutes by workers and trucks haul construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, a Traffic Control and Emergency Response Plan would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate access is provided through the construction

area. The Plan would also outline maintenance of lifeguard and helicopter emergency services during construction.

Operation

The expanded lagoon would be filled with fresh and sometimes brackish water but surrounded by beach and natural topography. The existing retaining walls and development directly adjacent to the lagoon would be removed and relocated, which would reduce the amount of potential fire hazards from structures adjacent to the lagoon compared to existing conditions. The risk of fire and emergency situations would be similar to or improved compared to existing. Therefore, the lagoon expansion would not require additional fire protection or emergency services.

The new PCH bridge would be constructed with easier pedestrian and emergency access between Topanga Beach and State Park under the highway. No capacity enhancements are proposed that would increase traffic volumes and cause poor traffic operating conditions on local roadways that would affect emergency service response times. Therefore, no expansion or construction of fire protection and emergency services would be needed.

The lifeguard and public restroom building, and helipad would be located adjacent to each other and closer to PCH to enhance emergency response times. Emergency access to the beach would also be enhanced via provision of year-round emergency and pedestrian access on both sides of the lagoon under the highway and the realigned access road. Staff parking and access at the beach level would be improved. Therefore, no expansion or construction of fire protection and emergency services would be needed. No significant impacts related to fire protection and emergency services would occur, and further, a net benefit would occur as a result of the proposed improvements to emergency access.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), seepage pits (Option 2), and a sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could fully support wastewater generation associated with any of the Build Alternatives.

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur for the seepage pit option. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Development of a

sewer line under wastewater Option 3 would service only the Project area. Construction of a sewer line would therefore not increase area growth and thus public services need.

Implementation of **Mitigation Measure TRA-1** would ensure there is no disruption of emergency services under development of any wastewater option. As such, adequate fire and emergency services would be maintained throughout the construction period. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure

Implement **Mitigation Measure TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, consisting of a park office, employee housing, a maintenance/storage facility, a concession and associated parking, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease that is located at the site of the current Reel Inn restaurant would also be present. All other existing on-site leases and structures would be removed. Available parking near the motel and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day-use parking. All retained structures would be upgraded to meet current building code requirements related to fire safety. Implementation of safe construction practices and compliance with CAOSHA requirements would reduce potential impacts from fire to less than significant.

Construction of future visitor services would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, a Traffic Control and Emergency Response Plan would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate access is provided during construction.

With the availability of overnight accommodation, and an increase in Park staff, above existing conditions, future services development may require an on-site fire safety plan and/or a fire hose hydrant. Under Alternatives 3 and 4, redevelopment of the visitor services may require further environmental review and approval by State Parks.

Mitigation Measure

Implement **Mitigation Measure TRA-1**. (Refer to Section 3.16, *Transportation and Circulation*.)

Significance Determination

Less than Significant with Mitigation Incorporated

Police/Sheriff Services

PSF 3.13-2: The Project could create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of 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 sheriff protection. Impacts would be less than significant with mitigation incorporated.

As described above in Section 3.13.2, *Affected Environment*, police patrol and protection services in the Project area are primarily provided by LASD for Topanga Beach, State Parks rangers for Topanga State Park, and CHP has jurisdiction on PCH within the Project area. The nearest stations operated by LASD and CHP are each located within 10 miles of the Project area. There is a ranger station currently located 5 miles north of the Project area within Topanga State Park. Public trespassing and temporary lane closures during construction of the Proposed Project would have the greatest potential to result in impacts to police/sheriff services at the Project site. As described below, the various components for the Proposed Project would not require the establishment of new public service facilities or cause physical impacts associated with the provision of new or altered facilities.

Alternative 1 (No Build)

Under Project Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not increase residences or population as a result of construction or operation, no increase in the need for new sheriff protection facilities would occur. Therefore, construction of a new or expanded sheriff facilities would not be required and no impact would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts to police and sheriff services would be similar under all Build Alternatives. The Proposed Project would not require the establishment of police/sheriff service facilities or cause physical impacts associated with the provision of new or altered facilities as discussed in the sections below.

Construction

Construction impacts related to police and sheriff services would be similar to impacts described above under Fire and Emergency Services. Construction of all Build Alternatives would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, a Traffic Control and Emergency Response Plan would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate access by the local police and sheriff is provided through the construction area. Implementation of **Mitigation Measure TRA-1** would ensure there is no disruption of emergency services. As such, adequate police and sheriff services would be maintained throughout the construction period. Temporary impacts would be less than significant with mitigation incorporated.

Operation

Under Alternatives 2, 3, and 4, expansion of the lagoon would not result in any population growth or substantial new operational activities that would require additional police protection services. Impacts would be less than significant.

Operation of the replacement bridge along PCH would not alter existing CHP facilities or result in any capacity enhancements that would require additional CHP services. Impacts would be less than significant.

The proposed demolition and reconstruction of the lifeguard and public restroom building and helipad, would not result in any population growth or new operational activities that would require additional police protection services. The proposed lifeguard and public restroom building would be relocated at a higher elevation to address sea level rise but would not result in an expansion of capacity of lifeguard services or provide additional restrooms beyond existing conditions that would result in additional employees or visitors, requiring additional police services. Impacts would be less than significant.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could fully support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur for the seepage pit option. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas

along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Development of a sewer line under wastewater Option 3 would only service the Project area. Construction of a sewer line would therefore not increase area growth and thus police/sheriff services need.

Implementation of **Mitigation Measure TRA-1** would ensure there is no disruption of emergency services under development of any wastewater option. As such, adequate police services would be maintained throughout the construction period. Impacts would be less than significant with mitigation incorporated. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure

Implement **Mitigation Measure TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Project visitor services' facilities would not create new residential development and would therefore not directly induce substantial population growth in the Project area. Further, with the removal of the Topanga Ranch Motel and existing leases, the number of additional full-time employees would be similar to existing conditions. Therefore, no expansion or construction of police and sheriff services would be needed. Impacts would be less than significant.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be present. All other existing on-site leases and structures would be removed. Available parking near the motel and along the PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day-use parking.

Construction of future visitor services would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, a Traffic Control and Emergency

Response Plan would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate police access is provided during construction.

With the potential development of overnight accommodations, and an increase in Park staff, above existing conditions, future services development may require lighting in and around the developed areas for safety. Under Alternatives 3 and 4, redevelopment of the visitor services may require further environmental review and approval by State Parks.

Mitigation Measure

Implement **Mitigation Measure TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

PSF 3.13-3: The Project could result in cumulatively considerable impacts to public services. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative public services impacts is the same as the area for Project impacts to public services described above and includes the area within a 10-mile radius of the Project area to encompass the nearest service stations for police and fire protection.

Significant cumulative impacts related to public services could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more cumulative projects would create capacity or service level problems of fire, emergency, police/sheriff services, or require the construction of new or expanded fire/emergency and police/sheriff facilities. As noted in Table 3-1, there is only one minor project being constructed near the Project area, the *PCH Signal System Improvements Project*.

As described above, the Proposed Project would result in less than significant impact to public services with implementation of **Mitigation Measure TRA-1**. Implementation of this mitigation measure would ensure no substantial increase in the provision of fire protection services, emergency services, or police protection services would be required during construction. Furthermore, as none of the Build Alternatives would induce substantial population growth through employment, or provide additional housing, no additional public services would be required during operation. On a cumulative basis, individual future discretionary projects, including project-level development applications for visitor services uses analyzed at the program-level herein, may have the potential to require additional public services dependent on the type of project and the specific location. However, because the Proposed Project, including

the proposed visitor services' facilities, would create minimal demand on existing public services during construction, and would require almost no long-term services once operational beyond existing conditions under any of the Build Alternatives. Therefore, the Proposed Project would not make a cumulatively considerable contribution to a cumulative public services impact related to fire protection, emergency service, or police protection. Less than significant cumulative impacts related to public services would occur with mitigation.

Mitigation Measure

Implement **Mitigation Measure TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

3.13.4 Summary of Impacts

Table 3.13-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to public services. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.13-1
SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO PUBLIC SERVICES**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
3.13-1: Fire and Emergency Services	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM
3.13-2: Police/Sheriff Services	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM
3.13-3: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less-than-Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

3.13.5 References

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3.14 Parks and Recreation

This section addresses the potential impacts to parks and recreation associated with implementation of the Proposed Project. This section includes a summary of applicable regulations related to parks and recreational facilities; a description of the existing parks and recreational facilities in the Project area; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to parks and recreation in and around the Project area.

3.14.1 Regulatory Setting

Federal

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan outlines goals and policies to establish partnerships with local and state entities to provide recreational and educational opportunities to the public (National Park Service 2002).

State

California Recreation Policy

California Public Resources Code [PRC] Section 540 directs the Commission to formulate, in cooperation with other state agencies, interested organizations, and citizens, and recommend to the Director of California State Parks for adoption, a comprehensive recreational policy for the State of California. The 2005 California Recreation Policy considers a range of recreation activities, including active, passive, indoor, and outdoor (State Parks 2005). It is a comprehensive policy directed at all recreation providers, including federal, state, and local agencies as well as private and nonprofit suppliers. The policy mandates opportunities and access to recreation activities for all activities and populations while preserving natural and cultural resources.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal Programs and development subject to the Coastal Act. Policies relevant to the Proposed Project are as follows:

Section 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.

Section 30221 Oceanfront land; protection for recreational 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.

Section 30223 Upland areas. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Regional and Local

Los Angeles County Code (Quimby Requirements)

The Los Angeles County Code (County Code) contains regulations governing operation of park facilities, and regulations for the provision of parklands for new subdivisions, in accordance with the Quimby Act. County Code Section 21.24.340 (Residential Subdivisions, Local Park Space Obligation, Formula) provides the methodology to determine the amount of parkland required to be dedicated by the subdivider as a part of the subdivision map approval process. Section 21.28.140 also states the developer may also choose to pay a fee in-lieu of the provision of parkland or may choose to provide less than the required amount of parkland but provide amenities equal to the value of what the in-lieu fee would be. As a condition of zone change approvals, general plan amendments, specific plan approvals, or development agreements, the County may require a subdivider to dedicate land according to the *Los Angeles County General Plan 2035* goal of 4 acres of local parkland per 1,000 residents, and 6 acres of regional parkland per 1,000 residents (County of Los Angeles 2015). Once the local park space obligation is determined, County Code Section 21.24.350 (Residential Subdivisions, Provision or Local Park Sites) contains regulations pertaining to the siting of park facilities as well as provisions that give the option to subdividers of 50 units or less to choose to provide the obligatory amount of parkland, any excess of which would be credited to the subdivision, or otherwise allow any remaining obligation to be satisfied by the payment of park fees in accordance with the provisions of Section 21.28.140 (Park Fees Required When, Computation and Use). It is the County's Department of Parks and Recreation (LA County Parks) responsibility to develop a schedule specifying how, when, and where it will use the parkland and/or fees, from each subdivision to develop park or recreational facilities within the applicable park planning area.

Los Angeles County General Plan 2035

The Parks and Recreation Element of the *Los Angeles County General Plan 2035* provides the following goals and policies potentially relevant to the Proposed Project (County of Los Angeles 2015):

Goal P/R 1: Enhanced active and passive park and recreation opportunities for all users.

Policy P/R 1.2: Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.

Policy P/R 1.5: Ensure that County parks and recreational facilities are clean, safe, inviting, usable and accessible.

Policy P/R 1.8: Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities.

Goal P/R 2: Enhanced multi-agency collaboration to leverage resources.

Policy P/R 2.5: Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, the county, state, and federal agencies, private groups, schools, private landowners, and other organizations.

Goal P/R 5: Protection of historical and natural resources on County park properties.

Policy P/R 5.1: Preserve historic resources on County Park properties, including buildings, collections, landscapes, bridges, and other physical features.

Policy P/R 5.3: Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

Policy P/R 5.4: Ensure maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains Local Coastal Program (LCP) was adopted by the County of Los Angeles and California Coastal Commission in 2018 and includes both a land use plan and implementing measures. The land use plan (LUP) serves as the land use plan for the LCP, replacing in its entirety the Malibu Land Use Plan, and the Local Implementation Program (LIP), is contained with a segment of the Los Angeles County Code Title 22 (Planning and Zoning Ordinance). The LUP provides the following goals and policies potentially relevant to the Proposed Project (LA County Planning 2018):

- Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural manmade resources.
- Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the County and the State.
- Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
- Assure priority for coastal-dependent and coastal-related development over other development on the coast.
- Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

Topanga State Park General Plan

PRC Section 3002.2 and California Administration Code Section 4332 Title 14 requires State Parks to prepare a general plan for a park prior to permanent development. A general plan provides guidelines for future land-use management within a state park. A general plan does not provide detailed management recommendations, but rather provides conceptual parameters for

future management actions. The current Topanga State Park General Plan was adopted in 2012, and provides the following park-wide goals potentially relevant to the Proposed Project (State Parks 2012):

- Protect, enhance, and restore the Park’s wetlands and hydrologic resources.
- Promote and restore the sustainability of natural ecosystem processes by actively managing plant community health and development, while maintaining the protection of cultural resources. Efforts also will address the conservation of sensitive and unique species and the control of exotic invasive species.
- Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native plant communities within the Park.
- Reduce the presence and further invasion of exotic species in the Park.
- Perpetuate wildlife assemblages by protecting, restoring, and interpreting the native terrestrial and aquatic animals within the Park.
- Protect all sensitive wildlife species occurring in the Park including those legally listed under federal and state law as threatened or endangered, those that are Species of Concern (CDFW), and those considered locally sensitive or endemic to the area.
- Work to control exotic animals that are found to upset natural ecological dynamics of native species.
- Ensure the highest level of professional measures to protect the Park’s historical resources.
- Promote a better understanding and a greater appreciation for Topanga State Park’s historical resources and cultural history.
- Visitors will participate in a variety of interpretive programs throughout the Park.

The Topanga State Park General Plan also includes Area Specific Goals and Guidelines. The following goals for the Lower Topanga and Lagoon Zones, and Watershed Conservation Zone are potentially relevant to the Proposed Project:

- Establish these two zones as a “natural” gateway into the Park with minimal built structures.
- Provide overnight lodging and concessions opportunities on the west side of the lagoon with concession opportunities on the east side of the creek.
- Restore, maintain and protect the lagoon/estuarine ecosystem and allow for scientific research as needed to reach these goals.
- Provide visitor-use and interpretive opportunities that are reflective of the creek/ lagoon restoration efforts in conjunction with the Native American story of the area.
- Educate the public and interpret the archaeological resources within Topanga State Park in general and in the Lower Topanga Canyon area in particular.
- Identify, document, evaluate, and manage historically significant resources within the Lower Topanga Canyon area, while enhancing visitor experiences.
- Restore, maintain, and protect the native ecosystem of the Topanga Creek Watershed, especially the riparian vegetation and wildlife corridor.

3.14.2 Affected Environment

The Proposed Project is located in the Santa Monica Mountains, adjacent to the communities of Topanga and Malibu, within unincorporated Los Angeles County, California. It is part of the Santa Monica Mountains National Recreation Area (SMMNRA). The Study Area for parks and recreational resources includes the area within a 0.5-mile radius of the Project limits. Resources within the Project area are described in detail below. The entire Project area is zoned as Open Space Recreation by the Santa Monica Mountains LCP.

Santa Monica Mountains National Recreation Area

The SMMNRA encompasses 150,050 acres, with approximately 71,300 acres of public parkland and the rest in private or other government ownership. The SMMNRA was created in 1978 by the U.S. Congress with shared management responsibilities between the National Park Service, California State Parks, and the Santa Monica Mountains Conservancy. The SMMNRA includes 46 miles of mountains adjacent to the California coastline with beaches, tide pools, and lagoons, with diverse ecological features and habitats for vegetation and wildlife, while also serving as an important recreational area due to its proximity to the San Fernando Valley and Los Angeles Basin. According to the General Management Plan, more than 33 million visitors enjoy the resources within the SMMNRA annually.

Topanga State Park

As part of the SMMNRA, Topanga State Park is a publicly owned recreational facility that covers over 11,000 acres with 36 miles of trails and unimproved roads. The park's boundaries stretch from Topanga Canyon to Pacific Palisades and Mulholland Drive. There are more than 60 trail entrances. Topanga State Park is not only the largest park in the Santa Monica Mountains, but it is also considered the largest park located in the limits of a major city. A portion of the Topanga Lagoon area north of PCH is owned by State Parks as part of Topanga State Park. The park is also the largest contiguous block of native habitat in the eastern part of the Santa Monica Mountains and contains significant paleontological and archaeological resources.

Recreational resources within the park provide 36 miles of trails, including trails that connect to other regional trail alignments, such as the Backbone Trail and Rim of the Valley Trail, camping at Musch Trail Camp, equestrian activities, and visitor support services. As described in the 2012 General Plan for Topanga State Park, with the acquisition of the Lower Topanga Canyon parcel, a physical connection was created between the interior of the park and the coast, whereby a "natural and scenic gateway" into the park can be enhanced. The Santa Monica Mountains Trail Plan and the Coastal Access Trail plan both have placeholders for adding trail connections within the Project area.

Topanga Beach

Topanga Beach is south of the Project area and has approximately 1 mile of beach frontage and extends along PCH. Topanga Beach also includes an ocean frontage of 21.5 acres, receives

approximately 750,000 visitors each year, and is popular with surfers because of the orientation of the beach (DBH 2022). Topanga Beach was transferred from State Parks to the County in the 1980s and is now operated and maintained by DBH. The mouth of Topanga Creek creates a point that provides for waves often used for surfing in the Pacific Ocean as well as the lagoon where the creek backs up behind the sand. Topanga Beach offers 97 parking spaces, beach wheelchairs, restrooms, a picnic area, and showers. Popular activities at the beach include surfing, scuba diving, fishing, swimming, sunbathing, windsurfing, bodysurfing, and bodyboarding. However, this stretch of the beach occasionally has rip currents, which present a hazard to surfers and swimmers.

Will Rogers State Beach

Will Rogers State Beach is the closest state-beach to the Proposed Project; it is located to the east within unincorporated Los Angeles County and is operated by DBH. This beach provides approximately 3 miles of beach frontage with lifeguard towers, volleyball courts, picnic tables, and wheelchair access. Popular activities also include surfing, fishing, sailing, and windsurfing (DBH 2022). Access is primarily provided via parking along southbound PCH and a beach parking lot that is the eastern terminus of the Project Area. This lot could be used for construction staging if wastewater Option 3 (sewer) is selected.

Las Tunas Beach

Las Tunas Beach is located within the city of Malibu and is operated by DBH. It is located west of the Project limits at the mouth of Tuna Canyon and has no developed facilities. This beach is popular with fishers and scuba divers and is also used for swimming, surfing, and passive recreation. Access is primarily provided via parking along southbound PCH and a parking lot approximately 0.5 mile west of Tuna Canyon Road.

3.14.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to recreational resources. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- 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. (Refer to Impact REC 3.14-1.)
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Refer to Impact REC 3.14-2.)

Neighborhood and Regional Parks

REC 3.14-1: The Project could 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. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Project Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Existing DBH facilities would continue to be at risk from the beach eroding because of sea level rise. The historic Topanga Ranch Motel on State Parks land would continue to degrade. Alternative 1 would not increase the use of existing neighborhood, regional parks, or other recreational facilities.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts with respect to existing neighborhood and regional parks or other recreational facilities would be similar under all Build Alternatives, although Alternative 2 provides more natural components and Alternatives 3 and 4 provide more visitor services.

Construction

Construction of Alternatives 2, 3, and 4 would result in temporary access restrictions to recreational facilities within the Project area that may result in impacts to other existing recreational facilities. Construction activities in portions of the Proposed Project area for five years may deter visitation as it is anticipated that noise, visual resources, and traffic disruption would affect recreational opportunities within the area during construction. As discussed in Section 3.14, *Transportation and Circulation*, Stage Construction & Traffic Handling Plan and Transportation Management Plan (TMP) would be required (**Mitigation Measure TRA-1**) and would outline appropriate traffic control measures intended to ensure adequate access is provided during construction. As described in Section 3.12, *Noise and Vibration*, noise control during construction would conform to the provisions in Section 14-8.02 of Caltrans' "Noise Control Requirements" and the County's Municipal Code Noise Ordinance. During construction, some beach visitors may choose other local beaches to avoid these temporary conditions. Since the effect of construction on visitation would be temporary, significant deterioration of neighboring beaches and parks is not anticipated.

Construction of the lagoon restoration would require removal and relocation of an existing unofficial trail within Topanga State Park; however, access to the remainder of the extensive trail alignment within the State Park would not be affected. Parking may be restricted during construction, and at times, portions of Topanga Beach would be closed to visitors. Considering Topanga Beach is one of the top surfing locations in the area, recreational surfing access would be maintained at all times during construction with the provision of temporary access to the surf break (**Mitigation Measure PR-2**). Partial beach closures would be short in duration and limited to only certain periods of construction at certain small areas of the beach, mainly during reconstruction of the lifeguard and public restroom building and helipad, and then during movement of fill if nearshore placement is selected as the method of removal.

Operation

Under all Build Alternatives, wetland and riparian bank habitats would increase, providing a greater refuge area for flora and fauna as compared to existing conditions. Restoring the lagoon would provide additional recreational user benefits beyond existing conditions in the form of trail improvements and improved natural habitat and wildlife viewing through improved water quality conditions, thus providing a benefit to the environment.

Under all Build Alternatives, the new PCH bridge would continue to accommodate two lanes in each direction with no expansion of roadway capacity. The new PCH bridge would include improved pedestrian access between Topanga Beach and Topanga State Park over existing conditions. Parking along the bridge would not be allowed. However, while parking along PCH would decrease under all Build Alternatives, overall parking for coastal access on the south side of PCH operated by the County would be similar to existing conditions but would include the development of a new parking area on the southwest side of the lagoon. Additional parking will be provided in the Gateway Corner along TCB on State Parks property in all Build Alternatives. In addition, the proposed transportation improvements including the bus stop, pedestrian circulation, and bicycle improvements in parking areas and along PCH, would enhance non-vehicular access, reducing the need for additional parking.

Under all Build Alternatives, the Topanga Beach area and depth would increase, thereby providing additional space for recreational users. Reconstruction of the lifeguard and public restroom building closer to PCH would provide a clean and safe environment for recreational users, which would be an improvement compared to existing conditions. Relocation of the helipad would also improve emergency response and no interruption of emergency or public access will occur at this recreational facility.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives.

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

As described above in *Affected Environment*, there are ample parks and recreational facilities, including miles of open beaches, available in the Project area, that would provide alternate recreational sources without accelerating physical deterioration.

In addition, implementation of **Mitigation Measure TRA-1, PR-1** and **PR-2** would ensure visitors are aware of access restrictions and provide a temporary solution for accessing the surf point break. Thus, no significant increase in use of other recreational facilities is anticipated and impacts would be less than significant with mitigation incorporated.

Mitigation Measures

PR-1: Temporary Access Restrictions. During final design, the Project Engineer in coordination with the officials with jurisdiction (i.e., State Parks or DBH) shall evaluate all proposed temporary impact areas to identify opportunities to further reduce their size and the duration of temporary access restrictions. All temporary impact areas shall be shown on the Project plans and specifications and shall include notes that the Construction Contractor shall not increase the size of those areas without consultation with the Project Engineer and subsequent environmental review. The Construction Contractor shall also be responsible for the following:

1. Ensure all temporary impact areas within parks and recreational facilities are appropriately signed and gated to restrict access.
2. Maintain the fencing throughout the time period each temporary impact area is used and to remove the fencing only after all construction activity in an area is completed, the temporary impact area is no longer needed, and the land is ready to be returned to the property owner.
3. Provide signage at each temporary impact area explaining why the area is fenced and why access is restricted, the anticipated completion date of the use of the land, and contact information for the public to solicit further information regarding temporary impact areas and the Proposed Project.

PR-2: Temporary Surf Break Access. During construction, a temporary access way to the surf break shall be constructed, to provide continued access for surfers, beach goers, and other offshore recreational uses at Topanga Beach. Prior to any beach closures, the Project Engineer in coordination with the County, shall develop detour signs notifying surfers and beach goers of the upcoming temporary closures and directing uses to the temporary accessway with estimated timeframes.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Construction and Operation

Under Alternative 2, removal of all leases but one (Reel Inn site retained) would decrease dining and shopping within State Parks property at this location. Removal of the Topanga Ranch Motel would not decrease existing overnight visitor accommodations resulting in increased use of other accommodations since this development is currently defunct. Use of other restaurants and shopping resources within the vicinity of the Project area would not result in substantial

deterioration of nearby recreational facilities. Once constructed, all Build Alternatives would improve recreational opportunities and facilities by improving or retaining coastal access and visitor services within Topanga State Park compared to existing conditions.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of programmatic visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be retained. All other existing on-site leases and structures would be removed. Available recreation parking near the motel and along the PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would likely be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Future concessions and motel structures that would be retained would be upgraded to meet current building code requirements. Implementation of safe construction practices and compliance with Occupational Safety and Health Administration (OSHA) requirements would reduce potential impacts from construction activities. Impacts would be less than significant.

Construction of future visitor services would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, Stage Construction & Traffic Handling Plan and a Transportation Management Plan (TMP) would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate access is provided during construction. Once constructed, the new development would attract visitors and would not result in deterioration of neighboring recreational facilities.

With the potential availability of overnight accommodations, there would be a greater breadth of visitor serving facilities on State Parks land within Topanga State Park above those gained under Alternative 2; however, the boundaries of the State Park would remain the same.

Mitigation Measure

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*).

Significance Determination

Less than Significant with Mitigation Incorporated

Recreational Facilities

REC 3.14-2: The Project would include recreational facilities and require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing recreational facilities within the Project area. Existing DBH facilities would continue to be at risk from the eroding beach due to sea level rise. The historic Topanga Ranch Motel on State Parks land would continue to be underutilized. Alternative 1 would not include recreational facilities or require any expansion of recreational facilities.

Alternatives 2, 3, and 4 (Build Alternatives)

Potential impacts to recreational facilities would be similar under Alternatives 3 and 4, but slightly different for Alternative 2.

Construction

The Proposed Project involves the restoration, expansion and enhancement of recreational facilities. All Build Alternatives would provide a benefit to recreational resources and the environment. Construction of the Proposed Project would include the creation of trails and pathways around the perimeter and surrounding areas that provide recreational opportunities for visitors within the Project area, providing access to both Topanga State Park and Topanga Beach. However, no official trails currently exist within the Project area that would be impacted during construction. Furthermore, with the mitigation measures described in Impact REC 3.14-1 above, construction of the Proposed Project would not restrict access to existing recreational facilities within the Project area in such a manner that would require the construction or expansion of additional recreational facilities to serve to local population.

Operation

Once constructed, the new facilities would accommodate coastal and inland recreational visitors and provide an improved and more cohesive experience. The existing surf break and surfing conditions would not be affected by the proposed new facilities (Appendix H). Since the Proposed Project involves restoration and enhancement of recreational facilities and would not result in substantial additional employees or population, no additional recreational facilities would be required to be constructed or expanded as a result of the Proposed Project.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives.

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along the PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

Since the Proposed Project involves restoration, enhancement, and expansion of recreational facilities and would not result in substantial additional employees or population, no additional recreational facilities would be required to be constructed or expanded as a result of the Proposed Project. With implementation of mitigation measures, impacts would be less than significant.

Mitigation Measures

Implement **Mitigation Measures PR-1, PR-2, and TRA-1.**

Significance Determination

Less than Significant Impact with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternatives 3 and 4, 15 to 20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site leases and structures would be removed. Available recreational parking near the motel and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Future concessions and motel structures that would be retained would be upgraded to meet current building code requirements. Implementation of safe construction practices and compliance with OSHA requirements would reduce potential impacts from construction activities. Impacts would be less than significant.

Construction of future visitor services would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site. As discussed in Section 3.16, *Transportation and Circulation*, a Traffic Management Plan would be required (**Mitigation Measure TRA-1**) that would outline appropriate traffic control measures intended to ensure adequate access is provided during construction.

Alternative 2 would develop more visitor serving facilities on State Parks property, including the potential for overnight accommodations, than Alternatives 3 and 4, which retain a greater area of open space. Under all Build Alternatives the boundaries of the State Park would remain the same.

Mitigation Measure

Implement **Mitigation Measures PR-1, PR-2, and TRA-1.**

Significance Determination

Less than Significant with Mitigation, Incorporated

Cumulative Impacts

REC 3.14-3: The Project would not result in cumulatively considerable impacts to recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The Project would result in the expansion of recreational facilities which would have a cumulatively considerable benefit on the environment. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative recreational services impacts is the same as the area for Project impacts to recreational services described above and includes adjacent areas that may contain areas with recreational facilities.

Significant cumulative impacts related to recreational facilities could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more cumulative projects would cause the physical deterioration of a recreational facility or result in the expansion of recreational facilities, which could impact the environment due to construction. As described in Table 3-1, there are multiple projects being constructed near the Project area.

As described above, each of the Build Alternatives would result in less-than-significant impact to parks and recreational facilities with implementation of the mitigation measures. Implementation of these mitigation measures would ensure no significant and unavoidable environmental impacts would occur as a result of construction and expansion of recreational facilities included as part of the Proposed Project. Furthermore, while all of the Build Alternatives would expand Topanga Beach by varying amounts, this expansion would allow for living shoreline components (i.e., dunes). The Proposed Project under any Build Alternative would increase the breadth of visitor resources available through development of an interpretive pavilion, interpretive materials, and improved coastal access through integrated trails and parking. The Proposed Project provides additional capacity for visitation on State Parks property and improved access for the entirety of the Project area. Other cumulative projects in the area may also serve to enhance recreational opportunities and facilities within the area.

On a cumulative basis, individual future discretionary projects, including project-level development applications for visitor services uses analyzed at the program-level herein, may have the potential to directly impact parks and recreational facilities through construction activities or indirectly through temporary access restrictions, changes in land uses, or additional visitors.

The Proposed Project, including the proposed future visitor serving development, would implement mitigation measures to maintain access to recreational facilities during construction and would improve the variety, extent, and integration of recreational facilities during operation. Therefore, the Proposed Project would not make a cumulatively considerable contribution to a significant cumulative parks and recreational impacts.

Mitigation Measures

Implement **Mitigation Measures PR-1, PR-2, and TRA-1.**

Significance Determination

Less than Significant with Mitigation Incorporated

3.14.4 Summary of Impacts

Table 3.14-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to parks and recreation. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.14-1
 SUMMARY OF PROPOSED PROJECT IMPACTS TO PARKS AND RECREATION**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
REC 3.14-1: Neighborhood and Regional Parks	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM
REC 3.14-2: Recreational Facilities	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures TRA-1, PR-1 and PR-2.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures TRA-1, PR-1 and PR-2.	LTSM
REC 3.14-3: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures PR-1, PR-2, and TRA-1.	LTSM

NOTES:
 NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less-than-Significant Impact with Mitigation Incorporated
 SU = Significant and Unavoidable

3.14.5 References

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3.15 Tribal Cultural Resources

This section provides an assessment of potential impacts related to tribal cultural resources that could result from implementation of the proposed project. The analysis in this section is based, in part, on consultation with the Native American Heritage Commission (NAHC) and Native American tribes.

3.15.1 Regulatory Setting

State

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerry “Jerry” Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency’s formal notification and the lead agency must begin consultation within 30 days of receiving the tribe’s request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project’s impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect,

if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Native American Consultation

State Parks submitted a request on November 27, 2019, to the California Native American Heritage Commission (NAHC) to consult their Sacred Lands File (SLF) in order to identify other culturally significant properties within the project APE, and to provide a contact list of Native American tribes, organizations or individuals with particular concern in the identified project areas. In a letter dated December 16, 2019, the NAHC reported that the results of the SLF check were positive and provided a list of Native American contacts for further follow-up. Letters were sent out to all contacts on January 22, 2020. Follow up phone calls were made by State Parks and a field meeting was held on February 18, 2020.

Representatives from the Fernandeano Tataviam Band of Mission Indians (FTBMI) and the Gabrielino Tongva Indians of California Tribal Council (GTIC) expressed interest in the project and have remained engaged in project updates and participation. A follow-up meeting to provide updates on the project was held via Zoom on May 11, 2023, with representatives of the GTIC and Gabrieleno/Tongva San Gabriel Band of Mission Indians in attendance. To date, Robert Dorame and Christina Conley of GTIC have provided Native American monitoring for the geoarchaeological study and other geotechnical studies within the Proposed Project Area.

All Native American contacts provided by the NAHC have been and continue to be notified of public meetings about the project and opportunities to comment in addition to formal consultation. Additionally, individuals from the Nunez family (Gabrielino Tongva) have requested and been added to outreach notifications.

3.15.2 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes considerations pertaining to tribal cultural resources. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. The Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(l) (Refer to Impact TCR 3.15-1).
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe (Refer to Impact TCR 3.15-1).

Tribal Cultural Resources

TCR 3.15-1: The Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 5020.1(l). Impacts would be less than significant with mitigation under Alternatives 2 and 3. Impacts would remain significant and unavoidable under Alternative 4.

As noted in Section 3.4, *Cultural Resources*, the proposed project encompass the ethnographic territory of the Gabrielino/Tongva people. A detailed cultural description of the Gabrielino/Tongva can be found in Section 3.4, *Cultural Resources*. The findings provided in the *Historical Resources Inventory and Evaluation Report for the Topanga Lagoon Restoration Project, Los Angeles County, California* (Tejada 2023) identify two tribal cultural resources in the Proposed Project Area. Based on the early records documenting numerous Native American burials encountered at the site, as well as the nature of the site as the remains of an ethnohistoric village, site P-19-000133, *Topaa'nga*, would be eligible as a tribal cultural resource. The site also has a contributing resource within the Proposed Project area, Redeposit Midden and Historic Scatter (P-19-003759). As such, although not listed in the California Register of Historic Places, both ***Topaa'nga* (P-19-000133 [ethnohistoric site])** and ***Redeposit Midden and Historic Scatter* (P-19-003759 [multicomponent site])** have been discretionarily determined by the California Department of Parks and Recreation to be eligible for listing in the California Register of Historic Places and would qualify as tribal cultural resources.

Alternative 1 (No Build)

Construction and Operations

Under Alternative 1, the Proposed Project would not be implemented; therefore 0 acres of lagoon would be restored and actions to protect the beach from SLR would be limited. The intended functions of existing structures throughout the Project area would remain the same. Over time

conditions of structures would continue to deteriorate and emergency reactive measures would be required to maintain public safety and functionality of the facilities as feasible. The future changed conditions are assumed to include a continued decline in the condition of the existing buildings and infrastructure at the site, and continued coastal erosion that may be worsened by future SLR, along with continued habitat degradation. It is assumed that State Parks, Caltrans, and DBH would each implement emergency or reactive improvements to manage the declining conditions.

No demolition or construction-related ground disturbances would occur under Alternative 1, nor would any operational activities occur. Two tribal cultural resources ***Topaa'nga (P-19-000133 [ethnohistoric site])*** and ***Redeposit Midden and Historic Scatter (P-19-003759 [multicomponent site])*** qualifying as tribal cultural resources under CEQA would not be impacted under Alternative 1. Furthermore, Alternative 1 does not include any ground disturbing activities that could potentially impact unknown archaeological resources that may qualify as tribal cultural resources. Therefore, Alternative 1 would result in no construction or operational-related impacts to tribal cultural resources.

Alternatives 2 and 3

Construction

Ground disturbing activities under Alternatives 2 and 3 could result in impacts to archaeological resources that may qualify as tribal cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-5 (refer to Section 3.4, *Cultural Resources*) would reduce impacts to less than significant.

Alternative 4

Construction

The alignment of PCH would move north and would also lengthen the Caltrans bridge from 79 to approximately 460 feet consistent with Alternatives 2 and 3. Alternative 4 could potentially impact known archaeological resources that may qualify as tribal cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-5 would minimize impacts of the Project to tribal cultural resources to the extent feasible through implementation of professional treatment and management procedures. However, the new roadway alignment and beach facilities would be constructed over a known tribal cultural resource, therefore impacts would remain significant and unavoidable.

Operations (All Build Alternatives)

Under all Build Alternatives, maintenance activities involving ground disturbing activities could potentially impact tribal cultural resources, as well as unknown archaeological resources that may qualify as tribal cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-5 would reduce operational-related impacts to tribal cultural resources to a less than significant level.

Wastewater Management Options

Improvements to any State Parks visitor services will require upgrading the wastewater management system to meet current standards. Re-development of portions of the Topanga Ranch Motel would require either onsite subsurface drip irrigation, onsite seepage pits or a sewer connection. All construction and operation activities would occur within State Parks property or within Caltrans ROW. There are no known tribal cultural resources located in the construction footprints of any of the three wastewater management options. However, grading, and other construction activities associated with proposed on-site wastewater systems could potentially impact unknown tribal cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-5 reduce impacts to tribal cultural resources to a less than significant level.

Mitigation Measures

Implementation of Mitigation Measures CUL-1 through CUL-5

Significance Determination

Impacts would be Less than Significant with Mitigation Incorporated under Alternatives 2 and 3. Impacts would remain Significant and Unavoidable under Alternative 4

Programmatic Topanga State Park Visitor Services

Future visitor services including maintenance activities involving ground disturbing activities could potentially impact tribal cultural resources, as well as unknown archaeological resources that may qualify as tribal cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-5 would reduce operational-related impacts to tribal cultural resources to a less than significant level.

Mitigation Measures

Implementation of Mitigation Measures CUL-1 through CUL-5

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

The Project could result in cumulatively considerable impacts to tribal cultural resources. *Impacts would be less than significant and unavoidable.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative cultural resources impacts is the Southern California Bight, the curved stretch of coastline between Point Conception in the north to northern Baja California in the south. Under Alternatives 2 and 3, known archaeological resources qualifying as tribal cultural resources, and unknown archaeological resources qualifying as tribal cultural resources would be mitigated through implementation of Mitigation Measures CUL-1 through CUL-5 and would not

contribute to a significant cumulative impact. However, construction of the new highway alignment and beach facilities under Alternative 4 would adversely affect known tribal cultural resources; therefore, impacts would be cumulatively considerable.

Mitigation Measure

Implementation of Mitigation Measures CUL-1 through CUL-5

Significance Determination

Impacts would be Less than Significant with Mitigation Incorporated under Alternatives 2 and 3. Impacts would remain Significant and Unavoidable under Alternative 4

3.15.3 Summary of Impacts

**TABLE 3.15-1
 SUMMARY OF PROPOSED PROJECT IMPACTS TO TRIBAL CULTURAL RESOURCES**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
TCR 3.15-1: Listed or eligible for listing	Project Alternatives 2 and 3	Implement CUL-1 through CUL-5	LTSM
	Project Alternative 4	Implement CUL-1 through CUL-5	SU
	Future Topanga State Park Visitor Services	Implement CUL-1 through CUL-5	LTSM
TCR 3.15-2: Cumulative Impacts	Project Alternatives 2 and 3	Implement CUL-1 through CUL-5	LTSM
	Project Alternative 4	Implement CUL-1 through CUL-5	SU

NOTES

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less than Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.16 Transportation and Circulation

This section evaluates the potential for impacts related to transportation generated by the construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to transportation; a description of the existing transportation and circulation conditions regionally and in and around the Project area; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to transportation and circulation.

3.16.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan outlines goals and policies to promote a wide range of transportation methods to the Park that are efficient and from green energy sources (National Park Service 2002).

State

Senate Bill (SB) 743

On September 27, 2013, Governor Edmund G. Brown, Jr. signed Senate Bill (SB) 743, which was intended to streamline review under the CEQA process for several categories of development projects, including the development of infill projects in transit priority areas, and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions.

In addition, SB 743 revises the metric for determining impacts relative to transportation to vehicle miles traveled (VMT), replacing the use of level of service (LOS) in CEQA documents. Previously, transportation impacts under CEQA focused on the delay that vehicles experience at intersections and on roadway segments, utilizing a metric of LOS. Mitigation for vehicular delay oftentimes requires increasing roadway capacity. Capacity enhancements have been proven to induce additional travel, generating additional GHG emissions. Capacity enhancements may also remove rights-of-way available for pedestrian and bicycle facilities and may generally discourage alternative modes of transportation. The use of VMT as a transportation impact metric promotes the state's goals of reducing GHG emissions and traffic-related air pollution by promoting the development of a multimodal transportation system and providing clean, efficient access to destinations.

Pursuant to SB 743, the CEQA Guidelines were updated in December 2018 to add Section 15064.3, *Determining the Significance of Transportation Impacts*, which describes specific considerations for evaluating a project's transportation impacts using VMT methodology.

Additionally, the Governor’s Office of Planning and Research (OPR) released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018) to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdictions. While OPR’s Technical Advisory is not binding on public agencies, CEQA allows lead agencies to “consider thresholds of significance recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence” (CEQA Guidelines Section 15064.7[c]).

California Department of Transportation

Traffic analysis and highway standards in the State of California are guided by policies and standards set at the state level by the California Department of Transportation (Caltrans) and local jurisdictions. Caltrans retains jurisdiction over State Route (SR) 1/PCH and SR-27/TCB and would be responsible for improvements to PCH.

The Caltrans *Transportation Impact Study Guide* establishes VMT as Caltrans’ primary review focus when evaluating local land use projects, replacing LOS as the metric used in CEQA transportation analyses (Caltrans 2020a). Caltrans recommends use of OPR’s recommended thresholds and guidance on methods of VMT assessment found in OPR’s Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 *Transportation Impact Study Guide* states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the state highway system and connections with the state highway system.

In addition, Caltrans issued the *Transportation Analysis Framework: Evaluating Transportation Impacts of State Highway System Projects* (Caltrans 2020b), which is one component of a set of materials prepared by Caltrans to guide the implementation of SB 743. The purpose of this document is to assist Caltrans district staff and others responsible for assessing likely transportation impacts as part of environmental review of proposed projects on the state highway system by providing guidance on the preferred approach for analyzing the VMT attributable to proposed transportation projects (induced travel) in various project settings.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. Policies relevant to the Proposed Project are as follows:

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

Section 30253 Minimization of adverse impacts. New development shall do all of the following: (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development and (4) Minimize energy consumption and vehicle miles traveled.

Regional and Local

Southern California Association of Governments

On September 3, 2020, the Southern California Association of Governments (SCAG) adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2045 RTP/SCS), also known as Connect SoCal. The 2045 RTP/SCS presents the transportation vision for the region through the year 2045 and builds upon and expands land use and transportation strategies previously established to increase mobility options and achieve a more sustainable growth pattern. The 2045 RTP/SCS includes new initiatives to reach the state’s GHG reduction goals with strategies in four categories: economy, mobility, environment, and healthy/complete communities. The following 2045 RTP/SCS goals related to transportation are relevant to the Proposed Project (SCAG 2020):

Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.

Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.

Goal 4: Increase person and goods movement and travel choices within the transportation system.

Goal 5: Reduce GHG emissions and improve air quality.

Goal 6: Support healthy and equitable communities.

Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.

Goal 8: Leverage new transportation technologies and data-driven solutions that result in more-efficient travel.

Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.

Active Transportation Strategic Plan

The Los Angeles County Metropolitan Transportation Authority (Metro) adopted the Active Transportation Strategic Plan (ATSP) in 2023. The ATSP identifies how the agency plans to help cities encourage more walking and biking in the county. Metro’s goal is to make it easier for people to walk and bike to transit stations as well as to help cities fund and build regional walk/bike paths that connect communities.

Metro is working to advance active transportation initiatives and provide more travel options throughout the county. Metro is currently updating the 2016 ATSP, which will further their mission of providing a world-class transportation system and focus specifically on improving the

regional active transportation network and first/last mile connectivity to transit. Relevant existing and proposed initiatives from the county ATSP have been incorporated into the East San Gabriel Valley Area Plan (ESGVAP) to further implement the ATSP and meet the ESGVAP goals of enhancing walkability and integrating land use and mobility throughout its communities. The goals and objectives of the ATSP include the following (Metro 2016):

- Improve access to transit.
- Establish active transportation modes as integral elements of the countywide transportation system.
- Enhance safety, remove barriers to access, or correct unsafe conditions in areas of heavy traffic, high transit use, and dense bicycle and pedestrian activity.
- Promote multiple clean transportation options to reduce criteria pollutants and greenhouse gas emissions and improve air quality.
- Improve public health through traffic safety, reduced exposure to pollutants, and design infrastructure that encourages residents to use active transportation as a way to integrate physical activity.

Los Angeles County General Plan 2035

The Mobility Element of the Los Angeles County General Plan 2035 provides policy guidance for building a comprehensive highway network throughout the unincorporated areas consistent with the County's Land Use Element. The following policies, goals, and implementation measures in the Mobility Element are applicable to the Proposed Project (County of Los Angeles 2015):

Goal M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

Policy M 2.6: Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.

Goal M 7: Transportation networks that minimizes negative impacts to the environment and communities.

Policy M 7.4: Where the creation of new or the retrofit of roadways or other transportation systems is necessary in areas with sensitive habitats, particularly SEAs [significant ecological areas], use best practice design to encourage species passage and minimize genetic diversity losses.

Vision Zero

Vision Zero Los Angeles County: A Plan for Safer Roadways 2020–2025 (Vision Zero) was prepared by the County of Los Angeles in 2019 as part of a worldwide traffic safety initiative to eliminate traffic-related fatalities. The concept of *health equity* is a main principle of Vision Zero. Streets with sidewalks, marked crosswalks, and bicycle lanes provide opportunities for physical

activity and mobility, thereby addressing health equity concerns. Other goals for Vision Zero relevant to the Proposed Project include (LA County DPH and LA County DPW 2019):

- Implement programs focused on eliminating fatal and severe injury collisions involving youth and older adults.
- Implement traffic safety enhancements to reduce fatal and severe injury collisions involving pedestrians and bicyclists.

Step by Step

Step by Step Los Angeles County – Pedestrian Plans for Unincorporated Communities (Step by Step) is designed to enhance walkability for the unincorporated communities of Los Angeles County. Step by Step outlines actions, policies, procedures, and programs for the County to consider to improve walkability, and it identifies potential pedestrian infrastructure projects for specific unincorporated communities. Step by Step is also a strategy for reaching the County’s Vision Zero goal, described above, by identifying specific actions, programs, and projects that prioritize pedestrian safety in the design and operations of the County’s transportation system. Other goals for Step by Step relevant to the Proposed Project include (LA County DPH 2019):

Policy SS-1: Coordinate across County departments, and with the California Highway Patrol, community members, and organizations to implement Vision Zero Los Angeles County to eliminate traffic-related pedestrian fatalities and severe injuries.

Policy EH-1: Make transportation, land use, and building design or site planning decisions that make walking a logical first choice transportation option for residents and visitors.

Policy C-2: Create a barrier-free pedestrian network. Maintain pedestrian facilities to ensure they are free of hazards and obstructions.

Policy SP-1: Improve air quality and reduce greenhouse gas emissions through reduced car dependency.

Topanga State Park General Plan

A portion of the Project area is located within the Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of Topanga State Park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The plan provides the following goals potentially relevant to the Proposed Project (State Parks 2012):

- Minimize development within the core of the Park, while concentrating visitor orientation elements to the perimeter management zones.
 - Work cooperatively with SMMC []/MRCA [], Los Angeles County Department of Beaches and Harbors, and Caltrans to explore joint parking facilities, and to ensure adequate parking is provided for both the Park and beach use, especially along the Park boundary that abuts to Pacific Coast Highway.
 - Encourage public and group transportation through educational and signage programs at the Park’s main access points.

- When feasible, provide for electrical vehicle recharging stations by working cooperatively with the appropriate power agencies.
- Encourage pedestrian flow and walking by not necessarily siting parking areas immediately adjacent to proposed park use. However, fully comply with accessibility criteria for parking stalls that meet the requirements of the Americans with Disabilities Act (ADA).

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains Local Coastal Program (LCP) was adopted by the County of Los Angeles and California Coastal Commission in 2018. The LCP includes both a land use plan and implementing measures. The land use plan provides the following overriding goal relevant to transportation for the Proposed Project (LA County Planning 2018):

- Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

Topanga Community Wildland Fire Evacuation Plan

The *Topanga Community Wildland Fire Evacuation Plan* identifies Los Angeles County's approach to ensure, in cooperation with public agencies, a safe and effective community response to a wildland fire evacuation (County of Los Angeles, Chief Executive Office 2009).

Topanga State Park Wildfire Management Plan

State Parks is in the process of updating park unit wildfire management plans that serve as local operating agreements between State Parks and the California Department of Forestry and Fire Protection (CAL FIRE) or its agents, local fire departments. Each park unit plan describes the extraordinary challenges and resources that influence wildfire and dictate fire suppression activities. The Topanga State Park Wildfire Management Plan provides a framework for preventing and controlling wildfire events in a way that safely protects park infrastructure, protects sensitive resources, and preserves the unique landscape, while effectively reducing the spread and risk of wildfires in Topanga State Park. The Wildfire Management Plan's objectives include establishing responsibilities and roles for wildland fire activities; identifying fire suppression constraints in sensitive resource areas; providing guidance for implementing modified suppression techniques; and setting repair standards. The plan also includes goals for implementing the incident command system, preventing destructive wildfires through fuel management projects, and identifying hazards to emergency responders (State Parks in prep.).

City of Malibu Mass Evacuation Plan

The City of Malibu Mass Evacuation Plan was developed through a collaborative, multiagency process. In August 2019, a multiagency evacuation exercise was held with representatives from the Los Angeles County Fire Department, the County Sheriff's Department, County of Los Angeles Department of Public Works, DBH, Caltrans, the California Highway Patrol, Pepperdine University, the Topanga Coalition for Emergency Preparedness, the Santa Monica Police Department, and County Supervisor Sheila Kuehl's office. The City of Malibu is vulnerable to a

variety of hazards that could require a mass evacuation of all or part of the city, including fire, flooding, landslide, and tsunami hazards. The 2018 Woolsey Fire, which caused significant damage and involved the full evacuation of the city, demonstrated the need for a comprehensive and coordinated plan (City of Malibu 2020).

3.16.2 Affected Environment

The main roadways within the Project area are SR-1, also referred to as PCH, and TCB, both of which are operated and maintained by Caltrans. The Project area is understood to be generally between the PCH intersection with Coastline Drive to the east and the current Cholada Thai restaurant to the west. In addition, it is understood the Project area extends northerly along TCB from PCH by approximately 0.5 mile.

Roadway/Vehicular Circulation

Major Highways

The County has five roadway classifications that apply to the road network: major highways, secondary highways, limited secondary highways, parkways, and expressways. The primary roadways in the Project area include PCH and TCB. These roadways are described below.

- **Pacific Coast Highway (PCH, SR-1):** PCH is generally a north-south state route but travels east-west through the Project area. To the east in the City of Santa Monica, PCH turns into the Santa Monica Freeway (I-10), which provides access to the greater Los Angeles Basin. PCH within the Project area provides four travel lanes. There are two lanes in each direction and a center two-way left-turn lane which transitions to the left-turn lane on the eastbound approach at the SR-27 (TCB) intersection. According to the County Mobility Element, PCH is designated as a major highway. It is also a designated disaster route.

The average daily traffic volume on PCH within the Project limits is approximately 44,500 vehicles per day (Appendix R LLG 2023). Vehicle ingress and egress access locations serving a DBH parking lot are provided along the south side of PCH in the Project area. Along the north side of PCH, there is generally open access to vehicle parking areas serving the current commercial uses (i.e., no demarked vehicle entries and exits).

- **Topanga Canyon Boulevard (TCB, SR-27):** TCB is a north-south state route through the Project area and provides access through the entirety of Topanga State Park. To the south, TCB ends at Topanga Beach, providing access to both eastbound and westbound PCH. To the north, in the unincorporated LA County community of Twin Lakes, TCB ends at the intersection with Ronald Reagan Freeway (SR-118). TCB within the Project area provides three travel lanes (one northbound and two southbound) with one right-turn lane for southbound turns heading west on PCH and two left-turn lanes for southbound turns heading east on PCH. According to the County Mobility Element, TCB is designated as a major highway. It is also a designated Disaster Route. The average daily traffic volume on TCB within the Project limits is approximately 13,700 vehicles per day (LLG 2023).

Safety and Collisions

Traffic collision records were obtained from Caltrans for PCH from approximately 250 feet east of the PCH/TCB intersection to the east to the Malibu city boundary to the west (Post Mile 40.700 to Post Mile 41.101). Collisions were requested for the most recent three-year period,

which corresponds to January 1, 2019, through December 31, 2021. Based on the records provided by Caltrans, a total of 39 collisions occurred within the three-year period. No fatal collisions were documented.

A total of 18 collisions occurred within 250 feet of the PCH/TCB intersection. The two most frequent primary collision factors for these collisions were speeding and improper turning, followed by other violations and influence of alcohol. The most frequent types of collision were sideswipe and rear-end. Collisions in the vicinity of the intersection occurred most frequently on Wednesdays.

A total of 21 collisions occurred west of the PCH/TCB intersection to the Malibu city boundary. The most frequent primary collision factor was improper turning, followed by speeding and failure to yield. The most frequent type of collision was sideswipe, followed by rear-end and broadside. One collision involving a pedestrian was documented and resulted in minor injuries. Collisions west of the PCH/TCB intersection occurred most frequently on Saturday.

Pedestrian and Bicycle Circulation

Bicycle Facilities

Within the Project area, PCH is designated as a Class III Bicycle Route. In addition, according to the *County of Los Angeles Bicycle Master Plan* (Bicycle Master Plan), a Class III Bicycle Route is proposed along TCB (LA County DPW 2012). There is currently a bicycle stencil on northbound TCB within the Project area, but it is not a designated route. According to the Bicycle Master Plan, which follows the Caltrans bikeway classification system, Class III bike routes provide for shared use with motor vehicle traffic within the same travel lane (LA County DPW 2012). Bike routes may be designated with signs and/or shared lane marking pavement stencils. While Class III routes do not provide a measure of separation from motor vehicles, they have an important function in providing continuity to the bikeway network and may designate preferred routes through corridors with high demand. By law, bicycles are allowed on all roadways in California except on freeways when a suitable alternate route exists.

Pedestrian Facilities

Common pedestrian facilities include sidewalks, marked crosswalks, and curb ramps. There are no continuous sidewalks within the Project limits on either PCH or TCB. Pedestrian crosswalks are located at the intersection of PCH and TCB on the northwest side of the intersection. The southern side of the intersection provides direct access to Topanga Beach for pedestrians via the unimproved shoulder along eastbound PCH. Sidewalks are present along the existing bridge over Topanga Lagoon. Pedestrian stairs are located on the eastern end of the bridge connecting the north and south side, providing pedestrian access under PCH to and from Topanga Beach.

Transit

Transit services within the Project area are provided by Metro and Los Angeles County Public Works. The Metro Express Line 534 provides service along PCH. The first stop of the 534-bus

route is Trancas Canyon/PCH, and the last stop is Olympic/7th. Route 534 is operational every day and has 39 stops with a total trip duration of approximately 62 minutes from end to end. Within the Project area, there are stops at the Topanga Beach parking lot and the eastbound PCH at the intersection with TCB and westbound PCH west of TCB at the edge of the parking area for Oasis.

Los Angeles County Department of Public Works also provides the Topanga Beach Bus, which provides low-cost, daily, year-round service between the San Fernando Valley and Topanga Beach. The Beach Bus route starts at Owensmouth Ave./Oxnard St. in the north and runs three times a day taking approximately one hour to travel north-south to the coast making eight stops, ending at the Expo Line Santa Monica Station parking lot (LA County DPW 2023).

3.16.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to transportation and circulation. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (Refer to Impact TRA 3.16-1.)
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). (Refer to Impact TRA 3.16-2.)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Refer to Impact TRA 3.16-3.)
- Result in inadequate emergency access. (Refer to Impact TRA 3.16-4.)
- Result in cumulative impacts to transportation and circulation. (Refer to Impact TRA 3.16-5.)

Methodology

According to the Transportation Assessment prepared by LLG for the Proposed Project (**Appendix R**) a VMT assessment is provided for both the transportation improvements and commercial development components of the Proposed Project. OPR Guidance (page 20) states, “Projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis include: Rehabilitation, maintenance, replacement, safety, and repair project designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts) and do not add additional motor vehicle capacity.”

For commercial development, the Caltrans Transportation Impact Study Guide (pages 10 and 11) states, “Caltrans references OPR’s December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which identifies projects and areas presumed to have a less than significant Transportation Impact. Those include “projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact”

(Caltrans 2018). To assess the potential for VMT impacts related to the generation of new vehicle trips to the Project area based on the proposed commercial development component of the Proposed Project, trip generation forecasts were prepared for each of the Build Alternatives (Alternatives 2–4).

Traffic volumes expected to be generated by the commercial development component of the Proposed Project on a daily basis (as well as during the weekday AM peak hour, PM peak hour, and Saturday peak hour) were estimated using rates published in the 11th Edition of the Trip Generation Manual. Traffic volumes expected to be generated by the commercial components of the Build Alternatives were based upon rates per occupied rooms, residential dwelling units, and 1,000 square feet of building floor area as applicable.

In addition to the trip generation forecasts for the new development (which are essentially an estimate of the number of vehicles that could be expected to enter and exit the commercial site access points), trip generation forecasts were also prepared for the existing, active uses which currently occupy the north side of PCH.

Circulation System

TRA 3.16-1: The Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not alter the existing transportation facilities and circulation system within the Project area, there would be no conflict with adopted transportation plans and programs and no impact would occur. However, several of the proposed improvements included in the Build Alternatives include transportation and circulation improvements for vehicles, transit riders, pedestrians and cyclists. Therefore, under Alternative 1, the improvements included under the Build Alternatives that would implement several goals and policies of the adopted transportation plans and programs would not occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Proposed Project impacts to the circulation system would be similar under all Build Alternatives. The Proposed Project would not conflict with applicable programs, plans, ordinances, or policies addressing the circulation system as discussed in the sections below.

Construction

Construction activities associated with the Build Alternatives would include construction of components described in detail below. Construction-generated traffic on local roadways associated with these components would generally include construction equipment and material

transportation, soil and debris haul trips, and construction worker trips to the construction area. Best construction practices would be implemented, including locating staging and laydown areas for construction activities within existing disturbed areas, nearby parking lots, or other previously developed locations. Use of these developed areas would minimize construction impacts on local traffic operations. In addition, because construction activities would occur within and adjacent to the roadway over the construction period of five years requiring construction of a temporary bridge as well as temporary lane closures and detours, a Transportation Management Plan (TMP) and Stage Construction & Traffic Handling Plan would be required (**Mitigation Measures TRA-1**) and would outline appropriate traffic control measures intended to ensure adequate traffic operations and access is provided through the construction area for vehicles, transit, bicyclists, and pedestrians. As described in Chapter 2.0, *Project Description*, a 180-foot-long temporary bridge would be constructed adjacent to the existing bridge. The new PCH bridge would be constructed sequentially by building first the northbound lanes followed by the southbound lanes. The northbound half of the existing bridge would be demolished and removed. The northbound new bridge lanes would then be constructed. Upon completion of the northbound lanes, the southbound section of the existing bridge would be demolished, and the southbound lanes of the new bridge completed. Construction sequencing would be outlined in detail in the Stage Construction & Traffic Handling Plan and TMP. With these plans and final design plans, all four lanes of PCH would be maintained within the bridge area throughout the entire construction period. Furthermore, these plans would be developed in coordination with Caltrans and appropriate agencies requiring input and emergency service responders and would ensure PCH is maintained as an evacuation route during construction. Development of temporary parking locations would occur prior to construction activities that would affect existing parking in order to retain adequate parking and coastal access (**Mitigation Measures TRA-1**).

Operation

Operation of the lagoon habitat expansion itself would not generate traffic; however, associated trail and pedestrian improvements would provide additional and improved coastal access within the Project area. These circulation improvements would not induce substantial additional trips but would encourage multi-modal and alternative transportation. Therefore, the proposed lagoon improvements are consistent with adopted transportation plans and policies and impacts would be less than significant.

Other transportation improvements that would occur as a result of the beach improvements under all the Build Alternatives include creation of a trail system through the Project area and provision of pedestrian access under the PCH on the east and west sides of the lagoon. Vehicular access would continue to be provided via parking along the PCH and TCB. As described in Chapter 2.0, *Project Description*, parking on the south side of PCH operated by DBH would be similar to existing conditions for all the Build Alternatives. A dirt emergency route from PCH to the beach level would be constructed on the west side of the lagoon to allow lifeguard access to both limit vehicle usage along the lagoon berm and provide access to the western beach even during times when the lagoon mouth is open. Parking at the beach level would be similar to existing conditions, and only for staff, emergency vehicles, and disabled visitor parking spaces. The areas

around the existing bus stops would be improved to be more welcoming to public transportation users. Therefore, the proposed beach improvements are consistent with adopted transportation plans and policies.

For all the Build Alternatives, the replacement bridge width is proposed at 90 feet, 4 inches to maintain the existing four-lane configuration of PCH. The four travel lanes are 12 feet in width with standard 8- to 12-foot shoulder widths. The median widths would vary from 10 feet wide for Alternatives 2 and 3, and 12 feet wide for Alternative 4. Therefore, there are no proposed capacity enhancements that would induce traffic volumes and cause poor traffic operating conditions on local roadways, consistent with the goals of the adopted plans and policies related to reducing VMT. For all the Build Alternatives, an 8-foot shoulder would be provided on both sides of the traffic lanes; the shoulder would also provide bicycle access.

Recreational parking for Topanga Beach would be provided on the south side of PCH and no parking on the new bridge span would be permitted. Due to restriction for parking on the new bridge deck shoulder, the number of free PCH shoulder parking spaces would drop to between 51 and 56 depending on the alternative, from the currently available 79 free conforming parking spaces used primarily for beach access. However, the Proposed Project would include additional pedestrian, bicycle, and transit improvements that would encourage multi-modal transportation for beach visitorship. In addition, as there is no pedestrian crossing at the road level across PCH at the bridge, removal of these parking spaces has the potential to reduce pedestrian/vehicle conflicts and improve safety, consistent with the goals of VisionZero. For all the Build Alternatives, the existing pedestrian undercrossing stairs located on the eastern end of the existing bridge would be removed and replaced with a new pedestrian access constructed under the proposed bridge structure on both the east and west sides of the lagoon. Additional stairs from the DBH parking lot and at the intersection with TCB would provide improved pedestrian access on the east end of the Project area. Access to Topanga State Park and Topanga Beach would also be enhanced with improvements to the existing bus stops and parking.

All Alternatives would have 6-foot-wide sidewalks provided on both sides of the bridge. The proposed transit, pedestrian, and cyclist circulation improvements would encourage active and multi-modal transportation, reducing VMT and the need for parking. Therefore, operations of the bridge and associated roadway improvements would be consistent with the goals of Connect SoCal, the County's ATSP and General Plan, Vision Zero, and Step by Step.

Under Alternative 2, the Topanga Ranch Motel and all existing structures on the State Parks property would be fully removed and new development at the Gateway Corner would include small concessions, an outdoor interpretive pavilion/restroom, a small picnic area, and park facilities (such as park office/employee housing/maintenance storage). The new development would serve both State Parks and DBH visitorship and would be located along the perimeter of the State Park, consistent with the transportation and circulation goals of the Topanga State Park General Plan and Santa Monica Mountains LCP. While the LCP and Coastal Act encourage provision of overnight accommodations, the existing Topanga Ranch Motel is defunct and does not currently provide

accommodations. Therefore, although Alternative 2 would not include the potential for overnight accommodations, this would not result in a change from existing conditions.

The proposed development at the Gateway Corner associated with the Build Alternatives would include between 107 and 115 parking spaces. While the existing parking along PCH and north of PCH on State Parks land would be reduced, adequate parking would be provided for the proposed development. In addition, all the Build Alternatives would include a pedestrian path from the Gateway Corner to provide safe crossing to Topanga Beach and improvements to the existing bus stop located at the intersection of PCH and TCB.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with the development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would likely take 3-6 months and would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within the Caltrans right-of-way (ROW). Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to require an additional year and would be limited to paved areas along the Caltrans ROW along the PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

As described below, with implementation of the Stage Construction & Traffic Handling Plan and TMP, construction of the various components for the Build Alternatives would be consistent with the goals of Vision Zero and Step by Step for ensuring transportation safety and would not conflict with the goals of the Coastal Act, Connect SoCal, and the County's ATSP and General Plan related to maintaining vehicular access through the Project area and maintaining coastal access. Therefore, Project Alternatives would result in a less-than-significant impact with mitigation incorporated related to transportation plans and policies.

Mitigation Measures

TRA-1 Stage Construction & Traffic Handling Plan and Transportation Management Plan (TMP). During final design and prior to the issuance of demolition, grading or any construction permits, a qualified traffic engineer shall prepare a TMP that would address potential traffic flow disruptions on local roadways prior to construction.

A TMP is required by Caltrans to address the following: 1) Public Information 2) Motorists Information Strategies 3) Incident Management 4) Construction Strategies 5) Demand Management 6) Alternative Route Strategies 7) Other Strategies

The Plan shall incorporate and build upon requirements from the City of Malibu Emergency Evacuation Plan and the Los Angeles County Evacuation Plan and would be developed in coordination with Caltrans, City of Malibu, Los Angeles County, State Parks, DBH, and emergency service responders, which include fire departments, police departments, and ambulances that have jurisdiction within the Project area. The Plan shall be included in the final design plans and prepared in accordance with the California Manual on Uniform Traffic Control Devices, Caltrans Standard Plans (2023), and current standards and best practices of the reviewing and approving agencies. The Plan shall be coordinated with applicable agencies regarding construction and maintenance schedules and worksite Traffic Control Plans including, but not limited to, Caltrans, the California Highway Patrol (CHP), and local fire and police departments. The Plan shall include, but is not limited to the following measures:

- Maintain four lanes, two lanes in each direction, of circulation on PCH within the bridge area, at least one lane in each direction on all other public roadways, and access to neighboring commercial establishments during construction of all Proposed Project components other than the sewer extension within PCH
- Prepare an Emergency Evacuation Route Plan approved by Caltrans and other emergency agencies for installation of the sewer extension within PCH requiring closure of one lane of traffic. The Plan shall ensure the following at a minimum:
 - No more than one lane of traffic will be closed at any time
 - Nighttime work shall be used to minimize lane closures during daytime hours
 - Four lanes of traffic shall be maintained during peak traffic hours. Lane closures shall not be allowed during weekend days or holiday days
 - Emergency service providers shall be provided expedited through-passage at all times
- Minimize traffic delays and effectively maintain an acceptable level of traffic flow throughout the transportation system during construction
- Minimize detours and impacts to pedestrians and bicyclists
- Maintain operation of PCH for use as an emergency evacuation route at all times during construction, especially during red-flag days
- Establish communication plan between State Parks, DBH, Caltrans, City of Malibu, Los Angeles County Fire, construction contractors, and emergency service providers
- Ensure that temporary speed limit reduction for the traffic detour approaches and exits conforms to safe highway design speeds
- Have a flagger present to coordinate north-south traffic during those limited times that only a single lane is open
- Prepare of a public outreach campaign and signage plans for public notification prior to and during the construction period

Prior to the issuance of demolition, grading, or any other construction permits, a Transportation Management Plan will be prepared and submitted for review and approval by Caltrans, State Parks, and the County of Los Angeles. The Management Plan shall include, at a minimum, the following parking measures, which shall be implemented during all construction activities as overseen by the Construction Contractor:

- All temporary construction parking areas shall be located within previously disturbed or developed areas within the Project area
- Temporary parking areas shall provide a minimum replacement parking ratio of 1:1 for standard parking spaces to the greatest extent feasible, as well as ADA spaces
- Temporary parking areas shall be identified on the final design plans and signage shall be provided prior to the start of construction activities to notify travelers of the location and duration of the temporary parking provisions
- Temporary parking shall be developed and available for use prior to start of construction

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Construction and Operation

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Proposed Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site concessions and structures would be removed. Available parking near the motel and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking.

Construction of future visitor services would temporarily increase workers and traffic in the area through daily commutes by workers and trucks hauling construction debris from the site and would temporarily disrupt existing parking. As discussed above, a Traffic Management Plan and Stage Construction & Traffic Handling Plan (**Mitigation Measure TRA-1**) would be required that would outline appropriate traffic control measures intended to ensure adequate access and parking is provided during construction.

Under Alternatives 3 and 4, future visitor services would serve both State Parks and DBH visitorship and would be located along the perimeter of Topanga State Park, consistent with the

transportation and circulation goals of the Topanga State Park General Plan and Santa Monica Mountains LCP.

Mitigation Measures

Implement **Mitigation Measures TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Vehicle Miles Traveled

TRA 3.16-2: The Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same in terms of existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not result in any changes to the land uses or transportation system within the Project area, no increase in VMT would occur. However, implementation of the pedestrian, bicyclist, and transit improvements included in the Build Alternatives would also not occur and these features would serve to reduce VMT.

Alternatives 2, 3, and 4 (Build Alternatives)

CEQA Guidelines Section 15064.3, subdivision (b) outlines that VMT is the most appropriate measure of transportation impacts and states that VMT refers to the amount and distance of automobile travel attributable to a project. Neither construction nor operation of the Build Alternatives are anticipated to result in increases in VMT as discussed in the sections below. Refer to the Topanga Lagoon Final Transportation Assessment in **Appendix R**.

Construction

Construction traffic trips would occur throughout the duration of the construction period for all components of the Build Alternatives. Construction activities would involve a temporary increase in employees; however, employment opportunities associated with the construction activities are assumed to be filled by the local workforce. Further, construction activities would not result in any changes that would encourage more vehicle use or noticeably change the distance of vehicle trips. Therefore, due to the limited and temporary nature of the construction related VMT, impacts would be less than significant.

Operation

Operation of the restored and expanded lagoon would not generate traffic, as the lagoon itself does not provide a recreational resource or experience heavy visitor use. The proposed trail improvements would provide on-site connections between State Parks and DBH properties and

along both sides of the creek. It also allows potential future connection to regional trail systems like the California Coastal Trail and proposed SMMNRA Coastal Access Trail. While these improvements may encourage walking and pedestrian access to Topanga Beach, they would not create substantial new recreational opportunities compared to existing conditions that would entice people to travel to the area and increase VMT. Additional trips would also occur for maintenance of the restored lagoon, similar to existing conditions.

All the Build Alternatives would include a new two-car parking garage at Topanga Beach; however, no expansion of lifeguard services is anticipated. In addition, while all Build Alternatives would expand Topanga Beach, this expansion would allow for living shoreline elements (i.e., dunes) and would not provide new recreational facilities or substantial additional beach area that would result in additional visitors traveling to the area and a subsequent increase in VMT. Furthermore, the proposed bus stop improvements, pedestrian access, and bicycle access improvements may encourage more people to travel using active or multi-modal transportation, which would reduce VMT.

For all the Build Alternatives, there are no proposed capacity enhancements that would induce traffic volumes and result in an increase in VMT. Furthermore, the proposed pedestrian access underneath PCH on both sides of the lagoon, sidewalk improvements, and restriping along PCH to provide bicycle access along the shoulder may encourage more people to travel by foot or by bicycle, which would reduce VMT.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), or an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2–4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur.

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along the PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

Under all options, although the VMT during construction would increase slightly, it is expected to be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternative 2, the Topanga Ranch Motel and all existing structures on State Parks property would be fully removed. With the removal of the existing facilities, Alternative 2 would result in a net decrease of 365 daily vehicle trips during a typical weekday, with a net decrease of 20 vehicle trips during the AM peak hour and a net decrease of 42 vehicle trips during the PM peak hour. Alternative 2 is also forecast to result in a net decrease of 111 vehicle trips during the weekend peak hour. The proposed facilities would not include residential development or substantial employment opportunities that would result in an increase in VMT. In addition, the proposed park facilities, including the employee residence and concession, would replace the existing similar uses rather than provide new land uses in the Project area. Therefore, trip length would not be anticipated to change from existing conditions. No increase in VMT is anticipated as a result of the proposed visitor serving uses and based on the above analysis, it is determined that the visitor service components associated with Alternative 2 would result in a net decrease of daily (or peak hour) vehicle trips compared to the existing active uses that currently occupy the Project area.

Under Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A concession located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site concessions and structures would be removed. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking.

Operation of Alternatives 3 and 4 would be anticipated to result in net decreases in daily trips due to the removal of existing concessions and the proposed development would largely replace existing uses. Future visitor services under Alternative 3 would be anticipated to result in a net decrease of 270 daily vehicle trips during a typical weekday, with a net decrease of nine vehicle trips during the AM peak hour and a net decrease of 31 vehicle trips during the PM peak hour. Alternative 3 is also forecast to result in a net decrease of 94 vehicle trips during the weekend peak hour. Future visitor services under Alternative 4 would be anticipated to result in a net decrease of 292 daily vehicle trips during a typical weekday, with a net decrease of 11 vehicle trips during the AM peak hour and a net decrease of 33 vehicle trips during the PM peak hour.

Alternative 4 is also forecast to result in a net decrease of 98 vehicle trips during the weekend peak hour.

While future visitor services could result in the development of overnight accommodations and a subsequent increase in employment above existing conditions, with the removal of existing services, these future services under Proposed Project Alternatives 3 and 4 are still anticipated to result in a net decrease in VMT over current conditions; therefore, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Traffic Hazards

TRA 3.16-3: The Project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Safety hazards associated with unauthorized parking and pedestrian crossings of PCH would not change from existing conditions. Because Alternative 1 would not include any roadway improvements or introduce any new uses, no new transportation hazards would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Proposed Project impacts related to traffic hazards would be similar under Alternatives 2 and 3. The Proposed Project would not include any hazardous geometric design features or incompatible uses as discussed in the sections below. Alternative 4 would realign PCH slightly north; however, the proposed roadway alignment would comply with relevant Caltrans requirements for roadway design and any non-standard design features would be reviewed and approved by Caltrans prior to implementation.

Construction

Under the Build Alternatives, traffic delays and heavy construction equipment are expected along PCH and TCB during construction. In addition, parking along PCH and throughout the Project area would be temporarily impacted. However, as specified in **Mitigation Measure TRA-1**, a Traffic Management Plan would be developed with traffic control plans and safety measures for vehicles, pedestrians, bicyclists, and heavy equipment use. In addition, provisions for temporary

parking would be implemented during construction to ensure that safe access to parking and facilities within the Project area is provided.

Operation

Operation of the Proposed Project under all the Build Alternatives would include a realigned access road and proposed pedestrian underpass on both sides of the proposed bridge. The Proposed Project would improve access to the DBH parking area located along the south side of PCH, including relocating the existing exit driveway to the west and away from the PCH/TCB intersection. The proposed access road to Topanga Beach would provide access for emergency services, vehicles, and pedestrians. The proposed access road, underpass, and pedestrian improvements would not increase hazards due to a design feature or incompatible uses because the Proposed Project would be designed and constructed in compliance with the Caltrans Design Standards and Standard Construction Specifications.

To provide for a wider lagoon and improve fish migration and refugia, the existing Caltrans bridge would be replaced with a longer bridge along the same road alignment for Alternatives 2 and 3, and an alignment slightly north for Alternative 4.

For all the Build Alternatives, the replacement bridge width is proposed at 90 feet 4 inches to maintain the existing four-lane configuration of PCH with a center left-turn lane at the intersection with TCB. The four travel lanes are 12 feet wide with standard 8- to 12-foot shoulder widths. The median widths would vary from 10 feet wide for Alternative 2 and Alternative 3, and 12 feet wide for Alternative 4. Therefore, there are no proposed capacity enhancements or geometric design features that might result in hazardous roadway conditions.

The proposed alignment for all the Build Alternatives includes two travel lanes in each direction. Alternative 2 and Alternative 3 would not include any curves or turns along PCH. Alternative 4 would utilize the existing horizontal alignment with the north realignment of PCH; these curves would comply with Caltrans standards for adequate sight distance and would not result in a hazardous design feature. Restriping would ensure the new travel lanes line up with the existing lanes on the bridge approaches with the proposed standard shoulders and bicycle lanes. In addition, under all Build Alternatives, parking would no longer be provided along the bridge, which would reduce potential hazards associated with parking along the roadway shoulder.

The proposed bridge replacement would not increase hazards due to a design feature or incompatible uses because the Proposed Project would be designed and constructed in compliance with the Caltrans Design Standards and Standard Construction Specifications.

Wastewater Management Options

State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2) or an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the

seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (2–4).

For wastewater management Options 1 (SDI) and 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along the Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Proposed Project Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

With implementation of **Mitigation Measures TRA-1 and TRA-2**, potential traffic hazards would be reduced to less than significant.

Mitigation Measures

Implement **Mitigation Measures TRA-1 and TRA-2**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternative 2, the Topanga Ranch Motel and all existing structures on State Parks property would be fully removed. Therefore, the existing access from PCH to these uses would be removed, reducing the number of inbound and outbound movements along PCH. The removal of existing commercial development adjacent to the northwest corner of the PCH/TCB intersection would also reduce the number of inbound and outbound traffic movements. This development would be replaced with vehicle parking for beach visitors with improved and identifiable access locations, improving traffic safety in the Project area. The removal of visitor services and parking north of PCH would also reduce the number of pedestrians crossing PCH, which currently results in traffic hazards. Installation of pedestrian access under the roadway on both sides of the lagoon as well as additional stairs from the DBH parking area to the beach would also provide circulation improvements to reduce the existing hazard. All new development and access to the Gateway Corner would be designed and constructed in compliance with the Caltrans Design Standards and Standard Construction Specifications. A new left-turn lane is proposed to permit ingress into the Gateway Corner parking area, with egress onto PCH limited to right-turn only. The proposed visitor services would replace similar existing conditions and would not introduce incompatible uses to the Project area.

Under Alternatives 3 and 4, 15–0 structures associated with the historic Topanga Ranch Motel would be retained and restored. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. As described for Alternative 2 above, the removal of existing commercial development adjacent to the northwest corner of the PCH/TCB intersection would also reduce the number of inbound and outbound traffic movements. This development would be replaced with vehicle parking for beach visitors with improved and identifiable access locations, improving traffic safety in the Project area. Construction of future visitor services would require preparation of a Traffic Management Plan and Stage Construction & Traffic Handling Plan to ensure no potentially significant impacts would occur related to hazards from construction detours and construction equipment. A new left turn lane is proposed to permit ingress into the Gateway Corner parking area, with egress on to PCH limited to right turn only. Revisions to the driveways and access for future visitor services would also be designed and constructed in compliance with the Caltrans Design Standards and Standard Construction Specifications. Operation of future visitor services would not introduce incompatible uses to the Project area. With implementation of **Mitigation Measures TRA-1**, potential traffic hazards would be reduced to less than significant.

Mitigation Measures

Implement **Mitigation Measures TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Emergency Access

TRA 3.16-4: The Project could result in inadequate emergency access. *Impacts would be less than significant with mitigation incorporated.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not alter the existing roadway configuration or provide additional access improvements, no impacts related to inadequate emergency access would occur. However, the emergency access improvements included in the Build Alternatives would not occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Proposed Project impacts to emergency access would be similar under the Build Alternatives. The Proposed Project would not result in inadequate emergency access and would include emergency access improvements as discussed in the sections below.

Construction

Construction of all Build Alternatives would result in temporary and intermittent traffic delays that may affect emergency access during construction as a result of lane closures required for construction of the replacement bridge and other Proposed Project components. As discussed above, **Mitigation Measures TRA-1 and TRA-2** would require preparation of a Traffic Management Plan and Stage Construction & Traffic Handling Plan and would be implemented to minimize circulation and delay impacts during Proposed Project construction. These plans would also include measures to ensure lifeguard and helicopter emergency services would be maintained during construction to ensure there is no disruption of service. In addition, the Traffic Management Plan and Stage Construction & Traffic Handling Plan would be coordinated with Caltrans, State Parks, DBH, law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times. As such, adequate emergency access would be maintained throughout the construction period.

Operation

Operation of the restored and expanded lagoon area would not result in any changes to the emergency access within the Project area. No impact would occur.

The existing lifeguard and public restroom building as well as the helipad would be demolished and rebuilt north of their existing location in order to provide improved emergency access and adequate sight lines required for the expanded recreational beach area. Emergency access to the beach would also be enhanced via the realigned access road and proposed underpass on both sides of the proposed bridge. All existing ADA and staff parking and emergency access at the beach level would be retained. Therefore, no impacts would occur related to inadequate emergency access and operation of the Build Alternatives would improve emergency access compared to existing conditions.

For all Build Alternatives, the replacement bridge width is proposed at 90 feet 4 inches to maintain the existing four-lane configuration of PCH with a center turn lane. The four travel lanes would all be 12 feet in width and would contain 8- to 12-foot shoulders consistent with Caltrans standards. The median widths would vary from 10 feet wide for Alternatives 2 and 3, and 12 feet wide for Alternative 4. Although striping changes would occur, there are no proposed capacity enhancements that would affect emergency access during operations. As no parking would be allowed within the roadway shoulder on the bridge deck, emergency access near the pedestrian underpass and lagoon would be provided with the standard roadway shoulders. Operation of the proposed bridge would have no impact on emergency access.

Wastewater Management Options

Under Alternative 2, wastewater management would involve the construction and operation of an on-site SDI system (Option 1) that would be installed along TCB within the Gateway Corner on State Parks property. All work and staging areas would be located on State Parks property.

Under Alternatives 3 and 4, re-development of portions of the Topanga Ranch Motel would require either on-site seepage pits or a sewer connection. The seepage pits would be located at the northern tip of the Project boundary on State Parks property. All construction and operation activities under either Option 2 or 3 would occur within State Parks property or within Caltrans ROW.

It is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment between the Project area and Coastline Drive; however, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. Closure of one lane of traffic within PCH would result in traffic delays that could affect emergency access routes. **Mitigation Measure TRA-1** would require the preparation of an Emergency Evacuation Route Plan that would ensure the maintenance of emergency evacuation routes, minimize traffic delays, and maintain expedited through-passage to emergency responders. With implementation of **Mitigation Measure TRA-1**, potential traffic hazards would be reduced to less than significant.

Mitigation Measures

Implement **Mitigation Measures TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, one concession and associated parking, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Alternative 2, the Topanga Ranch Motel and all existing structures on State Parks property would be fully removed, which would reduce the need for any emergency access improvements. All new development at Gateway Corner would be limited in size and scale and is assumed to include small concessions and park facilities (such as park office/employee housing/maintenance storage). A small outdoor interpretive pavilion/restroom and a small picnic area would also be included. Emergency access to the Gateway Corner would be provided via the new left turn lane proposed to permit ingress into the Gateway Corner parking area, with egress onto PCH limited to right-turn only. The proposed driveway and parking improvements associated with the proposed visitor services would improve emergency access within this corner of Topanga State Park compared to existing conditions.

Under Proposed Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be restored. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Construction of future visitor services would require preparation of a Traffic Management Plan and Stage Construction & Traffic Handling Plan (**Mitigation Measure TRA-1**) to ensure no

potentially significant impacts would occur related to inadequate emergency access during construction.

As described for Impact TRA 3.16-3, revisions to access for future visitor services would also be designed and constructed in compliance with the Caltrans Design Standards and Standard Construction Specifications. Therefore, at the programmatic level, impacts related to emergency access would be less than significant with mitigation.

Mitigation Measures

Implement **Mitigation Measure TRA-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Cumulative Impacts

TRA 3.16-5: The Project could result in cumulative impacts to transportation and circulation. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative transportation impacts is the County of Los Angeles, as VMT and transportation impacts are considered on a regional scale.

Significant cumulative impacts related to transportation could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more cumulative projects would conflict with applicable transportation plans or policies, increase VMT for the region, create traffic hazards, or result in inadequate emergency access. As described in Table 3-1, there are multiple projects being constructed near the Project area.

As described above, the Proposed Project would result in a less-than-significant impact to transportation with implementation of **Mitigation Measures TRA-1**. Implementation of these mitigation measures would ensure traffic flow, parking, and access are maintained throughout the construction period in a manner that would not conflict with applicable plans and policies, would minimize hazards associated with heavy construction equipment on local roadways, and would maintain adequate emergency service throughout the Project area. Furthermore, as none of the Proposed Project alternatives would include transportation capacity improvements or include new land uses that would induce substantial population growth or new vehicle trips, no increases in VMT are anticipated. On a cumulative basis, individual future discretionary projects, including project-level development applications for visitor services uses analyzed at the program-level herein, may have the potential to result in increases in transportation impacts. However, the Proposed Project would not make a cumulatively considerable contribution to a cumulative transportation impact related to applicable plans and programs, VMT, traffic hazards and

emergency access. Less-than-significant cumulative impacts related to transportation would occur with mitigation.

Mitigation Measures

Implement **Mitigation Measures TRA-1.**

Significance Determination

Less than Significant with Mitigation Incorporated

3.16.4 Summary of Impacts

Table 3.16-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to transportation and circulation. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.16-1
 SUMMARY OF POTENTIAL PROJECT IMPACTS RELATED TO TRANSPORTATION AND CIRCULATION**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
TRA 3.16-1: Circulation System	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures TRA-1	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures TRA-1	LTSM
TRA 3.16-2: VMT	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
TRA 3.16-3: Traffic Hazards	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measures TRA-1	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures TRA-1	LTSM
TRA 3.16-4: Emergency Access	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM
TRA 3.16-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures TRA-1	LTSM

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less-than-Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

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3.17 Utilities and Service Systems

This section addresses the potential impacts related to utilities and service systems with implementation of the Proposed Project. This section includes a summary of applicable regulations related to the utilities/service systems sources available for the Project area; a description of existing applicable utility/service system providers as well as existing energy sources for the Project area; and an evaluation of the potential for the Proposed Project to result in environmental impacts, including cumulative impacts, related to utilities/service systems.

3.17.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan provides goals and policies to site new facilities with adequate utilities and service systems (National Park Service 2002).

Clean Water Act

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. In Los Angeles County, the State Water Resources Control Board and the Los Angeles Regional Water Quality Control Board (LARWQCB) are responsible for ensuring implementation and compliance with the provisions of the federal CWA.

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges, including discharges associated with construction activities, under the NPDES program.

State

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, *Coastal Resources Planning and Management Policies*, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the California Coastal Act. There are no policies relevant to utilities and services systems.

California Water Code

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California.

State Water Resources Control Board

The State Water Resources Control Board was created by the California Legislature in 1967 with the mission of ensuring the highest reasonable quality for waters of the state, while allocating those waters to achieve the optimum balance of beneficial uses. The State Water Resources Control Board has authority over water allocation by administering and regulating appropriate water right permits and licenses, as per the Water Code, which require that all uses of water be “reasonable and beneficial,” which includes municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.

In 1970, the Porter-Cologne Water Quality Control Act created nine RWQCBs that develop and enforce water quality objectives of the state and implementation plans within their region. The RWQCBs oversee various programs that protect surface water and groundwater quality, and enforce the federal NPDES Wastewater Program, and NPDES Storm Water Program. The RWQCBs are also responsible for developing and implementing total maximum daily loads for impaired water bodies.

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7, or SBX7-7), which amends the act and adds new water conservation provisions to the Water Code.

Assembly Bill 939

Assembly Bill 939 (the Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) requires local agencies to create waste management practices that focus on source

reduction, recycling and composting, and environmentally safe land disposal. Assembly Bill 939 also requires counties to provide a 15-year solid waste disposal plan, reflecting sufficient disposal capacity for all jurisdictions.

In order to further the goals of AB 939, statewide strategies to achieve a statewide goal of diverting 75 percent of solid waste from landfills by 2020 were established with the adoption of AB 341 in May 2012. As stated in the legislative text of AB 341, it is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter (PRC Section 41780.01[a]).

Assembly Bill 1826

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses. AB 1826 defines “organic waste” as food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It defines a “business” as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multifamily residential dwelling consisting of five or more units.

Assembly Bill 341

AB 341, also referred to as the Mandatory Commercial Recycling Regulation, requires businesses and multi-family residential dwellings of five units or more, that generate four or more cubic yards of commercial solid waste per week to implement recycling programs, on or after July 1, 2012. The goal of AB 341 is to divert 75 percent of California's waste stream away from the landfill and instead toward recycling by the year 2020 and beyond.

California Green Building Standards Code (Title 24, California Code of Regulations, Part 11)

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

California Public Utilities Commission

The California Public Utilities Commission regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. The California Public Utilities Commission has established goals for energy regulation including: establish service standards and safety rules, authorize utility rate changes, oversee markets to inhibit anti-competitive activity, prosecute unlawful utility marketing and billing activities, govern business relationships between utilities and their affiliates, resolve complaints by customers against utilities, implement energy efficiency and conservation programs and programs for the low-income and disabled, oversee the merger and restructure of utility corporations, and enforce CEQA for utility construction.

Regional and Local

Regional Water Quality Control Board

Each RWQCB is required to develop, adopt, and implement a Basin Plan for its respective region. The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in each region. Basin Plans identify beneficial uses of surface waters and groundwater within the corresponding region; specify water quality standards, known as water quality objectives, for both surface water and groundwater; and develop the actions necessary to maintain the standards to control nonpoint and point sources of pollutants to the state's waters. All discretionary projects requiring permits from the RWQCB (i.e., waste and pollutant discharge permits) must implement Basin Plan requirements (i.e., water quality standards), taking into consideration the beneficial uses to be protected.

As described above under the CWA, the Proposed Project is located within the jurisdiction of the LARWQCB and is subject to the LARWQCB's Water Quality Control Plan.

Regional Municipal Separate Storm Sewer System Permits

The County of Los Angeles is a co-permittee under the NPDES stormwater permit covering Los Angeles County (NPDES No. CAS614001). The LARWQCB requires a Municipal Separate Storm Sewer System (MS4) Permit to reduce the discharge of storm water pollutants to the maximum extent practicable and ensure MS4 discharges do not cause or contribute to violations of water quality standards. The MS4 Permit also requires implementation of various site design best management practices (BMPs) and treatment control BMPs to reduce the possibility of pollutants being stored or produced on-site from entering surface water or sewer system.

NPDES Construction General Permit

The State of California adopted a Construction General Permit on September 2, 2009 (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ) (Construction General Permit). The Construction General Permit regulates construction site stormwater management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the Construction General Permit for discharges of stormwater associated with construction activity. The Proposed Project would be required to comply with the permit requirements to control stormwater discharges from the construction site. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, as well as construction of buildings and the undergrounding of utilities.

To obtain coverage under this permit, the Proposed Project must electronically file a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents prior to construction. The SWPPP will need to identify BMPs that must be implemented to reduce construction effects on receiving water quality based on potential pollutants. BMPs will need to

be identified that are directed at implementing both sediment and erosion control measures as well as other measures to control potential chemical contaminants.

Santa Monica Mountains Local Coastal Program

The Project area is located within the California coastal zone, and all developments are subject to regulations of the Santa Monica Mountains Local Coastal Program (LCP). It was certified by the California Coastal Commission in 2014 and grants the County authority to review and approve coastal development permits at the local level. The County's LCP includes a land use plan (LA County Planning 2018) to regulate land use and a local implementation plan for zoning.

Development within a coastal zone may not commence until a coastal development permit has been issued by the California Coastal Commission or a local government that has a California Coastal Commission–certified LCP Los Angeles County Integrated Waste Management Plan.

The California Integrated Waste Management Act of 1989 (AB 939) requires that the responsibility for solid waste management be shared between state and local governments. The State of California has directed the County to prepare and implement a local integrated waste management plan in accordance with AB 939. The Los Angeles County Integrated Waste Management Plan Executive Summary presents the County-wide goals and objectives for integrated solid waste management and describes the County's system of governmental solid waste management infrastructure and the current system of solid waste management in the cities and unincorporated areas of the County. This document also summarizes the types of programs planned for individual jurisdictions and describes countywide programs that could be consolidated.

Construction and Demolition Debris Recycling and Reuse Ordinance

The County of Los Angeles Board (County) of Supervisors adopted the Construction and Demolition Debris Recycling and Reuse Ordinance on January 4, 2005. The Ordinance added Chapter 20.87 to the Los Angeles County Code, which requires projects in the unincorporated areas to recycle or reuse 50 percent of the debris generated. Its purpose is to increase the diversion of construction and demolition debris from disposal facilities and will assist the County in meeting the State of California's 50 percent waste reduction mandate.

Mandatory Organic Waste Disposal Reduction Ordinance

On November 16, 2021, the Los Angeles County Board of Supervisors adopted the Mandatory Organic Waste Disposal Reduction Ordinance. The Ordinance ensures everyone does their part in diverting organic waste and edible food from landfills to reduce emissions of methane and the impacts on climate change. The Ordinance is also required per State Senate Bill 1383 regulations.

County of Los Angeles Department of Public Works Low Impact Development Standards Manual

The County prepared the 2014 Low Impact Development Standards Manual (LID Standards Manual) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175). The LID Standards Manual provides guidance for the

implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. All Designated, Non-Designated, street and road construction, and single-family hillside home projects within the Unincorporated Areas of the County are required to comply with the LID Standards Manual.

Los Angeles County General Plan 2035

The following goals and policies from the Public Services and Facilities Element of Los Angeles County General Plan 2035 are applicable to utilities and service systems (County of Los Angeles 2015):

Goal PS/F 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

Policy PS/F 1.1: Discourage development in areas without adequate public services and facilities.

Policy PS/F 1.3: Ensure coordinated service provision through collaboration between County departments and service providers.

Policy PS/F 1.4: Ensure the adequate maintenance of infrastructure.

Goal PS/F 2: Increased water conservation efforts.

Policy PS/F 2.1: Support water conservation measures.

Goal PS/F 3: Increased local water supplies through the use of new technologies.

Policy PS/F 3.1: Increase the supply of water through the development of new sources, such as recycled water, gray water, and rainwater harvesting.

Goal PS/F 4: Reliable sewer and urban runoff conveyance treatment systems.

Policy PS/F 4.1: Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems.

Policy PS/F 4.4: Evaluate the potential for treating stormwater runoff in wastewater management systems or through other similar systems and methods.

Goal PS/F 5: Adequate disposal capacity and minimal waste and pollution.

Policy PS/F 5.7: Encourage the recycling of construction and demolition debris generated by public and private projects.

Goal PS/F 6: A County with adequate public utilities.

Policy PS/F 6.4: Protect and enhance utility facilities to maintain the safety, reliability, integrity and security of utility services.

Policy PS/F 6.6: Encourage the construction of utilities underground, where feasible.

County of Los Angeles Countywide Integrated Waste Management Plan

The 2020 Countywide Integrated Waste Management Plan provides the following goals potentially relevant to the Proposed Project:

- To reduce the volume (tonnage) of solid waste requiring disposal/transformation by continuing to implement and expand source reduction, recycling, composting, and public education programs.

Topanga State Park General Plan

The Topanga State Park General Plan provides the following goals and guidelines potentially relevant to the Proposed Project (State Parks 2012):

- Minimize development within the core of the Park, while concentrating visitor orientation elements to the perimeter management zones.
 - For any proposed development, examine the feasibility of connecting to adjacent municipal wastewater systems or explore tertiary sewer treatment systems, to minimize leach field size and to allow for the use of the treated for irrigation.
 - Evaluate potential direct, indirect, and cumulative impacts to the Park’s resources, including water usage and waste output, by a proposed concession, prior to approval to proceed with implementation. This includes the expansion of any existing concession opportunities.

3.17.2 Affected Environment

The study area for this analysis of impacts to utilities and service systems consists of Los Angeles County to account for the regional utility providers that serve the Project area.

Water

The Metropolitan Water District of Southern California is the regional water wholesaler that imports water to Los Angeles County from the Colorado River Aqueduct and the Sacramento Delta via the California Aqueduct. According to the Los Angeles County General Plan 2035 Update EIR, the Metropolitan Water District of Southern California has a capacity of approximately 2.64 billion gallons per day across five water treatment plants (County of San Diego 2014). Retail water supply within the Project area is delivered to customers by Los Angeles County Waterworks District No. 29 and the Malibu Water Company.

District No. 29’s system consists of approximately 220 miles of potable water pipelines, including a 35-mile-long transmission water main, and 52 potable water tank reservoirs. The water supply to the Project area is provided through a 30-inch water main running along Pacific Coast Highway, with several distribution pipelines running north toward the canyons. Water is pumped at several locations from the main transmission pipeline into canyons. There are also four fire hydrants within the Project area. District No. 29’s Urban Water Management Plan, which was updated in 2020, projects a 0.4 percent annual demand increase within their service area.

Existing water demands within the Project area are minimal, including potable service to the lifeguard and public restroom building and to five locally owned businesses, including two restaurants, two commercial establishments, and a winery. Little to no landscape irrigation occurs within the Project area.

Wastewater Treatment

Portions of unincorporated Los Angeles County along with the City of Malibu do not maintain a publicly owned and operated sewer system. As a result, residents, businesses and public facilities within these areas are required to provide their own on-site wastewater treatment systems, commonly known as septic systems, to dispose of wastewater (i.e., percolation through leach lines or dry wells).

Wastewater treatment within the Project area is comprised of on-site wastewater treatment systems including septic tanks. Wastewater at Topanga State Park is provided by existing septic tanks that are pumped weekly, or more as needed. There are also on-site wastewater treatment systems located at the Malibu Feed Bin and Reel Inn. There is a septic line and tank currently serving the Ranger cabin. Rosenthal Winery does not currently have on-site treatment, but rather has portable toilets. Cholada Restaurant also has a septic tank that serves both this restaurant and patrons at the bait shop nearby. The lifeguard and public restroom building at Topanga Beach are also serviced with an advanced treatment septic system. There are no public sewer connections located within the Project area.

The closest sewer connection within the vicinity of the Project area is located on the east side of TCB near Coastline Drive, operated by the Los Angeles County Sanitation Districts (LACSD). The LACSD currently serves 24 independent special districts in Los Angeles County, covering approximately 850 square miles and encompassing 78 cities and unincorporated areas in the County. The LACSD-owned sewers near the Project site convey wastewater to the City of Los Angeles' collection system, which flows to the city's Hyperion Water Reclamation Plant operated by the City of Los Angeles Sanitation and Environment (LASAN).

Improvements to any State Parks visitor services would require upgrading the wastewater management to meet current standards. A variety of potential options for managing wastewater were explored during a planning level feasibility study (**Appendix I**). The feasibility study identified the following options for supporting the wastewater needs of the proposed new State Parks visitor services: Option 1: on-site subsurface drip irrigation (SDI), Option 2: on-site seepage pits, and Option 3: connection to off-site sewer.

Stormwater Infrastructure

Stormwater infrastructure within the Project area includes storm drains and catch basins owned and managed by the Los Angeles County Flood Control District (LACFCD) and the U.S Army Corps of Engineers (USACE). Storm drains in the Project area convey stormwater runoff to the Topanga Creek that flows to the ocean. Storm drain capacity is determined by the LACFCD flood protection requirements.

Electricity and Natural Gas Service

Southern California Edison (SCE) provides electrical services to the study area. Natural gas is provided to the City by Southern California Gas (SoCalGas). Electricity and natural gas service providers are further described in Section 3.7, *Energy*. SCE facilities within the Project area include transformers located along Pacific Coast Highway (PCH), as well as overhead power lines on the north and south sides of PCH and on the east and west sides of Topanga Canyon Boulevard (TCB). SoCalGas lines are present within the Project area on both the north and south sides of PCH and along TCB.

Telecommunications

Telecommunication services within the Project area are provided by SCE, Charter Communications, Frontier, Spectrum, Airtouch Cellular, HP Communications. General telephone lines are present within the Project area along the north side of PCH and along TCB.

Solid Waste

Solid waste collection in the Project area is provided by a private waste hauler that contracts with Los Angeles County. Solid waste in Los Angeles County is disposed of at a variety of landfills. The Calabasas Sanitary Landfill and Simi Valley Landfill and Recycling Center are disposal facilities that serve the Project area, with a maximum of 3,500 and 12,000 daily tons of solid waste, respectively. The Calabasas Sanitary Landfill solid waste facility permit (SWFP) was renewed in 2019 and is projected to reach its capacity in 2029, while the Simi Valley Landfill SWFP that was renewed in 2020 is expected to close by 2063 (CalRecycle 2022).

3.17.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to utilities and service systems. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Proposed Project would have a significant adverse environmental impact if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects. (Refer to Impact UTS 3.17-1.)
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. (Refer to Impact UTS 3.17-2.)
- 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. (Refer to Impact UTS 3.17-3.)
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (Refer to Impact UTS 3.17-4.)
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (Refer to Impact UTS 3.17-5.)

Utilities Expansion and Relocation

UTS 3.17-1: The Project would require the relocation of existing utilities and will require the construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the relocation or construction of which could cause significant environmental effects. Impacts would be less than significant with mitigation incorporated.

As described in Section 3.17.2, *Affected Environment*, utilities within the Project area include water, storm drains, electrical lines, gas lines, and telecommunication lines. There are no sewer lines present in the Project area, and wastewater is treated through septic systems. The Proposed Project would have the potential to impact these utilities and service systems as a result of construction activities that would require relocation and connections to the proposed development.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not result in construction where existing utilities are located, relocation of existing utilities would not be required. In addition, as Alternative 1 would not result in construction of new land uses, construction of new or expanded utilities or service systems would not be required. Therefore, no impacts would occur. However, most existing businesses onsite lease the buildings from State Parks. These existing buildings currently use septic systems that may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies. No new visitor serving facilities or expansion of existing utilities would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Impacts to utilities and service systems would be similar under all Build Alternatives. The Proposed Project would require the relocation of existing utilities along with the construction of new utilities or service systems connections that may result in physical impacts as discussed in the sections below.

Construction

During construction activities, all utilities serving the existing land uses would be disrupted or temporarily disconnected. Utility lines, including the water main traversing the site serving neighboring areas—including the city of Malibu—would be temporarily relocated, resulting in minimal service disruption. The existing water and gas lines along PCH would be relocated within the proposed bridge or on an adjacent utility bridge. In addition, the existing overhead power/telecommunication lines along PCH would be undergrounded and relocated within the proposed bridge or on an adjacent utility bridge.

Sanitary services needed during construction would be provided by temporary portable toilet facilities that would transport waste off-site for proper treatment and disposal. Short-term demand

for water would be required for construction activities including soil dust suppression watering, cleanup, masonry, painting, and other activities would be temporary and would cease at completion of construction. Overall, short-term construction activities would require minimal water and are not expected to have adverse impacts to the existing water system or cause a demand that would result in the construction of new water facilities or the expansion of existing facilities. A SWPPP would be prepared pursuant to the General Construction NPDES permit that would specify appropriate BMPs to address stormwater runoff from the Project area.

Caltrans has requirements and procedures for the placement and protection utility facilities within State highway rights-of-way. During Final Design, determinations would be made in consultation with the owner of each affected utility facility as to whether relocations are necessary. The Final Design Plans would include a Utility Relocation/Protection Plan for the utility relocations, removals, and protection in place (**Mitigation Measure UTS-1**).

Operation

The restoration and expansion of Topanga Lagoon would not include any uses that would require utilities or service systems such as natural gas, electricity, or communication facilities due to the nature of this habitat restoration and expansion; thus, development of expanded or new facilities is not proposed. In addition, expansion of Topanga Lagoon under all Build Alternatives would reduce the need for additional built storm drainage within the Project area, as Topanga Lagoon would naturally convey stormwater runoff. Storm drains from the built areas would be replaced.

Operation of the bridge would not include any uses that would require utilities or service systems such as natural gas, electricity, or telecommunication facilities due to the nature of this transportation improvement and no new lighting is proposed for the bridge. Other stormwater runoff improvements for the bridge and impervious surfaces would be installed as part of the Proposed Project such as bioswales or rain gardens. All runoff would be filtered through bioswales or rain gardens to prevent runoff entering Topanga Creek.

Operation of the relocated lifeguard and public restroom building, and helipad would replace the existing facilities, and no expansion of services is anticipated. The existing permitted advanced on-site wastewater treatment system (AOWTS) that services the beach restroom would remain to support the new facility unless a sewer hookup becomes available. Similarly, the relocated facilities would connect to the existing SCE, natural gas lines, and telecommunication lines within the Project area. Operation would be similar to the existing demand. Stormwater runoff improvements would be connected to the creek.

Implementation of visitor services under Alternative 2 would include a concession with expansion of Topanga Lagoon. While the existing Topanga Ranch Motel is not currently operational, the other leasees and facilities proposed for demolition are operational. The proposed visitor services would connect to the existing water lines, SCE electrical lines, SoCalGas natural gas lines, and telecommunications lines within the Project area and operation of the Proposed Project at full buildout would be similar to existing on-site water, energy, and communications demand and

would not require the construction of any physical improvements related to the provision of these utilities and service systems that would result in significant environmental impacts.

With the removal of the existing Topanga Ranch Motel, leases, and park facilities and redevelopment of these structures within an already developed portion of Topanga State Park, the Proposed Project would result in an overall decrease in impervious surfaces compared to existing conditions and would generally conform to existing drainage patterns in the area. A Low-Impact Development (LID) Plan and Water Quality Mitigation Plan would be developed for new stormwater infrastructure, including bioswales consistent with the MS4 NPDES permit. New parking areas would be constructed with permeable surfaces and bioswales used to prevent surface runoff pollution and reduce the need for additional stormwater drainage facilities.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4). For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur

Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction.

Option 1) SDI. SDI would only support effluent levels for State Parks facilities under Alternative 2. If SDI were selected, it would be installed directly north of the proposed parking area along TCB within the Gateway Corner on State Parks property. Construction would require a pipe and pump system with treatment works to move effluent from the sources to the receiver site. Approximately 1,000 CY of excess fill material would be generated. All work and staging areas would be located on State Parks property. The SDI system could be constructed concurrently with other project elements over a 3- to 6-month period.

Option 2) Seepage Pits. Seepage pits could support the effluent needs of State Parks facilities under all Build Alternatives. If chosen, construction of this option would occur concurrently with other Project elements and require 3 to 6 months. Construction would require a pipe and pump system with treatment works to move effluent from State Parks visitor services development at the Gateway Corner and along PCH to the dispersal site. The pipe alignment between the

treatment works and the dispersal site would be located outside of Caltrans ROW on the west shoulder of TCB on State Parks property but would cross TCB through Caltrans, ROW at approximately the 0.50-mile marker to terminate at the dispersal site on the east side of TCB on State Parks property. Approximately 1,000 CY of excess fill material would be generated. All staging is anticipated to be located within the dispersal site on State Parks property. Standard measures to minimize traffic impacts such as limiting work when crossing TCB to night hours, traffic management and community notices, would be implemented.

Option 3) Sewer. Connection to the public sewer system would involve the construction of an extension of the LACSD public sewer from existing facilities located just south of the intersection of Coastline Drive/PCH within the Will Rogers State Beach parking lot to facilities associated with Topanga Beach and the Topanga Ranch Motel/Gateway Corner. Both DBH and State Parks would connect project facilities to it. Sewer construction is anticipated to take one year and would likely extend project construction an additional year for a total of 5.5 years. Approval from the LAFCO would be required to expand the LACSD sphere of influence to include the Project area. Caltrans approval for ROW use, as well as other standard Coastal Commission, Los Angeles County, and regulatory approvals, would apply.

The sewer extension is anticipated to use a force main (pump station and pressure pipe) system, although a gravitation system may be used if feasible, with the sewer alignment anticipated to run within the median of PCH between Coastline Drive and TCB and then cross PCH to shift to the north or south shoulder of PCH to connect to DBH and State Parks facilities. No extension into the city of Malibu or user's further west is proposed.

A combination of trenchless methods (jack and bore or microtunneling) and some open trenches are anticipated to be used. Roughly 1,000 CY of excess excavated material is anticipated. Periodic closure of the #1 westbound lane during sewer installation could occur. Use of the Will Rogers Beach parking lot and Topanga Ranch Motel parking lot are anticipated to be used for construction staging and storage. Traffic management and communication requirements of Caltrans, Los Angeles County, State Parks, DBH and other regulatory agencies would be implemented.

Advanced coordination with utility providers for the development and implementation of **Mitigation Measure UTS-1**, the Utility Relocation/Protection Plan, would serve to minimize potential service disruptions and ensure appropriate siting requirements are met. Note that although the Project boundary includes potentially disturbed area for the SDI, seepage pits and sewer options, once a final preferred alternative is selected, only one of these would be carried forward to final design.

Through compliance with regulatory requirements and implementation of **Mitigation Measure UTS-1**, potential impacts would be reduced to less-than-significant levels.

Mitigation Measure

UTS-1: Utility Relocation/Protection Plan. During Final Design, a Utility Relocation/Protection Plan shall be prepared in consultation with the affected utility providers/owners for those utility facilities anticipated to be relocated, removed, and protected in place. The Resident Engineer shall develop the plan with a focus on avoiding utility relocations. If relocation is necessary, final design shall focus on relocating utilities within the State right-of-way or within other existing public rights-of-way and/or easements. If relocation outside of existing or the additional public rights-of-way and/or easements required for the Proposed Project is necessary, final design shall focus on relocating those facilities in such a manner as to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. The Utility Relocation/Protection Plan shall be included in the project specifications and subject to review and approval by CDPR and the affected utility providers. During construction, the Utility Relocation/Protection Plan specifications shall be implemented by the construction contractor.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Build Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored and development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. The Topanga Ranch Motel structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site leases and structures would be removed. Relocation or protection in place of utilities and service systems may be required during construction of the future visitor services, and **Mitigation Measure UTS-1** would reduce potential impacts related to temporary disruption from relocation to less than significant. Construction activities may also require temporary increases in water use and wastewater generation due to dust suppression and construction workers.

These future visitor services would connect to the existing water lines, SCE electrical lines, SoCalGas natural gas lines, and telecommunications lines within the Project area. Improvements to any State Parks visitor services would require upgrading the wastewater management to meet current standards. As described above, implementation of **Mitigation Measure UTS-1** would reduce impacts to less than significant.

Mitigation Measures

Implement **Mitigation Measure UTS-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Water Supplies

UTS 3.17-2: The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

As described in Section 3.17.2, *Affected Environment*, water service for the Project area is provided by Malibu Water Company and Los Angeles County District N. 29. The Proposed Project would connect to existing water lines that already serve the Project area. As described below, the various components for the Proposed Project would not require the establishment of new or expanded water entitlements in order to serve the proposed development during normal, dry, and multiple dry years.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not require water use for construction activities or include new operational uses that would require water supplies, no new or expanded entitlements would be required. As a result, sufficient water supplies would continue to be sufficient for the existing on-site uses.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts related to sufficient water supply would be similar under all Build Alternatives. The Proposed Project would not require new or expanded water entitlements or cause physical impacts associated with the provision of new or expanded water entitlements as discussed in the sections below.

Construction

As discussed above, construction activities associated with the Build Alternatives would result in an increase short-term demand for construction activities including soil dust suppression watering, cleanup, masonry, painting, and other activities. Planting activities for Topanga Lagoon would also involve minimal water use that would require temporary irrigation during plant establishment. Overall, short-term construction activities would require minimal water and are not expected to have adverse impacts to the existing water system or cause a demand that would result in the construction of new water treatment facilities or the expansion of existing facilities. In addition, the construction contractor would comply with all State and local water conservation regulations and construction site best management practices would be implemented to reduce water use where feasible and ensure no inefficient water use occurs during construction. Therefore, impacts would be less than significant.

Operation

Water consumption associated with operation of Topanga Lagoon expansion under the Proposed Project would be limited and associated occasional maintenance activities. Other than occasional maintenance activities, the lagoon expansion does not include features requiring water supply. Therefore, available water supplies would be sufficient to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years and impacts would be less than significant.

The new PCH bridge would maintain the existing four-lane configuration of PCH, and no capacity enhancements are proposed that would induce additional visitor trips or future development, requiring additional water supplies. Further, based on the nature of this transportation improvement, operation of the bridge would not require water supplies. Therefore, no new or expanded water entitlements would be needed. Available water supplies would be sufficient to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years and impacts would be less than significant.

Operation of the relocated lifeguard and public restroom building, and helipad would replace the existing facilities and no expansion of services is anticipated. Therefore, no new or expanded water entitlements would be needed. Available water supplies would be sufficient to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years and impacts would be less than significant.

Development of visitor services would result in land uses that require water supplies for operations. However, while the Topanga Ranch Motel is not currently operational, with removal of the other existing leases and facilities, the proposed water demand would increase above existing conditions. As described above, the 2020 Urban Water Management Plan projects that there would be a surplus of water supply in the multiple dry year scenario from 2020 through 2045.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2) or an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots. Wastewater management options would not affect water supply.

As the proposed visitor services are consistent with the existing and proposed land uses for the Project area, the Proposed Project would be consistent with regional water demand projections. Therefore, the Proposed Project would not necessitate new or expanded water entitlements, and District No. 29 would be able to accommodate the Proposed Project's demand for potable and recycled water. No new or expanded water entitlements would be required. Impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included. As described for Alternative 2 above, future visitor services would also be consistent with the existing and proposed land uses for the Project area, and therefore would be included in projections related to local water demand.

Under Build Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. As described above, the Topanga Ranch Motel is not currently operational. However, the proposed restoration of these structures would replace other existing leases and park facilities to be demolished. However, while the Topanga Ranch Motel is not currently operational, with removal of the other existing leases and facilities, the proposed water demand would increase above existing conditions. As described above, the 2020 Urban Water Management Plan projects that there would be a surplus of water supply in the multiple dry year scenario from 2020 through 2045.

These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be kept. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Therefore, the Proposed Project would not be anticipated to necessitate new or expanded water entitlements. Therefore, no new or expanded water entitlements would be needed. Impacts would be less than significant at the programmatic level.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Wastewater

UTS 3.17-3: The Project would 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. *Impacts would be less than significant.*

As described in Section 3.17.2, *Affected Environment*, wastewater treatment within the Project area is provided by on-site wastewater treatment facilities and there are no current sewer connections serving the Project area. Wastewater treatment for other sewer connections within the vicinity of the Project area is provided by the LACSD Joint Water Pollution Control Plant. As described below, the various components for the Proposed Project would require the construction of new wastewater treatment facilities to serve the Project demands.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not generate wastewater during construction activities or include new operational uses that would generate wastewater, no additional wastewater capacity would be required. As a result, no impacts would occur related to construction or expansion of wastewater treatment facilities. However, under Alternative 1, the proposed improvements to the current septic systems included in the Build Alternatives would not occur, and these septic systems may be subject to future restriction or cessation of use by enforcement of recent statewide wastewater policies.

Alternatives 2, 3, and 4 (Build Alternatives)

Construction

Construction of all Build Alternatives would temporarily increase workers and would therefore temporarily increase wastewater generation within the Project area. As discussed above, sanitary services needed during construction would be provided by temporary portable toilet facilities that would transport waste off-site for proper treatment and disposal.

Operation

Operation of the expanded lagoon would not induce any new land uses or induce additional visitor trips, requiring additional wastewater treatment capacity. The new PCH bridge would maintain the existing four-lane configuration of PCH, and no capacity enhancements are proposed that would induce additional visitor trips or future development, requiring additional wastewater treatment capacity. Further, based on the nature of this transportation improvement, operation of the bridge would not generate wastewater. Operation of the relocated lifeguard and public restroom building, and helipad would replace the existing facilities.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: SDI (Option 1), on-site seepage pits (Option 2) or an off-site sewer connection

(Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots. The future increase in demand for wastewater treatment is anticipated to be accommodated by the existing Hyperion Water Reclamation Plant (pers. Comm. Los Angeles Sanitation District). Coordination and approval from LACSD and LASAN would be required for any option. An estimated 8,380 gpd would require treatment under Alternative 2 without visitor services, and 12,330 gpd and 11,370 gpd under Alternatives 3 and 4 respectively.

Through coordination with regulatory agencies, and implementation of **Mitigation Measure UTS-1**, impacts would be reduced to less than significant.

Mitigation Measures

Implement **Mitigation Measure UTS-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

As described above, development of future visitor services would require upgrades to existing facilities to accommodate this level of development. As described above, future demand for wastewater treatment can be accommodated by LASAN or on-site treatment options. In addition, implementation of **Mitigation Measure UTS-1** would reduce impacts to less than significant.

Mitigation Measures

Implement **Mitigation Measure UTS-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Solid Waste

UTS 3.17-4: The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. *Impacts would be less than significant.*

As described in Section 3.17.2, *Affected Environment*, solid waste disposal services in the Project area are primarily provided by private waste haulers contracted with the LADPW, which

transport waste to the Calabasas Sanitary Landfill and the Simi Valley Landfill, located approximately 11 miles and 20 miles away from the Project area, respectively. The Proposed Project would generate solid waste during construction as a result of demolition and during operation as a result of daily operations of visitor services. As described below, the various components for the Proposed Project would not generate solid waste in excess of the capacity of existing infrastructure or impact solid waste reduction goals.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not result in any demolition activities or new land uses, no increase in solid waste generation would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts related to solid waste generation would be similar under Alternatives 3 and 4. Alternative 2 would generate approximately 90,000 CY more solid waste than Alternatives 3 and 4. However, the Proposed Project would not require additional infrastructure to accommodate solid waste generated by construction or operation of the Project components as discussed in the sections below.

Construction

Construction activities associated with the Build Alternatives would generate solid waste as a result of removal of fill material within Topanga Lagoon, and as a result of demolition activities associated with the removal of the existing bridge and the lifeguard and public restroom building, helipad, and State Parks structures. Under all Build Alternatives, construction debris from demolition of the structures (other than the Topanga Ranch Motel) and the bridge would be hauled off-site for disposal. Alternatives 2, 3, and 4 would result in varying quantities of soil ranging from approximately 245,000 CY under Alternative 3 with the most limited lagoon expansion to approximately 335,000 CY under Alternative 2 with the maximum lagoon expansion to be removed from the existing fill area to contour the proposed expanded Topanga Lagoon. Alternative 4 has the most material removed (340,000 CY) to accommodate moving the roadway alignment north. The fill material would be either trucked off-site for disposition or beneficially reused in a near-shore placement location, subject to approval by USACE.

Generation of the construction debris and fill material would be short-term in nature and would not have the capability to substantially affect the capacity of regional landfills. Moreover, placement of fill material offshore, if approved by USACE, would further reduce solid waste disposal at landfills and would be consistent with the goals of the 2020 Countywide Integrated Waste Management Plan. The Proposed Project would also be subject to the requirements of the California Green Building Standards Code Section 5.408, which require recycling or and/or reuse of at least 50 percent of nonhazardous construction and demolition waste from nonresidential construction operations.

Operation

Operation of the expanded Topanga Lagoon and PCH bridge would not generate solid waste due to the nature of these features as habitat restoration and transportation improvements, respectively. In addition, relocation of the DBH structures at Topanga Beach would not expand capacity of the lifeguard and public restroom building and no additional solid waste generation is anticipated beyond existing conditions. Once constructed, the new visitor services facilities would accommodate coastal and inland recreational visitors and would generate solid waste during operations. However, under Alternative 2, operation of the proposed concession and Gateway Corner facilities would replace the existing leases and parking facilities to be demolished. Alternatives 3 and 4, which retain portions of the Topanga Ranch Motel, would potentially generate additional solid waste depending on the visitor service uses implemented. Operation of the proposed visitor services would not include land uses that would generate substantial additional solid waste compared to existing operations. Therefore, operation of the Proposed Project would not generate substantial solid waste in excess of the infrastructure capacity of existing county landfills. Furthermore, all proposed concessions would comply with AB 341 and AB 1826, requiring recycling and organic waste recycling program for businesses and commercial facilities, reducing the amount of solid waste for disposal at county landfills.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2) or an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots. Development of wastewater management options are not anticipated in and of themselves to contribute significantly to generation of solid waste during operations.

All options would require excavation and import and export of materials to the Project area. Solid waste generated during construction of the Proposed Project would be collected and transported to the Calabasas Landfill, as the closest Class III landfill to the Project area. Construction of the Proposed Project is not anticipated to result in a significant production of solid waste that would exceed the daily available capacity (3,500 tons per day [tpd]) at the Calabasas Landfill. In addition, the Simi Valley Landfill also provides surplus capacity for the region with a daily capacity of 9,250 tpd. Therefore, construction of the Proposed Project would result in a less-than-significant impact to solid waste and landfill facilities, and no mitigation would be required.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Build Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, a maintenance facility, park offices, and storage. A lease located at the site of the current Reel Inn restaurant would also be kept. All other existing on-site leases and structures would be removed. Available parking near the motel and along PCH would be reduced but would be relocated to the Gateway Corner and TCB areas. Development at the Gateway Corner would be limited to an outdoor interpretive pavilion/restroom, a small picnic area, and day use parking. Future concessions and motel structures that would be retained would be upgraded to meet current building code requirements. Therefore, construction related to renovating these structures would generate solid waste, but demolition debris would be less than under Alternative 2 and would not be in excess of the capacity at existing landfills.

With the availability of overnight accommodations and additional park facilities above existing conditions, future services development may result in additional solid waste generation during operations. However, this additional future development would also be subject to the requirements of AB 341 and AB 1826, which would reduce solid waste generated by these uses through implementation of recycling and organic waste recycling programs. Therefore, impacts would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Solid Waste Regulations

UTS 3.17-5: The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain the same as existing functions and conditions. There would be no construction activities and no operational changes to the existing bridge, lagoon, beach, or visitor services. Because Alternative 1 would not result in any demolition or changes to operations, no changes to solid waste generation or management would occur.

Alternatives 2, 3, and 4 (Build Alternatives)

Project impacts to solid waste regulations would be similar under all Build Alternatives. The Proposed Project would not include any new land uses that would conflict with applicable regulations related to solid waste reduction as discussed in the sections below.

Construction

Construction activities associated with the Build Alternatives would result in solid waste generation from fill material removal within the Topanga Lagoon, demolition of the existing bridge, and demolition of DBH and State Parks structures. The Proposed Project would comply with all statutes and regulations related to solid waste including California Green Building Standards Code Section 5.408, which require recycling or and/or reuse of at least 50 percent of nonhazardous construction and demolition waste from nonresidential construction operations. In addition, the potential for near-shore placement disposal of fill material from Topanga Lagoon would comply with the State's goals to reduce construction waste through reuse.

Operation

As described under Impact UTS 3.17-4 above, operation of the Build Alternatives would generate solid waste related only to the proposed DBH and State Parks facilities. Operation of the lifeguard and public restroom building, park facilities, and concessions would all be subject to federal, state, and local regulations to minimize the amount of waste material entering local landfills, including AB 341 and AB 1826, which would reduce solid waste generated by these uses through implementation of recycling and organic waste recycling programs. These facilities would also replace existing similar uses and do not include any land uses that would generate substantial quantities of solid waste in conflict with federal, state, or local reduction requirements.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site SDI (Option 1), on-site seepage pits (Option 2) or an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit or sewer options could support wastewater

generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4). Development of wastewater options is not anticipated to conflict with solid waste regulations.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Construction and Operation

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Build Alternatives 3 and 4, construction and operation of future concessions and Topanga Ranch Motel structures would also comply with all federal, state, and local regulations to minimize the amount of waste material entering local landfills, including AB 341 and AB 1826, which would reduce solid waste generated by these uses through implementation of recycling and organic waste recycling programs. The proposed future visitor services would include land uses similar to existing visitor services and would not generate types or quantities of solid waste in conflict with applicable regulations related to waste reduction.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Cumulative Impacts

UTS 3.17-6: The Project could result in cumulatively considerable impacts to utilities and service systems. *Impacts would be less than significant with mitigation incorporated.*

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative utilities and service system impacts is the same as the area for Project impacts to utilities and service systems described above to encompass the utility and system service providers that service the Project area and surrounding communities.

Significant cumulative impacts related to utilities and service systems could occur if the incremental impacts of the Proposed Project combined with the incremental impacts of one or more cumulative projects would impact the capacity or service level for water, wastewater,

electricity, natural gas, or telecommunications, require the construction of new or expanded utilities and service systems to serve the Project area, or generate solid waste that would impact capacity of existing landfills. As described in Table 3-1, there are multiple cumulative projects within the vicinity of the Project area. As transportation improvements, cumulative projects would be required to coordinate with utility and service systems providers to avoid or minimize any potential conflicts during construction and no expansion or impacts to capacity of these systems would be required during operations.

As described above, the Proposed Project would result in less-than-significant impact to utilities and service systems with implementation of **Mitigation Measure UTS-1**. Implementation of this mitigation measure would ensure no substantial disruption in utilities and service system provisions would occur during construction. Furthermore, as Alternative 2 would continue to utilize AOWTS, no expansion of the sewer system would be required. Under Alternatives 3 and 4, connection to an off-site sewer system may be required; however, the proposed connection would only provide capacity to serve the Project area and would not provide additional capacity to support other development within the City of Malibu or unincorporated Los Angeles County. Therefore, this proposed connection would not induce additional development requiring additional wastewater treatment capacity. On a cumulative basis, individual future discretionary projects, including project-level development applications for visitor services uses analyzed at the program-level herein, may have the potential to require additional utilities and service systems dependent on the type of project and the specific location. The Proposed Project, including the proposed visitor services' facilities, would create minimal disruptions to existing utilities and services systems during construction with implementation of **Mitigation Measure UTS-1**, and would require similar long-term service to existing conditions during operation under any of the Build Alternatives. Therefore, the Proposed Project would not make a cumulatively considerable contribution to a cumulative utility and service system impacts. Less than significant cumulative impacts related to utility and service systems would occur with mitigation.

Mitigation Measure

Implement **Mitigation Measure UTS-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

3.17.4 Summary of Impacts

Table 3.17-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related utilities and service systems. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.17-1
 SUMMARY OF PROPOSED PROJECT IMPACTS TO UTILITIES AND SERVICE SYSTEMS**

Impact	Alternative	Mitigation Measure	Significance After Mitigation
UTS 3.17-1: Utility Expansion and Relocation	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure UTS-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure UTS-1.	LTSM
UTS 3.17-2: Water Supply	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
UTS 3.17-3: Wastewater	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure UTS-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure UTS-1.	LTSM
UTS 3.17-4: Solid Waste	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
UTS 3.17-5: Solid Waste Regulations	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
UTS 3.17-6: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure UTS-1.	LTSM

NOTES:

NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant with Mitigation Incorporated
 SU = Significant and Unavoidable

3.17.5 References

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3.18 Wildfire

This section addresses the wildfire impacts associated with construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to wildfire; a description of the wildfire history and conditions in the Project area; and an evaluation of the potential impacts of the Proposed Project related to wildfire hazards.

3.18.1 Regulatory Setting

Federal

Santa Monica Mountains National Recreation Area

The Project is located within the Santa Monica Mountains National Recreation Area (National Park Service 2002). The General Management Plan and Environmental Impact Statement for the Santa Monica Mountains National Recreation Area General Plan provides goals and policies to increase fire and safety awareness for visitors, and to maintain fire suppression and fuel management zones maintained around structures (National Park Service 2002).

State

Executive Order B-52-18

Governor Edmund G. Brown Jr. signed Executive Order (EO) B-52-18 on May 10, 2018. EO B-52-18 recognizes that the size and intensity of wildfires have dramatically increased. It orders the California Department of Forestry and Fire Protection (CAL FIRE) to work with landowners to accelerate prescribed fire projects across jurisdictions and integrate fire prevention activities into landscape reforestation efforts in and near wildland-urban interface areas (State of California 2018).

2018 Strategic Fire Plan for California

Developed by the Board of Forestry and Fire Protection, the 2018 Strategic Fire Plan for California outlines goals and objectives for implementing CAL FIRE's overall policy direction and vision (CAL FIRE 2018). The 2018 plan demonstrates CAL FIRE's focus on: (1) fire prevention and suppression activities to protect lives, property, and ecosystem services; and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and serve as important habitat for adaptation and mitigation. CAL FIRE provides direction for fire prevention and enforcement within the State Responsibility Areas (SRAs) using fire resource assessments, a variety of available data, mapping, and other tools. Pre-fire management activities, including prescribed burning, fuel breaks, forest health treatments, and removal of hazardous vegetation, are conducted at the unit level under the guidance of CAL FIRE program managers. Through the 2018 Strategic Plan, CAL FIRE also delivers land use planning and defensible space inspection programs to the local level across the state.

The 2018 Strategic Fire Plan for California outlines operational units, which geographically follow county lines and consist of one operational unit to three counties. Because each operational unit varies greatly in size, terrain, and fire suppression strategies, individual unit strategic fire plans are completed annually to address how each unit is achieving the goals and objectives of the California Strategic Fire Plan.

Governor’s Forest Management Task Force

On January 8, 2021, Governor Gavin Newsom’s Forest Management Task Force released *California’s Wildfire and Forest Resilience Action Plan* (CFMTF 2021), a comprehensive plan to reduce wildfire risk for vulnerable communities, improve the health of forests and wildlands, and accelerate action to combat climate change. Implementation of the plan is intended to guide the state’s efforts going forward with an overall goal to increase the pace and scale of forest management and wildfire resilience efforts by 2025 and beyond. The plan contains four goals: Goal 1, to increase the pace and scale of forest health projects; Goal 2, to strengthen the protection of communities; Goal 3, to manage forests to achieve the state’s economic and environmental goals; and Goal 4, to drive innovation and measure progress.

State of California Emergency Response Plan

Pursuant to the Emergency Services Act (Government Code Section 8550 et seq.), the California Office of Emergency Services (Cal OES) developed the *State of California Emergency Plan* (State Emergency Plan) to coordinate how emergency services are provided by federal, state, and local governmental agencies and private persons in response to natural and human-caused emergencies (Cal OES 2017).

The State Emergency Plan recognizes that “climate impacts, including extreme weather events, sea level rise, changing temperature, precipitation patterns, and severe and frequent wildfires, present new risks that impact all phases of emergency management” and outlines how Cal OES coordinates the emergency responses of other agencies. For example, the Cal OES Fire and Rescue Branch coordinates all interregional and state agency activity related to mutual aid under the California Fire Service and Rescue Mutual Aid Plan; this mutual aid and multiagency coordination mitigates the effects of fire and other disasters, whether they are natural or human-caused (Cal OES 2023). The State Emergency Plan also defines the “policies, concepts, and general protocols” for proper implementation of the California Standardized Emergency Management System, which agencies in California must follow during multiagency response efforts whenever state agencies are involved.

California Fire Code (California Code of Regulations Title 24, Part 9)

The California Fire Code is found in Title 24, Part 9 of the California Code of Regulations (CCR), as a subset of the California Building Code (CBC). The California Fire Code combines the Uniform Fire Code with amendments necessary to address California’s unique needs. The California Fire Code (Title 24, Part 9 of the CCR) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The California Fire Code also establishes requirements intended to provide safety

for and assistance to firefighters and emergency responders during emergency operations. The provisions of the California Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The California Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas (ICC 2021).

Typical fire safety requirements of the California Fire Code include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.

Fire Hazard Severity Zones

California Public Resources Code (PRC) Sections 4201 and 4204 and Government Code Chapter 6.8 (Sections 51175–51189) directed CAL FIRE to map Fire Hazard Severity Zones (FHSZs). The maps are divided into Local Responsibility Areas (LRAs) and SRAs. LRAs generally include cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, and counties, and by CAL FIRE under contract to the local government.

California Public Resources Code

The PRC was established in 1939 by the California Code Commission. The PRC contains laws related to natural resources and the conservation, utilization, and supervision thereof, along with mines and mining, oil and gas, and forestry. The following sections of the PRC, reproduced below verbatim, are relevant to the Proposed Project.

Public Resources Code Section 4427

During any time of the year when burning permits are required, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following:

- (a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet.
- (b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.

This section does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

Public Resources Code Section 4428

No person, except any member of an emergency crew or except the driver or owner of any service vehicle owned or operated by or for, or operated under contract with, a publicly or privately owned utility, which is used in the construction, operation, removal, or repair of the property or facilities of such utility when engaged in emergency operations, shall use or operate any vehicle, machine, tool or equipment powered by an internal combustion engine operated on hydrocarbon fuels, in any industrial operation located on or near any forest, brush, or grass-covered land between April 1 and December 1 of any year, or at any other time when ground litter and vegetation will sustain combustion permitting the spread of fire, without providing and maintaining, for firefighting purposes only, suitable and serviceable tools in the amounts, manner and location prescribed in this section.

- (a) On any such operation a sealed box of tools shall be located, within the operating area, at a point accessible in the event of fire. This fire toolbox shall contain: one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a sufficient number of shovels so that each employee at the operation can be equipped to fight fire.
- (b) One or more serviceable chainsaws of three and one-half or more horsepower with a cutting bar 20 inches in length or longer shall be immediately available within the operating area, or, in the alternative, a full set of timber-felling tools shall be located in the fire toolbox, including one crosscut falling saw six feet in length, one double-bit ax with a 36-inch handle, one sledge hammer or maul with a head weight of six, or more, pounds and handle length of 32 inches, or more, and not less than two falling wedges.
- (c) Each rail speeder and passenger vehicle used on such operation shall be equipped with one shovel and one ax, and any other vehicle used on the operation shall be equipped with one shovel. Each tractor used in such operation shall be equipped with one shovel.

Public Resources Code Section 4431

During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saw, auger, drill, tamper, or other portable tool powered by a gasoline-fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches, or one serviceable fire extinguisher. The Director of Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by use of portable power tools under various climatic and fuel conditions.

The required fire tools shall at no time be farther from the point of operation of the power saw or tool than 25 feet with unrestricted access for the operator from the point of operation.

Public Resources Code Section 4442

- a) Except as otherwise provided in this section, no person shall use, operate, or allow to be used or operated, any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brush-covered land, or grass-covered land unless the engine is equipped with a spark arrester, as defined in subdivision (c), maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.
- b) Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.
- c) A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels, or which is qualified and rated by the United States Forest Service.
- d) Engines used to provide motive power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code.
- e) Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in effective mechanical condition.
- f) Motor vehicles when being operated in an organized racing or competitive event upon a closed course are not subject to this section if the event is conducted under the auspices of a recognized sanctioning body and by permit issued by the fire protection authority having jurisdiction.

California Building Code

The CBC includes regulations that are consistent with nationally recognized standards of good practice, intended to facilitate protection of life and property. Among other things, its regulations address the mitigation of the hazards of fire explosion; management and control of the storage, handling, and use of hazardous materials and devices; mitigation of conditions considered hazardous to life or property in the use or occupancy of buildings; and provisions to assist emergency response personnel.

Chapter 7 of the CBC details the materials, systems, and assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area. A *Wildland-Urban Interface Area* is defined in Section 702A as a geographical area identified by the areas of fire hazard severity in accordance with PRC Sections 4201–4204 and Government Code Sections 51175–51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. *Fire hazard severity zones* are geographical areas classified as Very High, High, or Moderate FHSZs in SRAs or as VHFHSZs in LRAs. FHSZs, which are determined based on factors such as fuel, slope, and fire weather, do not predict when or where a wildfire will occur, but they do identify the degree of fire hazard (very high, high, or moderate).

California Vehicle Code Section 38366

California Vehicle Code Section 38366 requires spark-arresting equipment on vehicles that travel off-road. This code applies to the Project area because proposed construction equipment may be implemented in off-road areas.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the Coastal Act. The following policy is potentially relevant to the Project:

Section 30253 Minimization of adverse impacts. New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard

Regional and Local

Santa Monica Mountains Local Coastal Program

The Santa Monica Mountains Local Coastal Program (LCP) was adopted by the County of Los Angeles and California Coastal Commission in 2018 and includes both a land use plan and implementing measures. The LCP provides the following goals and policies potentially relevant to public services for the Proposed Project:

Goal PF-3: Adequate fire and paramedic services to meet existing and future demand.

Policy PF-18: Continue to consult and coordinate with the Fire Department as part of the project review process.

Policy PF-19: Reduce fire hazards by:

- Reviewing new development for adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel.
- Requiring, where appropriate, on-site fire suppression systems for all new residential and commercial development to reduce the dependence on Fire Department equipment and personnel.
- Limiting the length of private access roads to reduce the amount of time necessary for the Fire Department to reach residences and to minimize risk to firefighters.
- Requiring project design to provide clearly visible (during the day and night) address signs for easy identification during emergencies.
- Cooperating with the Fire Department to ensure compliance with the Fire Code.
- Facilitating the formation of volunteer Fire Departments and volunteer EMS providers such as the Malibu Search and Rescue Team.

Los Angeles County Fire Department

2021 Los Angeles County Fire Department Strategic Fire Plan

The County of Los Angeles is one of six contract counties that have executed a contract with the State of California to provide wildland fire protection in SRAs. The Los Angeles County Fire Department (LACFD) has the responsibility as part of a contract county to implement the State Strategic Fire Plan, and functionally operates as a unit of CAL FIRE and is responsible for Strategic Fire Plan activities in Los Angeles County. The 2021 LACFD Strategic Plan includes three goals: emergency operations, public service, and organizational effectiveness. The 2021 LACFD Strategic Plan includes goals for LACFD related to analyzing the threat of wildfire to communities in the wildland-urban interface; implementing fuel reduction projects; developing battalion-specific asset maps, strategies, and tactics; and identifying fire prevention strategies that are consistent with the County's land use planning strategies. LACFD also includes goals to support local Fire Safe Councils and to work with communities to develop community wildfire protection plans (LACFD 2021).

Los Angeles County Fire Department Programs

LACFD has adopted the California Fire Code for regulations and standards that are applied to new development in hazardous fire areas.

Included in the Los Angeles County Fire Code (Sections 325.2.1.2, 328,10, 11117.2.1, and 4908.1) are:

- Requirements for access roads, adequate road widths, all-weather access, fire flow requirements, fire hydrant spacing, and vegetation clearance.
- Restrictions on, permit requirements for, and fire-suppression equipment requirements for activities and housing in fire-prone areas.
- Provisions for the use and storage of hazardous, flammable, and combustible material.
- Fire safety requirements for construction and demolition, construction requirements for buildings, as well as requirements for land uses such as energy systems and biomass facilities.
- Requirements that projects in areas located in VHFHSZs complete and seek approval of a land development plan and a fuel modification plan.

The LACFD has instituted a variety of programs to reduce wildfire-related threats. These relate to pre-fire management and defensible space planning; vegetation management (focusing on the use of prescribed fire, hand crews, and mechanical, biological, and chemical means to address wildland fire fuel hazards in SRAs and LRAs); and brush clearance (CEO OEM 2019; LACFD 2022), as well as fuel modification (County of Los Angeles 2014). In addition to these programs, LACFD and the Los Angeles County Department of Public Works (DPW) enforce fire and building codes related to development in FHSZs.

Los Angeles County Operational Area Emergency Response Plan

Adopted in 2012, the Los Angeles County Operational Area Emergency Response Plan (OAERP) identifies how the emergency response plan aligns with other federal, state, and local authorities.

The plan identifies various emergency management phases and incident management systems and identifies operational priorities. The purpose of the OAERP is to incorporate and coordinate all the facilities and personnel of County government, along with the jurisdictional resources of the cities and special districts within the county, into an efficient operational area organization capable of responding to any emergency using the California Standardized Emergency Management System, mutual aid, and other appropriate response procedures. The OAERP is an extension of the California Emergency Plan. The plan's operational concepts focus on large-scale disasters that have the potential to generate unique situations (CEO OEM 2012).

Los Angeles County All-Hazards Mitigation Plan

Los Angeles County's All-Hazards Mitigation Plan was adopted in 2019 (CEO OEM 2019). The plan includes risk assessments and hazard mitigation strategies for a variety of hazards including wildfire. It describes the fireproof coating and provision of auxiliary power for critical assets; the County's brush program, vegetation management program, and education and awareness programs to mitigate wildfire hazard risks; the Wildland-Urban Interface Ordinance as a codification of development standards to guide development in wildland-urban interface areas; and various community wildfire protection plans to identify strategic sites and methods for fuel reduction projects across the landscape.

Los Angeles County General Plan

The Project area is located within the area governed by the *Los Angeles County General Plan 2035* (County General Plan) (County of Los Angeles 2015). Within the Land Use and Safety elements of the County General Plan, the following goals and policies regarding wildfire are applicable to the Proposed Project:

Goal LU 3: A development pattern that discourages sprawl and protects and conserves areas with natural resources and SEAs [Significant Ecological Areas].

Policy LU 3.2: Discourage development in areas with high environmental resources and/or severe safety hazards.

Goal S 3: An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.

Policy S 3.3: Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.

Policy S 3.4: Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.

Policy S 3.6: Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.

Policy S 3.7: Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildfire risk.

Los Angeles County Code

Fire-related land use and building regulations are found throughout the Los Angeles County Code.

Title 32, Fire Code, requires that defensible space be maintained around all buildings and structures in SRAs and within the VHFHSZs of LRAs (Section 4907); requires fuel modification plans for projects in areas designated as FHSZs within SRAs or as VHFHSZs within LRAs, identifying specific zones within properties where it is necessary to modify combustible native or ornamental vegetation or replace it with drought-tolerant, low-fuel-volume plants (Section 4908); and governs the clearance of brush and vegetative growth relative to electrical transmission lines, cables, and structures (Section 325). Title 32 also requires land development plan review for projects located within VHFHSZs (Section 328.10).

Title 20, Utilities, contains fire flow and fire hydrant requirements, including requirements applicable in VHFHSZs (Section 20.16.060).

Topanga State Park General Plan

A portion of the Project area is located within Topanga State Park. The Topanga State Park General Plan was developed by State Parks and directs the long-range management, development, and operation of Topanga State Park by providing broad policy and program guidance including goals, guidelines, and objectives for park management. The Topanga State Park General Plan sets aside a number of management zones including a Lower Topanga and Lagoon Zone, Wildlands Zone, Cultural Preserve, and Historic Zone, as well as other zones for resource management, visitor use, and accessible interpretive and recreational programs. The Topanga State Park General Plan also contains specific proposals to consolidate the park's trail system through eliminating duplicate trails and relocating trails away from sensitive resources (State Parks 2012). The following guidelines in the Topanga State Park General Plan are potentially relevant to the Proposed Project:

Guideline 4: Pursue fire management techniques that promote sound ecological principles or “buffer zones” between the Park and the neighboring communities. In cases where the adjacent land is currently developed or is planned for improvement, the footprint of these “buffer zones” should be implemented off of park property.

Guideline 5: Follow prepared guidelines for the protection of buildings and structures near wildland vegetation (*Guidelines for the Protection of Structures from Wildland Fire* 2009). These guidelines are intended to minimize the probability that structures near flammable vegetation will ignite and burn during a wildland fire.

Topanga Creek Watershed Management Plan

The *Topanga Creek Watershed Management Plan* provides voluntary guidelines for implementing a variety of preventive planning and best management practices (BMPs) that reflect current understanding of the interrelationships and connections of the physical, chemical, biological, economic, and social aspects of the Topanga Creek Watershed (Topanga Creek Watershed Community 2002). Section 4 of the plan includes goals and actions related to reducing flood and fire hazards.

Topanga Community Wildland Fire Evacuation Plan

The *Topanga Community Wildland Fire Evacuation Plan* identifies the County's approach to ensuring, in cooperation with public agencies, a safe and effective community response to a wildland fire evacuation (CEO OEM 2009).

Topanga State Park Wildfire Management Plan

State Parks is in the process of updating park unit wildfire management plans that serve as local operating agreements between State Parks and CAL FIRE or its agents, local fire departments. Each park unit plan describes the extraordinary challenges and resources that influence wildfire and dictate fire suppression activities. The Topanga State Park Wildfire Management Plan provides a framework for preventing and controlling wildfire events in a way that safely protects park infrastructure, sensitive resources, and the unique landscape, while also effectively reducing the spread and risk of wildfires in Topanga State Park. The Wildfire Management Plan's objectives include establishing responsibilities and roles for wildland fire activities; identifying fire suppression constraints in sensitive resource areas; providing guidance for implementing modified suppression techniques; and setting repair standards. The plan also includes goals for implementing the incident command system, preventing destructive wildfires through fuel management projects, and identifying hazards to emergency responders (State Parks in prep.).

City of Malibu Mass Evacuation Plan

The City of Malibu Mass Evacuation Plan was developed through a collaborative, multiagency process. In August 2019, a multiagency evacuation exercise was held with representatives from LACFD, the County Sheriff's Department, DPW, DBH, the California Department of Transportation (Caltrans), the California Highway Patrol, Pepperdine University, the Topanga Coalition for Emergency Preparedness, the Santa Monica Police Department, and County Supervisor Sheila Kuehl's office. The City of Malibu is vulnerable to a variety of hazards that could require a mass evacuation of all or part of the city, including fire, flooding, landslide, and tsunami hazards. The 2018 Woolsey Fire, which caused significant damage and involved the full evacuation of the city, demonstrated the need for a comprehensive and coordinated plan (City of Malibu 2020).

3.18.2 Affected Environment

Project Area Setting

The Proposed Project is located in the Santa Monica Mountains, adjacent to the community of Topanga within unincorporated Los Angeles County. A small portion of the Project area overlaps with the city of Malibu, with Project activities anticipated to be limited to the Caltrans right-of-way (ROW).

The Project area is a mix of developed and undeveloped areas. The northern portion of the Project area is a mix of undeveloped open space, parking, the defunct Topanga Ranch Motel, five lessees, Topanga Lagoon, and Topanga Creek. The southern portion of the Project area is developed with Pacific Coast Highway (PCH); the Topanga Lagoon Bridge (Bridge Number 53-0035); beach

parking lots; and a LACFD lifeguard and public restroom building and helipad. The Project area is bounded by the Santa Monica Mountains to the north; Coastline Drive and Ratner Beach along PCH to the east; the Pacific Ocean to the south; and single-family residences, a retail clothing store, and the continuation of PCH to the west.

Significant geographic features within and near the Project area include the Pacific Ocean and the Santa Monica Mountains. The climate in the region is Mediterranean, with dry summers and moderately wet winters; however, the region has experienced severe drought conditions in recent years (USGS 2022). The Project area is also subject to the Santa Ana winds, which are dry, strong, downslope winds that affect Southern California. These typically occur in the fall, when the area has been without significant rainfall for many months. High winds and dry climate conditions can exacerbate fire risk as dry vegetation acts as a fire fuel as discussed below and the high winds can carry these flames creating larger wildfire risk.

Fire Protection Services

Fire and emergency medical services in the unincorporated areas of the county are provided by LACFD. LACFD has 175 fire stations, nine divisions, and 22 battalions, and multiple divisions including Air and Wildland, Fire Prevention, Forestry, and Health Hazardous Materials (LACFD 2020). LACFD receives the majority of its revenue from the ad valorem property tax paid by owners of taxable properties in the unincorporated areas of the county (County of Los Angeles 2014).

The closest fire stations are LACFD Station 69, which is located 4 miles north on Topanga Canyon Boulevard (TCB); Los Angeles City Fire Station 23, which is located 2 miles east at 17281 Sunset Boulevard in Pacific Palisades; and LACFD Station 88, which is located approximately 6 miles west at 23720 Malibu Road in the city of Malibu. Additionally, LACFD has air support at Station 69 Bravo, located on Saddle Peak Road, as well as access to super scoopers and other aerial resources.

LACFD follows the following standards for response times (County of Los Angeles 2014):

- 5 minutes or less for response times for urban areas
- 8 minutes or less for suburban areas
- 12 minutes or less for rural areas (LACFD 2021)

Firefighting efforts within Topanga State Park are conducted as a multiagency effort. While LACFD Station 69 and City Fire Station 23 are the primary responders for the Project area, State Parks also has agreements with a few agencies such as the Mountains Recreation and Conservation Authority or providing joint use of fire crews for fire protection.

Designated Fire Hazard Severity Zones

CAL FIRE maps areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These areas, called FHSZs, are represented as Very High, High, or Moderate. The maps are divided into Federal Responsibility Areas, where the federal government is

financially responsible for fire suppression; SRAs, where the state is financially responsible for wildfire suppression; and LRAs, where cities or counties have the primary financial responsibility for wildfire suppression. As of 2019, in the unincorporated areas of the county, there were 23.53 square miles of VHFHSZs in the LRAs, 610.94 square miles of VHFHSZs in the SRAs, and 132.06 square miles of HFHSZs in the SRAs (CEO OEM 2019).

Federal Responsibility Areas in the county include federal lands in the Santa Monica Mountains, SRAs in the county include portions of the Santa Monica Mountains, and LRAs in the county include foothills of the Santa Monica Mountains (CAL FIRE 2007; County of Los Angeles 2014).

The Project area is mapped as being primarily a VHFHSZ within an SRA, with a small portion of PCH on the western boundary of the Project area being a VHFHSZ in an LRA (CAL FIRE 2022).

Fire Environment

Fire behavior is dependent primarily upon fuels (e.g., vegetation or structures), weather (e.g., wind, temperature, and humidity), and topography (e.g., slope, elevation, and aspect). The combination of these three factors can help or hinder the spread of a wildfire if it occurs.

Topography

Topography influences the rate of wildfire spread. South-facing slopes, for example, are subject to more solar radiation, which makes them drier and intensifies wildfire behavior. By comparison, ridge tops may mark the end of wildfire spread, because fire spreads more slowly or may even be unable to spread downhill (CEO OEM 2019). The areas of Los Angeles County that are most susceptible to wildfires are generally located in mountainous or hillside areas, including the Santa Monica Mountains; however, the areas where wildfire poses the greatest risk to people are located generally along the wildland-urban interface (CEO OEM 2019).

Elevations in the Project area range from approximately 210 feet above mean sea level in the western portion of the Project area to sea level in the southern portion of the Project area). The south side of the Project area slopes down to Topanga Beach and the Pacific Ocean, and the northern portion of the Project area slopes up into the Santa Monica Mountains.

Vegetation/Fuels

The type and condition of vegetation plays a significant role in wildfire spread occurrence. Certain plant types are more susceptible to burning or once ignited, burn with greater intensity. Dense or overgrown vegetation increases the amount of combustible material available to fuel a fire (i.e., the fuel load); the ratio of living to dead plant matter is also important. Certain changes to the climate may increase wildfire risk significantly during prolonged drought periods because they cause the moisture content to decrease for both living and dead plant matter. The continuity of both the horizontal and vertical fuel load is also an important factor (CEO OEM 2019). State Parks has identified that the extensive infestations of invasive giant reed (*Arundo donax*) in the understory of the Project area is of particular concern due to its ability to ignite rapidly, ability to

increase fire spread in riparian areas, and relatively fast recovery post-fire. Arundo is also frequently used on-site for encampments by the unhoused.

Onsite habitats that are particularly flammable include the sage and ceonothus dominated shrublands, and the invasive weed dominated understory of onsite riparian habitats.

Weather/Climate

Weather is the most variable factor affecting wildfire behavior. Temperature, humidity, wind, and lightning can affect ignition opportunities and fire spread rate. Extreme weather, such as high temperatures and low humidity, can lead to extreme wildfire activity. Climate change increases the susceptibility of vegetation to fire ignition because of the longer dry seasons. By contrast, cooling and higher humidity often signal reduced wildfire occurrence and easier containment (CEO OEM 2019).

The Los Angeles basin has a Mediterranean climate and experiences warm, dry summers and mild, wet winters. High moisture levels during the winter rainy season significantly increase the growth of plants. However, the vegetation becomes dried out during the long, hot summers, decreasing plant moisture content and increasing the ratio of dead fuel to living fuel. As a result, fire susceptibility increases dramatically, particularly in late summer and early autumn.

The coastline in the Project area experiences much cooler temperatures than inland areas, which can reach temperatures above 100 degrees Fahrenheit in the summer. The county experiences about 35 days of precipitation each year. In the autumn and early winter months, high-pressure weather systems that develop over the Great Basin and Mojave Desert produce strong, hot, offshore winds commonly known as *Santa Ana winds*. These are downslope winds that blow through the mountains, decrease relative air humidity and fuel moisture, and create conditions that can lead to the spread of high-severity wildland fires (LACFD 2021).

Impacts of Wildfire on Air Quality

As wildfires burn fuel, large amounts of carbon dioxide, black carbon, brown carbon, and ozone precursors are released into the atmosphere. Additionally, wildfires emit a substantial amount of volatile and semi-volatile organic materials and nitrogen oxides that form ozone and organic particulate matter. These emissions can lead to harmful exposures for first responders, nearby residents, and populations in regions farther from the wildfires (NOAA 2022).

Fire History

Topanga State Park experienced very large, damaging fires in 1923 (Cooper's Ranch), 1948 (Miller), and 1973 (Trippett). The 2018 Woolsey Fire burned approximately 97,000 acres and destroyed more than 1,600 structures. According to the 2021 LACFD Strategic Plan, in 2020 the County recorded 4,375 ignition starts—the majority caused by outside rubbish fires, followed by structure fires and vehicle sources (LACFD 2021). Wildfires were and continue to be a perennial problem in the hills of Los Angeles. Topanga has experienced spectacular and destructive fires

and suffered from repeated floods and mudslides, sometimes trapping residents for days due to washed-out roads.

Disaster Routes and Evacuation Routes

The Los Angeles County Department of Public Works (DPW) describes disaster routes as “freeway, highway or arterial routes pre-identified for use during times of crisis” (LA County DPW 2022a). These routes have been designated in advance to bring in emergency personnel, equipment, and supplies to affected areas to protect property, minimize environmental impacts, and save lives. During a disaster, these routes are prioritized for clearing, repairing, and restoration over all other roads (LA County DPW 2022a). Disaster routes have been mapped for the south county operation area, which includes the Project area (Los Angeles County DPW 2022b).

Disaster routes are not evacuation routes, which are used to move the affected population out of an affected area. An emergency may warrant the use of a road as both a disaster and evacuation route; however, the two are distinct (LA County DPW 2022a).

The Project area is located within identified potential Evacuation Routes (PCH and TCB) and the Topanga Beach parking lot is identified as a Safe Refuge Area (City of Malibu 2020).

3.18.3 Environmental Consequences

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to wildfire. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan. (Refer to Impact FIRE 3.18-1.)
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. (Refer to Impact FIRE 3.18-2.)
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. (Refer to Impact FIRE 3.18-3.)
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. (Refer to Impact FIRE 3.18-4.)
- Result in cumulatively considerable impacts to wildfire. (Refer to Impact FIRE 3.18-5.)

Emergency Response Plan

FIRE 3.18-1: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing functions and conditions throughout the Project area would remain the same. There would be no change to existing visitor services; the existing lagoon footprint or habitat quality; the existing bridge; or the existing lifeguard and public restroom building. The currently unusable Topanga Ranch Motel structures would continue to deteriorate without restoration, no new bridge would be constructed, and damage to the existing lifeguard and public restroom building due to coastal erosion would continue to occur. No Project components would be implemented; therefore, Alternative 1 would not impair an adopted emergency response plan or emergency evacuation plan.

Alternatives 2, 3, and 4 (Build Alternatives)

Disaster Routes in Los Angeles County include State Route (SR) 1, also known as PCH, which bisects the Project area, and SR 27 (TCB), which is adjacent to the eastern boundary of the Project area (LA County DPW 2022b). The potential for the Proposed Project to substantially impair an adopted emergency response plan or emergency evacuation plan would be similar under all Build Alternatives, as described below.

Construction

Project construction would require installing a 180-foot-wide temporary bridge and sequentially building a new 460-foot bridge to replace the existing PCH bridge that crosses over the lagoon, which may require short-term lane/road closures or detours. Potential lane/road closures or detours could congest local roadways that could be used by the public and emergency responders if an emergency or disaster were to occur. As described in Section 3.16, *Transportation and Circulation*, a Transportation Management Plan (TMP) and Stage Construction & Traffic Handling Plan for the Proposed Project would be prepared and implemented to ensure that construction impacts on local ROWs, such as blockage of the highway during red flag, wildfire, and other emergency conditions, do not occur as a result of the Proposed Project (**Mitigation Measure TRA-1**). The TMP and Stage Construction & Traffic Handling Plan will outline appropriate traffic control measures intended to ensure adequate traffic operations and access is provided through the construction area. The TMP and Stage Construction & Traffic Handling Plan will be developed in coordination with Caltrans, LACFD, the City of Malibu, State Parks, DBH, and emergency service responders, which include fire departments, police departments, and ambulances that have jurisdiction within the Project area.

Operation

Under all Build Alternatives (Alternatives 2, 3, and 4), operation and maintenance activities associated with the proposed lagoon, bridge, beach, and visitor services facilities would be similar to current conditions related to emergency response and evacuation. No substantial operation-

related activities that could impair an adopted emergency response plan or emergency evacuation plan would occur within surrounding ROWs.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation (SDI) (Option 1), on-site seepage pits (Option 2), and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. With implementation of **Mitigation Measure TRA-1**, impacts on the circulation system within the Project area during construction of the Proposed Project would be reduced to a less-than-significant level, and the Proposed Project would not impair an adopted emergency response plan or emergency evacuation plan. Impacts during construction would be less than significant with mitigation.

Mitigation Measure

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*).

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, one concession and associated parking, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored. These structures would be used for the development of future visitor services that could include a mix of overnight accommodations and park facilities such as employee housing, offices, and storage. A concession would be located to the southeast of

the motel. Additional limited development would occur at the Gateway Corner (the intersection of PCH and TCB) and could include a small outdoor interpretive pavilion/restroom, small picnic area, day use parking, and a maintenance yard.

The proposed construction activities would involve the transport of equipment, vehicles, and materials on local roadways. Additionally, temporary lane closures and/or detours may be required during installation of the proposed pipeline in the PCH or TCB ROW. These activities would have the potential to result in impacts on circulation system performance. As discussed above, **Mitigation Measure TRA-1** would include the preparation and implementation of a construction and emergency traffic management plan. With implementation of **Mitigation Measure TRA-1**, impacts on the circulation system in the Project area during construction would be reduced to a less-than-significant level, and the Proposed Project would not impair any adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant with mitigation.

Under Project Alternatives 3 and 4, operation and maintenance of the proposed visitor services redevelopment would increase the number of vehicles traveling on local roadways due to workers, maintenance staff, and visitors traveling to and from the Project site. However, it is anticipated that the additional trips would result in minor increases to daily vehicle trips compared to existing conditions. Therefore, operation and maintenance activities would have a nominal impact on local circulation system performance, including existing traffic conditions along PCH and TCB. The Proposed Project would be operated similar to current conditions respective to emergency response and evacuation. Impacts during operation would be less than significant.

Mitigation Measures

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*).

Significance Determination

Less than Significant with Mitigation Incorporated

Exposure to Pollutant Concentrations

FIRE 3.18-2: The Project, due to slope, prevailing winds, and other factors, would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. *Impacts would be less than significant with mitigation incorporated.*

As described in Section 3.18.2, *Affected Environment*, the Project area is located within a VHFHSZ and includes undeveloped, steep hillsides to the north, west, and east. The greatest potential for the Proposed Project to exacerbate wildfire risks would occur during activities involving operation of construction equipment and vehicles and the use of combustible materials such as diesel fuel. These activities could pose a wildfire risk to people and property with

possible ignition sources that could produce a spark, fire, or flame within the VHFHSZ. Additionally, risk of ignition events could also be exacerbated by Santa Ana winds, which are known to occur in the Project region.

Alternative 1 (No Build)

Under Project Alternative 1, conditions throughout the Project area would remain the same as existing functions and conditions. There would be no change to the Project area. Therefore, Alternative 1 would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to construction risks; however, increased risk of ignition of buildings due to wildfire embers or unauthorized fires set by the unhoused are possible.

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for the Proposed Project to expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be similar under all Build Alternatives, as described below.

Construction

During Project construction, the operation of construction equipment and vehicles and use of combustible materials such as diesel fuel could pose a wildfire risk to people and property. Ignition sources such as internal combustion engines, gasoline-powered tools, and equipment could produce a spark, fire, or flame. The use of spark-producing construction machinery could expose Project workers and contractors to pollutant concentrations from a wildfire, resulting in a potentially significant impact. However, all personnel in the Project area would be required to comply with PRC Sections 4427, 4428, 4431, and 4442, which include regulations related to the handling of combustible fuels and equipment that can exacerbate fire risks. During construction, adherence to existing state and local fire hazard regulations would reduce any potential for exacerbating wildfire risks. Additionally, all construction activities and crew would be required to comply with fire protection and prevention requirements specified by the CCR and the California Occupational Safety and Health Administration (Cal/OSHA), including easily accessible firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. The risk of construction-based ignition events could also be exacerbated by Santa Ana winds, which are known to occur in the Project region. Construction operations may be suspended on Red Flag days as part of the Project's construction and emergency traffic management plan (**Mitigation Measure TRA-1**). However, given compliance with the regulations discussed above, this impact would be less than significant.

Operation

As described in Section 3.18.2, *Affected Environment*, the Project area is located within a VHFHSZ; includes undeveloped, steep hillsides to the north, west, and east; and would be susceptible to additional risk associated with the rapid spread of wildfire due to Santa Ana winds in the Project region. The use of possible ignition sources, such as internal combustion engines, gasoline-powered tools, and equipment, during operation and maintenance activities could expose Project workers and contractors to pollutant concentrations from a wildfire.

However, operation and maintenance would be substantially similar to existing conditions related to wildfire risks. Furthermore, the Proposed Project would involve an increase in lagoon, wetland, and riparian bank habitats, which would allow the lagoon system to evolve to accommodate changing sea level and storm surge conditions and would result in increased water levels within the Project area. This would effectively create more inundated areas less susceptible to catching fire. Restoration activities would remove fire prone *Arundo* and further reduce fuel ignition and fire hazards. Additionally, **Mitigation Measure FIRE-1** requires the preparation of a fuel modification plan, consistent with State Parks and LACFD's standards. The fuel modification plan would identify fuel modification zones around the Project as well as the type of landscaping allowed within these zones and would ensure that the height and density of vegetation around the lagoon and beach is modified to reduce the risk of wildfire impacts for visitors within the Project area. Based on review of the fuel modification plan, State Parks and LACFD may also require the incorporation of alternative methods and materials onto the lifeguard and public restroom building to reduce the risk of wildfire.

Wastewater Management Options

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. Three wastewater treatment options are being considered: on-site subsurface drip irrigation, or SDI (Option 1); on-site seepage pits (Option 2); and an off-site sewer connection (Option 3). SDI would only support wastewater generation amounts associated with development of Alternative 2, while the seepage pit and sewer options could support wastewater generation associated with any of the Build Alternatives (Alternatives 2, 3, and 4).

For wastewater management Option 1 (SDI) and Option 2 (seepage pits), construction activities would be located at the northern tip of the Project boundary on State Parks property along TCB. All construction and operation activities would occur within State Parks property or within Caltrans ROW. Limited lane closures to install a pipeline across TCB would occur. Construction of Wastewater Option 3 (sewer) is anticipated to be limited to paved areas along Caltrans ROW along PCH, and on-site pump station(s) adjacent to parking lots, and it is anticipated that one lane along PCH would be closed intermittently during construction of the sewer alignment. However, under all Build Alternatives, ingress and egress for businesses and residences along PCH and TCB would be maintained during construction. With implementation of **Mitigation Measure FIRE-1**, impacts as a result of pollutant concentrations associated with wildfire would be less than significant with mitigation.

Mitigation Measures

FIRE-1: Before the issuance of a grading or building permit, State Parks shall submit a fuel modification plan to the State Fire Marshal and Los Angeles County Fire Department for review and approval. The plan shall identify fuel modification zones around the Project area and the type of landscaping allowed within these zones. The plan shall also ensure that the height and density of restoration planting and vegetation around the Project area is designed to reduce the risk of wildfire.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

As described in further detail in the discussion for Impact FIRE 3.18-1, under Project Alternatives 3 and 4, 15–20 structures associated with the historic Topanga Ranch Motel would be retained and restored and used for the programmatic development of future visitor services. Limited development would also be located at the Gateway Corner.

The proposed concession, motel structures, and pipeline would be located within the VHFHSZ. Similar to the construction impacts described above for the Build Alternatives, construction activities would involve operation of construction equipment and vehicles and use of combustible materials such as diesel fuel, which could pose a wildfire risk to people and property with possible ignition sources. Construction of the proposed concession, motel structures, and pipeline at the Project site would be required to comply with existing state and local fire hazard regulations, including Public Resources Code Sections 4427, 4428, 4431, and 4442, and regulations specified by the CCR and Cal/OSHA. Adherence to existing state and local fire hazard regulations would reduce any potential for exacerbating wildfire risks. Therefore, impacts during construction would be less than significant.

As described in Section 3.18.2, *Affected Environment*, the Project area is located within a VHFHSZ; includes undeveloped, steep hillsides; and would be susceptible to Santa Ana winds capable of exacerbating wildfire risks. Similar to construction impacts described above, the use of possible ignition sources such as internal combustion engines, gasoline-powered tools, and equipment during operation and maintenance activities could expose Project workers and contractors to pollutant concentrations from a wildfire. However, as discussed above for the Build Alternatives, **Mitigation Measure FIRE-1** requires the preparation of a fuel modification plan consistent with LACFD's standards to ensure that the height and density of vegetation around the lagoon and beach is modified to reduce the risk of wildfire impacts for visitors within the Project area. Therefore, with implementation of **Mitigation Measure FIRE-1**, impacts would be reduced to a less-than-significant level.

Mitigation Measures

Implement **Mitigation Measure FIRE-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Infrastructure that Exacerbates Wildfire Risk

FIRE 3.18-3: The Project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts would be less than significant with mitigation incorporated.

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would generally remain the same in terms of existing functions and conditions. Some increased fire risk could occur via ignition of deteriorating buildings and expanding invasive vegetation due to wildfire embers or unauthorized fires set by the unhoused.

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for the Proposed Project to exacerbate wildfire risk due to implementation or maintenance would be similar under all Build Alternatives, as described below.

Construction

Construction activities associated with the proposed visitor services redevelopment, expanded lagoon, beach helipad, parking lot, lifeguard and public restroom building, and PCH bridge would have the potential to exacerbate wildfire risk; however, all personnel would be required to comply with the regulations and policies discussed above for Impact FIRE 3.18-2, to limit potential for wildfire. The use of construction equipment would adhere to CCR Title 24, the CBC, and the County General Plan's Safety Element discussed above in Section 3.18.1, *Regulatory Setting*. These regulations and policies provide guidance on proper operation of diesel-fueled construction equipment that could exacerbate wildfire as well as operation of proper safety equipment to extinguish a fire should one start during construction.

Operation

Once operational, conditions around the proposed visitor services redevelopment, expanded lagoon, beach helipad, parking lot, lifeguard and public restroom building, and PCH bridge would generally resemble the existing conditions for wildfire. The beach helipad would assist in aerial firefighting operations and emergency response. Over time, the lagoon would be inundated with additional water as a result of changing sea levels and storm surge conditions, which would reduce the potential risk for wildfire. Additionally, as discussed above for Impact FIRE 3.18-2, implementation of **Mitigation Measure FIRE-1** requires the preparation of a fuel modification plan that would identify fuel modification zones around the Project area, identify the type of landscaping allowed within the modification zones, and ensure that the height and density of vegetation around the lagoon and beach facilities is modified to reduce the risk of wildfire impacts. Based on review of the fuel modification plan, the State Fire Marshal and LACFD may also require the incorporation of alternative methods and materials onto the beach facility structures to reduce the risk of wildfire.

Wastewater Management Alternatives

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. With the exception of small elements associated with treatment works or pump stations, wastewater facilities would be buried underground on State Parks property and/or Caltrans ROW. With implementation of **Mitigation Measure FIRE-1**, impacts as a result of wildfire would be less than significant.

Mitigation Measures

Implement **Mitigation Measure FIRE-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Programmatic Topanga State Park Visitor Services

Under Alternative 2, development would be restricted to the Gateway Corner area. This area would include at most approximately 5,500 square feet of one-story structures, which would include a park office, employee housing, a maintenance/storage facility, and a small outdoor interpretive pavilion/restroom. A small picnic area and day-use parking would also be included.

Construction activities for programmatic development of future visitor services at Topanga State Park have the potential to exacerbate wildfire risk due to the presence of construction equipment within a VHFHSZ; however, all personnel would be required to comply with the regulations and policies discussed above for Impact FIRE 3.18-2, to limit the potential for wildfire. The use of construction equipment would adhere to CCR Title 24, the CBC, and the County General Plan's Safety Element as discussed above in Section 3.18.1, *Regulatory Setting*.

Once operational, conditions at the future visitor services redevelopment would generally resemble the existing conditions for wildfire. The future visitor services facilities would not include development/uses that would exacerbate wildfire risk. Nonetheless, implementation of **Mitigation Measure FIRE-1** would require the preparation of a fuel modification plan to reduce the risk of wildfire impacts associated with the development. Operational impacts related to infrastructure potentially exacerbating fire risk would be reduced to less-than-significant levels with mitigation.

Mitigation Measures

Implement **Mitigation Measure FIRE-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

Post-Fire Slope or Drainage

FIRE 3.18-4: The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. *Impacts would be less than significant.*

Alternative 1 (No Build)

Under Alternative 1, existing conditions throughout the Project area would remain. Because Proposed Project components would not be implemented within the Project area, there would be no additional risk of flooding or landslides post-fire as compared to existing conditions.

Alternatives 2, 3, and 4 (Build Alternatives)

The potential for the Proposed Project to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would be similar under all Build Alternatives, as described below.

Construction and Operation

Topography varies within the Project area, from sea level at the coast to approximately 210 feet in the surrounding mountains. The portion of the Project area located north of PCH mainly contains slopes ranging from 0 to 2 percent, with small portions along the eastern and western boundaries containing slopes ranging from 30 to 75 percent; the portion of the Project area located south of PCH contains slopes ranging from 0 to 5 percent. As stated in Section 3.6, *Geology, Soils, Seismicity, and Paleontological Resources*, a small portion of the Project area north of PCH and the area adjacent to the Project's northwestern boundary are identified as having the potential for landslides; when stripped of vegetation in a fire, this area could become less stable and more susceptible to landslide activity. Additionally, as stated in Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*, portions of the Project area that surround the creek, lagoon, and ocean are located within flood hazard Zones VE and AE, which have a 1 percent or greater chance of flooding.

As discussed in Section 3.6, *Geology, Soils, Seismicity, and Paleontological Resources*, the proposed visitor services redevelopment, expanded lagoon, beach helipad, parking lot, lifeguard and public restroom building, and PCH bridge would be designed in accordance with the recommendations of a site-specific geotechnical investigation as required by the CBC and local codes. This investigation would include a risk assessment that would recommend appropriate mitigation to avoid or reduce potential impacts associated with liquefaction and landslides. The recommendations would be implemented into the Project design before construction.

Construction of the Project would also be required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit. In accordance with the requirements of this permit, the Project would implement a storm water pollution prevention plan (SWPPP) that would specify BMPs and erosion control measures to be used during construction to manage runoff flows. Compliance with existing regulations would minimize risk to construction workers. Additionally, as detailed in Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*, implementation of the Project

would alter drainage patterns compared to existing conditions; however, runoff from the Project area would be controlled through proposed stormwater conveyance and harvesting systems, compliant with the County’s Municipal Separate Storm Sewer (MS4) NPDES permit.

Wastewater Management Alternatives

Improvements to any State Parks visitor services would require upgrading the wastewater management system to meet current standards. These facilities would be largely buried underground on State Parks property and/or Caltrans ROW. Therefore, given compliance with the applicable laws and regulations discussed above, construction and operational impacts related to exposure of people or structures to downslope or downstream flooding or landslides would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Programmatic Topanga State Park Visitor Services

Under all Build Alternatives, future visitor service facilities at Topanga State Park would be designed in accordance with the recommendations of a site-specific geotechnical investigation as required by the CBC and local codes, which would advise final design of facilities to avoid or reduce potential impacts associated with liquefaction and landslides. These recommendations would be implemented into the Project design before construction. If future visitor services facilities would disturb more than 1 acre of soil, the construction would fall under the NPDES General Construction Stormwater Permit, and these facilities would need to implement site-specific BMPs outlined in the Project’s SWPPP. BMPs and erosion control measures would manage runoff flows during construction. Compliance with existing regulations would minimize risk to construction workers. Although implementation of future visitor services facilities may alter drainage patterns compared to existing conditions, runoff from the Project area would be controlled through proposed stormwater conveyance and harvesting systems compliant with the County’s MS4 NPDES permit. Therefore, given compliance with the applicable laws and regulations discussed above, construction and operational impacts related to exposure of people or structures to downslope or downstream flooding or landslides would be less than significant.

Mitigation Measures

None Required

Significance Determination

Less than Significant

Cumulative Impacts

FIRE 3.18-5: The Project could result in cumulatively considerable impacts to wildfire. Impacts would be less than significant with mitigation incorporated.

This section presents an analysis of the cumulative effects of the Proposed Project in combination with other present and reasonably foreseeable future projects that could generate cumulatively considerable impacts related to wildfire.

The geographic area affected by the Proposed Project and its potential to contribute to cumulative impacts vary based on the environmental resource under consideration. The geographic scope of analysis for cumulative wildfire impacts encompasses and is limited to the future project sites and their immediately adjacent areas. This is the case because of the site-specific nature of projects and their impacts related to wildfire caused by fuels (vegetation), climate conditions, and fire history as discussed above in Section 3.18.2, *Affected Environment*.

Significant cumulative impacts related to wildfire could occur if the incremental impacts of the Proposed Project were to combine with the incremental impacts of one or more cumulative projects to substantially increase wildfire risk to people or the environment. Cumulative projects would be subject to the same regulatory requirements as discussed for the Proposed Project, including adherence to emergency planning. Cumulative projects involving activities that could exacerbate wildfire risk would also be required to adhere to established regulatory standards for fire protection. As described in Table 3-1, multiple projects are being constructed near the Project area.

Construction of the Proposed Project could result in traffic-related impacts on emergency response as discussed above. This could cumulatively contribute to impacts on the operation of emergency response or evacuation plans in conjunction with other potential cumulative projects in the Project area happening at the same time. With implementation of **Mitigation Measure TRA-1**, the Proposed Project would not create significant cumulative impacts related to implementation of an emergency response or evacuation plan in conjunction with potential cumulative projects.

Proposed Project operation and maintenance activities could expose Project workers and contractors to pollutant concentrations from a wildfire and/or exacerbate fire risks in the area. However, these operation and maintenance activities would largely resemble existing conditions and would not exacerbate wildfire risks significantly. The addition of a new beach heliport would assist in firefighting operations and emergency response. Removal of invasive and flammable *Arundo* would reduce fuel loading and fire risk in the Project area. Additionally, the Proposed Project would involve the increase in lagoon, wetland, and riparian bank habitats, which would allow the lagoon system to evolve to accommodate changing sea level and storm surge conditions. Ultimately, more access to water resources and more inundated areas in and around the Project area would reduce potential impacts of wildfire in the area. Furthermore, **Mitigation Measure FIRE-1** requires the preparation of a fuel modification plan, consistent with State Fire Marshal and LACFD standards, which would reduce potential operational impacts related to exposure of pollutant concentrations of smoke and exacerbating fire risk to less-than-significant levels.

For the reasons described above, the combined effects of the construction and operation of the Proposed Project in combination with cumulative projects would not make a cumulatively considerable contribution to a cumulative impact. Similarly, proponents of other potential cumulative projects would be required to provide appropriate traffic control, emergency access, and fire safety. Less-than-significant cumulative impacts related to wildfire would occur with mitigation.

Mitigation Measure

Implement **Mitigation Measure TRA-1** (refer to Section 3.16, *Transportation and Circulation*) and **Mitigation Measure FIRE-1**.

Significance Determination

Less than Significant with Mitigation Incorporated

3.18.4 Summary of Impacts

Table 3.18-1 presents a summary of potential impacts of the Proposed Project—both the Build Alternatives and programmatic Topanga State Park visitor services—related to wildfire. Where applicable, the table lists associated mitigation measures and significance levels after mitigation.

**TABLE 3.18-1
 SUMMARY OF PROPOSED PROJECT IMPACTS RELATED TO WILDFIRE**

Impact	Alternative	Mitigation Measure	Significance after Mitigation
FIRE 3.18-1: Emergency Response Plan	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure TRA-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure TRA-1.	LTSM
FIRE 3.18-2: Exposure to Pollutant Concentrations	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure FIRE-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure FIRE-1.	LTSM
FIRE 3.18-3: Infrastructure that Exacerbates Wildfire Risk	Alternatives 2, 3, and 4 (Build Alternatives)	Implement Mitigation Measure FIRE-1.	LTSM
	Programmatic Topanga State Park Visitor Services	Implement Mitigation Measure FIRE-1.	LTSM
FIRE 3.18-4: Post-Fire Slope or Drainage	Alternatives 2, 3, and 4 (Build Alternatives)	None Required	LTS
	Programmatic Topanga State Park Visitor Services	None Required	LTS
FIRE 3.18-5: Cumulative Impacts	Alternatives 2, 3, and 4 (Build Alternatives) and Programmatic Topanga State Park Visitor Services	Implement Mitigation Measures TRA-1 and FIRE-1.	LTSM

NOTES:

- NI = No Impact, no mitigation proposed
- LTS = Less than Significant, no mitigation proposed
- LTSM = Less-than-Significant Impact with Mitigation Incorporated
- SU = Significant and Unavoidable

3.18.5 References

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CHAPTER 4

Other CEQA Considerations

4.1 Introduction

This chapter presents an evaluation of other types of environmental impacts required by CEQA that are not covered in the other chapters of this Draft EIR. The other CEQA considerations include environmental effects that were found not to be significant, significant and unavoidable adverse impacts, and significant irreversible environmental changes that would be caused by the proposed project.

Additionally, this Draft EIR has been prepared in accordance with the CEQA-Plus requirements of the U.S. Environmental Protection Agency (USEPA) to fulfill the requirement of potential federal funding partners to comply with the National Environmental Policy Act (NEPA). The CEQA-Plus requirements have been established by USEPA and are intended to supplement the CEQA Guidelines with specific requirements for environmental documents acceptable when reviewing applications for federal funding. They are not intended to supersede or replace the CEQA Guidelines (see Sections 4.5 through 4.7 below).

4.2 Environmental Effects Found Not to Be Significant

Agriculture and Forestry Resources

There are no Department of Conservation (DOC) classified farmlands; lands under Williamson Act contracts; or lands with forestry resources within the Proposed Project area (DOC 2022).

Mineral Resources

The Proposed Project area is not included in Mineral Land Classification (MLC)/Surface Mining and Reclamation Act (SMARA) designated areas (DOC 2022a).

Population / Housing

The Proposed Project would not displace existing residences nor would it create a demand for construction of new housing.

4.3 Significant and Unavoidable Adverse Environmental Impacts

As required by Section 15126.2(b) of the CEQA Guidelines, an EIR must identify any significant environmental effects that cannot be avoided if the proposed project is implemented. After environmental analyses were conducted for each environmental issue identified in Appendix G of the CEQA Guidelines (refer to Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*), it was determined that the Proposed Project would result in two significant and unavoidable adverse environmental impacts on cultural and tribal cultural resources, under Alternatives 2 and 4, respectively.

4.4 Significant Irreversible Environmental Changes

Under CEQA, this EIR must analyze the extent to which the Proposed Project would directly or indirectly commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (CEQA Guidelines Sections 15126.2[c] and 15127). Specifically, CEQA Guidelines Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental effects if any of the following statements is applicable:

- The primary and secondary impacts would generally commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the plan.
- The proposed consumption of resources is not justified (e.g., the project would involve the wasteful use of energy).

Construction and operation of beach facilities under all Build Alternatives (Alternatives 2, 3, and 4), the temporary bypass bridge, the new Pacific Coast Highway (PCH) bridge and roadway, retaining walls, and wastewater system needed for future visitor services development under the Build Alternatives would require the use and consumption of nonrenewable resources, such as steel and other metals. Renewable resources, such as lumber and other wood byproducts, would also be used. Unlike renewable resources, nonrenewable resources cannot be regenerated over time. Construction of proposed visitor services under all Build Alternatives would require the

commitment of a relatively small amount of building materials. The small quantity of building materials used during implementation of the Proposed Project would not result in a significant impact because these types of resources are anticipated to be in adequate supply into the foreseeable future.

Energy would be consumed during both construction and operation of the Proposed Project. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of building materials, preparation of the site, and construction and site restoration activities. Construction and operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy, but it would result in the irretrievable and irreversible commitment of energy resources in the form of diesel fuel, gasoline, and electricity. However, these types of resources are anticipated to be in adequate supply into the foreseeable future. See Section 3.5, *Energy*, for additional information. Therefore, impacts related to these irretrievable and irreversible commitments of resources would be less than significant.

4.5 Federal Regulations

The Proposed Project must comply with the following applicable federal regulations:

- Archaeological and Historic Preservation Act
- Clean Air Act
- Clean Water Act
- Coastal Zone Management Act
- Emergency Planning and Community Right-to-Know Act
- Endangered Species Act
- Energy Independence and Security Act
- Energy Policy Act of 1992 and 2005
- Executive Order 11988 (Floodplain Management)
- Executive Order 11990 (Protection of Wetlands)
- Executive Order 12898 (Environmental Justice)
- Executive Orders 13112 and 13751 (Invasive Species)
- Executive Order 13432 (Greenhouse Gas Emissions)
- Fish and Wildlife Conservation Act
- Fish and Wildlife Coordination Act
- Hazardous Materials Transportation Act
- Magnuson-Stevens Fishery Conservation and Management Act
- Marine Mammal Protection Act
- Marine Protection, Research, and Sanctuaries Act

- Migratory Bird Treaty Act
- National Historic Preservation Act
- National Pollutant Discharge Elimination System, Construction General Permit
- Native American Graves Protection and Repatriation Act
- Noise Control Act of 1972
- Occupational Safety and Health Act of 1970
- Resource Conservation and Recovery Act
- Rivers and Harbors Act

Compliance requirements for these federal laws and relevant executive orders are described in the sections below. In summary, the Proposed Project would comply with those laws and executive orders, with further evidence provided in other sections of this Draft EIR as cross-referenced below.

4.5.1 Clean Air Act

The federal Clean Air Act (CAA) requires USEPA to identify national ambient air quality standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter 10 microns or less in diameter and 2.5 microns or less in diameter (PM₁₀ and PM_{2.5}), and lead. Pursuant to the 1990 CAA Amendments, USEPA classifies air basins (or portions thereof) as “attainment” or “non-attainment” for these criteria air pollutants, based on whether or not the NAAQS have been achieved. The CAA requires each state to prepare a *State Implementation Plan*, which is an air quality control plan that includes pollution control measures for states that violate the NAAQS. CAA compliance is described in Section 3.2, *Air Quality*. CEQA-Plus requirements include a CAA general conformity analysis for projects in a federal non-attainment area or an attainment area subject to a State Implementation Plan. Los Angeles County is designated non-attainment for the federal eight-hour ozone NAAQS, attainment for the federal carbon monoxide standard, non-attainment for federal PM₁₀ standards, and non-attainment for federal PM_{2.5} standards, as explained in Section 3.2, *Air Quality*. As a result, a CAA general conformity analysis has been included in Section 3.2. Additionally, more information on the CAA is included in Section 3.7, *Greenhouse Gas Emissions/Climate Change*.

4.5.2 Clean Water Act

The Clean Water Act (CWA) and subsequent amendments, under the enforcement authority of USEPA, was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The purpose of the CWA is to protect and maintain the quality and integrity of the nation’s waters by requiring states to develop and implement state water plans and policies. The CWA established several programs to regulate and reduce discharges of pollutants into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE)

and California State Water Resources Control Board administer the various applicable sections of the CWA with oversight by USEPA:

- *Section 303*, administered by the state, requires states to identify “impaired waters” and establish total maximum daily loads. A *total maximum daily load* establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality.
- *Section 401*, administered by the state, specifies that before a 404 permit can be issued for an activity, the state in which the activity will occur must certify that the activity will not violate state water quality standards.
- *Section 402*, administered by the state, established the National Pollutant Discharge Elimination System (NPDES) Program. This program requires a permit for sewer discharges and stormwater discharges from developments, construction sites, or other areas of soil disturbance (see Section 4.5.17 below for more information).
- *Section 404*, administered by USACE, established a permit program to regulate the discharge of dredged and fill material into waters of the United States.

The Proposed Project’s compliance with the above-mentioned sections of the CWA is detailed in Section 3.3, *Biological Resources*; Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*; and Section 3.17, *Utilities and Service Systems*.

4.5.3 Coastal Zone Management Act

Section 307 of the Coastal Zone Management Act (CZMA) requires that activities approved or funded by the federal government that would affect any land or water use or natural resource of a state’s coastal zone be consistent with the enforceable policies of the state’s federally approved coastal management program. California’s federally approved coastal management program consists of the California Coastal Act, the McAtteer-Petris Act, and the Suisun Marsh Protection Act. The California Coastal Commission implements the California Coastal Act and the federal consistency provisions of the CZMA for activities affecting coastal resources outside of San Francisco Bay. The Project area is located within a State Coastal Zone and the Proposed Project could result in direct impacts on coastal zone natural resources. Compliance with the CZMA is discussed in Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*. More specifically, compliance with the California Coastal Act is included in each resource section (Chapter 3) of this Draft EIR, if applicable.

4.5.4 Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (1986; United States Code Title 42, Section 9601 et seq. [42 USC 9601 et seq.]) was created to help communities plan for emergencies involving hazardous substances. This law requires that federal, state, and local governments, Native American tribes, and industry plan for hazardous chemical emergencies. It also requires industry to report on the storage, use, and releases of hazardous chemicals to federal, state, and local governments. More information about the Proposed Project’s compliance with the

Emergency Planning and Community Right-to-Know Act is provided in Section 3.8, *Hazards and Hazardous Materials*.

4.5.5 Endangered Species Act

The purpose of the federal Endangered Species Act (FESA) is to protect and recover imperiled wildlife and plant species and the habitats/ecosystems upon which they depend for survival. Section 7 of the FESA requires federal agencies to use their legal and discretionary authorities to conserve and assist in the recovery of threatened and endangered species. Federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS), or both, to ensure that actions they authorize, permit, fund, or implement are not likely to jeopardize the continued existence of the listed threatened or endangered species.

To comply with the FESA, a project applicant analyzes the project's effects on threatened and endangered species and any critical habitat designated for any of the species. The applicant uses biological assessments prepared for the project and any documents pertaining to the project's effects on listed species and designated critical habitat. In this case, if the Proposed Project may adversely affect a listed species, staff from USACE or the California Department of Transportation would confer with USFWS and/or NMFS to inform these agencies of Project impacts on any federally listed species or critical habitat. If USFWS and/or NMFS staff determine that the Proposed Project may adversely affect a federally listed species or designated critical habitat, formal consultation would be initiated, in which USEPA would assume the role as the lead agency. Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*, provide the documentation to disclose the Proposed Project's effects on special-status species and support consultation with USFWS and/or NMFS as required by FESA Section 7.

4.5.6 Energy Independence and Security Act

The Energy Independence and Security Act of 2007 facilitates the reduction of national greenhouse gas emissions by requiring increases in the supply of alternative fuels; prescribing or revising standards of regional efficiency of various consumer products; and establishing miles-per-gallon targets for cars and heavy-duty trucks. Additional provisions of this law address energy savings in government and public institutions and promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs. The Proposed Project's compliance with the Energy Independence and Security Act is described in Section 3.7, *Greenhouse Gas Emissions/Climate Change*.

4.5.7 Energy Policy Acts of 1992 and 2005

The Energy Policy Act of 1992 was enacted to reduce U.S. dependence on foreign petroleum and improve air quality. This law includes several provisions intended to build inventories of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The Energy Policy Act requires certain federal, state, and local governments and private fleets to purchase a

percentage of light-duty AFVs capable of running on alternative fuels each year. The law also includes financial incentives. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Energy Policy Act to consider a variety of incentive programs to help promote AFVs.

As enacted in 2005, the Energy Policy Act provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; offers bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy. The Proposed Project's compliance with the Energy Policy Acts of 1992 and 2005 is described in Section 3.5, *Energy*.

4.5.8 Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act declares that fish and wildlife are of ecological, educational, aesthetic, cultural, recreational, economic, and scientific value to the United States. The purposes of this law are to encourage all federal departments and agencies to utilize their statutory and administrative authority, to the maximum extent practicable and consistent with each agency's statutory responsibilities, and to conserve and to promote conservation of non-game fish and wildlife and their habitats. Another purpose is to provide financial and technical assistance to the states for the development, revision, and implementation of conservation plans and programs for non-game fish and wildlife. The Proposed Project's compliance with the Fish and Wildlife Conservation Act is described in Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*.

4.5.9 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) provides the basic authority for the USFWS involvement in evaluating impacts on fish and wildlife from proposed water resource development projects. This law requires that fish and wildlife resources receive equal consideration as other project features. It also requires federal agencies that construct, license or permit water resource development projects to first consult with the USFWS, National Oceanic and Atmospheric Administration (NOAA), and/or NMFS in some instances, and state fish and wildlife agencies regarding the impacts on fish and wildlife resources and measures to mitigate these impacts. The Proposed Project's compliance with the Fish and Wildlife Coordination Act is described in Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*.

4.5.10 Hazardous Materials Transportation Act

Enacted in 1975, the Hazardous Materials Transportation Act (49 USC 5101 et seq.) is the principal federal law regulating the transportation of hazardous materials. Its purpose is to "protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce" under the

authority of the U.S. Secretary of Transportation. More information about the Proposed Project's compliance with this Act is provided in Section 3.8, *Hazards and Hazardous Materials*.

4.5.11 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the principal law governing marine fisheries in the United States. First enacted in 1976, this law was adopted to create a U.S. fishery conservation zone out to 200 nautical miles off the U.S. coast, to phase out foreign fishing activities within this zone, to prevent overfishing, to allow overfished stocks to recover, and to conserve and manage fishery resources. The MSA requires federal agencies to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries when their actions or activities may adversely affect habitat identified by federal regional management councils as Essential Fish Habitat. The MSA defines *Essential Fish Habitat* as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (NOAA Fisheries 2022). The Proposed Project could affect the marine environment or Essential Fish Habitat in the Pacific Ocean. The Proposed Project's compliance with the MSA is described in Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*.

4.5.12 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972, as amended (16 USC 1361–1421H), establishes a federal responsibility for the protection and conservation of marine mammal species by prohibiting their take. The MMPA defines *take* as the act of hunting, killing, capture, harassment, or death of any marine mammal. The MMPA also imposes a moratorium on the import, export, or sale of any marine mammals, parts, or products within the United States. These prohibitions apply to any person in U.S. waters and to any U.S. citizen in international waters. All project-related construction activities are prohibited from disturbing marine mammals or disrupting their activities or behavior in known migration routes, feeding areas, or breeding areas. The primary authority for implementing the MMPA belongs to USFWS and NMFS. The Proposed Project's compliance with the MMPA is described in Section 3.11, *Marine Biological Resources*.

4.5.13 Marine Protection, Research, and Sanctuaries Act

Section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) (16 USC 1431 et seq. and 33 USC 1401 et seq.), also known as the Ocean Dumping Act, regulates the disposition of any material in the ocean, unless expressly excluded under the MPRSA. The MPRSA prohibits or restricts (primarily in terms of material type, amount and location) ocean dumping that would adversely affect human health, welfare, amenities, the marine environment, ecological systems, or economic potentialities.

Four federal agencies share responsibilities under the Ocean Dumping Act: USEPA, USACE, NOAA, and the U.S. Coast Guard. USEPA has primary authority to regulate ocean disposal of all

substances except dredged spoils, which are under the authority of USACE. NOAA is responsible for long-range research on the effects of human-induced changes to the marine environment, while USEPA is authorized to carry out research and demonstration activities related to phasing out sewage sludge and industrial waste dumping. The U.S. Coast Guard is charged with maintaining surveillance of ocean dumping. Permits for, and federal projects involving, ocean disposal of dredged material are subject to USEPA review and concurrence. Dumping that occurs in, or affects, ocean waters of a state also may be subject to review for consistency with the enforceable policies of a state's NOAA-approved coastal zone program under the Coastal Zone Management Act.

The Proposed Project's compliance with the MPRSA is described in Section 3.3, *Biological Resources*, and Section 3.11, *Marine Biological Resources*, of this EIR.

4.5.14 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms, or implements, a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States. The Proposed Project's compliance with the MBTA is described in Section 3.3, *Biological Resources*.

4.5.15 National Historic Preservation Act

CEQA-Plus requires compliance with Section 106 of the National Historic Preservation Act. Consultation with the State Historic Preservation Officer is required to demonstrate and confirm that Section 106 compliance has been achieved. This EIR and the administrative record include the following information and documentation that must be provided to the State Historic Preservation Officer to initiate the Section 106 consultation:

- (1) Identification of the Proposed Project's Area of Potential Effects (APE).
- (2) Cultural records searches for the APE at the appropriate Information Centers.
- (3) Documentation of Native American consultation.
- (4) Cultural resources field surveys of the APE.
- (5) Evaluations of elements of the built environment in and around the APE that are eligible for the National Register of Historic Places.
- (6) Determination of eligibility for any cultural resources that cannot be avoided during Project construction.

The Proposed Project's compliance with the National Historic Preservation Act is discussed in Section 3.4, *Cultural Resources*, and Section 3.15, *Tribal Cultural Resources*.

4.5.16 National Pollutant Discharge Elimination System, Construction General Permit

The Proposed Project would be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires the development and implementation of a storm water pollution prevention plan (SWPPP) that includes specific best management practices designed to prevent sediment and pollutants from contacting stormwater from moving off-site into receiving waters. Routine inspection of all best management practices is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

More information about the Proposed Project's compliance with the NPDES Construction General Permit is provided in Section 3.6, *Geology, Soils, Seismicity, Topography, and Paleontology*, and Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*.

4.5.17 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony (referred to collectively in the statute as *cultural items*) with which they can show a relationship of lineal descent or cultural affiliation.

NAGPRA requires federal agencies that receive federal funds to inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on federal or tribal lands.

The Proposed Project's compliance with NAGPRA is discussed in Section 3.4, *Cultural Resources*, and Section 3.15, *Tribal Cultural Resources*.

4.5.18 Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare. *Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety*, commonly referenced as the "Levels Document," identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations. Additional information on the Proposed Project's compliance with the Noise Control Act of 1972 is included in Section 3.12, *Noise and Vibration*.

4.5.19 Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act (Code of Federal Regulations Title 29, Parts 70–2400 [29 CFR 70–2400]) is implemented by the U.S. Occupational Safety and Health Administration (OSHA) and contains provisions with respect to hazardous materials handling. OSHA requirements set forth in 29 CFR 1910 et seq. are designed to promote worker safety, worker training, and a worker's right to know (OSHA 2022). In California, OSHA has delegated the authority to administer OSHA regulations to the State of California. More information about the Project's compliance with the Occupational Safety and Health Act is provided in Section 3.8, *Hazards and Hazardous Materials*.

4.5.20 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (42 USC Part 2) was the first major federal law regulating the potential health and environmental problems associated with hazardous and nonhazardous solid waste. This law and implementing regulations promulgated by USEPA provide the general framework for the national systems of hazardous and nonhazardous waste management. This framework includes the determination of whether hazardous wastes are being generated, techniques for tracking wastes to their eventual disposal, and the design and permitting of hazardous waste management facilities (USEPA 2022). More information about the Proposed Project's compliance with the Resource Conservation and Recovery Act is provided in Section 3.8, *Hazards and Hazardous Materials*.

4.5.21 Rivers and Harbors Act

Section 9 of the Rivers and Harbors Appropriation Act of 1899 (33 USC 403; Chapter 425, March 3, 1899; 30 Stat. 1151), commonly known as the Rivers and Harbors Act of 1899, prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the United States without congressional approval. Under Section 10 of the Rivers and Harbors Act, the building of any wharfs, piers, jetties, and other structures is prohibited without congressional approval, and excavation or fill within navigable waters requires the approval of the Chief of Engineers.

The Proposed Project includes the construction of a new PCH bridge over Topanga Lagoon, a federally designated navigable water. Therefore, the Proposed Project's compliance with the Rivers and Harbors Act is described in Section 3.3, *Biological Resources*; Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*; and Section 3.11, *Marine Biological Resources*.

4.6 Executive Orders

4.6.1 Executive Order 11988—Floodplain Management

Executive Order 11988, "Floodplain Management," requires that federal agencies avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains and avoid direct and indirect support of floodplain development wherever there is a practicable alternative (FEMA 2021). If a project would have a potential impact on or within a floodplain, agencies can carry out the following eight-step process during their decision-making process on the project (FEMA 2021):

- (1) Determine whether a proposed action is in the base floodplain or area that has a 1 percent or greater chance of flooding in any given year.
- (2) Conduct early public review.
- (3) Identify and evaluate practicable alternatives to locating in the base floodplain.
- (4) Identify impacts of the proposed action.
- (5) Develop measures to minimize the impacts and restore and preserve the floodplain if impacts cannot be avoided.
- (6) Reevaluate the alternatives.
- (7) Present the findings and a public explanation.
- (8) Implement the action.

As discussed in Section 3.9, *Hydrology/Floodplain and Water Quality/Stormwater Runoff*, the Proposed Project is located within a 100-year flood zone as designated by the Federal Emergency Management Agency and includes the construction or renovation of habitable or occupied structures. See Section 3.9 for further discussion of the Proposed Project components in the floodplain and potential impacts and mitigation measures.

4.6.2 Executive Order 11990, as Amended by Executive Order 12608—Protection of Wetlands

Under Executive Order 11990, each federal agency is to act to minimize the destruction, degradation, or modification of wetlands and enhance the natural and beneficial values of wetlands. The executive order also directs the avoidance of direct or indirect support of new construction in wetlands and public involvement throughout the wetlands protection decision-making process (HUD 2022). Impacts on wetlands in the Project area are described in Section 3.3, *Biological Resources*.

4.6.3 Executive Order 12898—Environmental Justice

Under Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” federal agencies are directed to make achieving environmental justice a part of their mission by identifying and addressing, as appropriate, disproportionately high adverse human health or environmental effects of their activities on minority and low-income populations (FEMA 2022).

In accordance with Executive Order 12898, each federal agency must make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health, environmental, economic and social effects of its programs, policies, and activities on minority and low-income populations, particularly when such analysis is required by NEPA. The executive order emphasizes the importance of NEPA's public participation process, directing that each federal agency provide opportunities for community input in the NEPA process. Agencies are further directed to identify potential effects and mitigation measures in consultation with affected communities. An environmental justice analysis for the Proposed Project is presented below in Section 4.7, in accordance with the guidelines set above to comply with federal regulations required to receive federal funding.

4.6.4 Executive Orders 13112 and 13751—Invasive Species

Executive Order 13112, “Invasive Species,” issued February 3, 1999, called upon executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. Executive Order 13112 also created a coordinating body—the Invasive Species Council, also referred to as the National Invasive Species Council—to oversee implementation of the order, encourage proactive planning and action, develop recommendations for international cooperation, and take other steps to improve the federal response to invasive species. Past efforts at preventing, eradicating, and controlling invasive species demonstrated that collaboration across federal, state, local, tribal, and territorial governments, stakeholders, and the private sector is critical to minimizing the spread of invasive species and that coordinated action is necessary to protect the assets and security of the United States.

Executive Order 13751, “Safeguarding the Nation From the Impacts of Invasive Species,” issued December 5, 2016, amended Executive Order 13112 and directs actions to continue coordinated federal prevention and control efforts related to invasive species. This order maintains the National Invasive Species Council (and the Invasive Species Advisory Committee); expands the membership of the council; clarifies the operations of the council; incorporates considerations of human and environmental health, climate change, technological innovation, and other emerging priorities into federal efforts to address invasive species; and strengthens coordinated, cost-efficient federal action. The Proposed Project’s compliance with these executive orders is described in Section 3.3, *Biological Resources*.

4.6.5 Executive Order 13432—Greenhouse Gas Emissions

On May 14, 2007, in response to the Supreme Court’s ruling in *Massachusetts v. Environmental Protection Agency*, President George W. Bush signed Executive Order 13432, “Cooperation Among Agencies in Protecting the Environment with Respect to Greenhouse Gas Emissions from Motor Vehicles, Nonroad Vehicles, and Nonroad Engines.” This executive order directed USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court’s decision. Executive Order 13432 was codified by the 2009 Omnibus Appropriations Law, signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. The Proposed Project’s compliance with Executive Order 13432 is described further in Section 3.7, *Greenhouse Gas Emissions/Climate Change*.

4.7 Environmental Justice Analysis

This section discusses the environmental justice issues pertaining to the Proposed Project and evaluates the potential for the Proposed Project to disproportionately affect minority and low-income populations. Data presented in this section were obtained from the 2020 U.S. Census by the U.S. Census Bureau.

4.7.1 Environmental Setting

Potentially Affected Populations

The study area for environmental justice effects includes areas that may experience adverse human health or environmental effects resulting from construction and operation of the Proposed Project. The Project area is located primarily within the Topanga census-designated place (CDP), which consists of the unincorporated Pacific Ocean coastline of Los Angeles County. However, the study area for this analysis also includes the City of Malibu and City of Los Angeles, given their proximity to the Project area and physical relationship to potential Project impacts, such as air quality or traffic. **Table 4-1** lists demographic information for the CDPs and cities that could be affected by the Proposed Project. **Table 4-2** lists economic data for populations in the Topanga CDP, City of Malibu, and City of Los Angeles.

**TABLE 4-1
DEMOGRAPHIC INFORMATION FOR CENSUS-DESIGNATED PLACES AND CITIES WITHIN THE STUDY AREA (2021)**

City or CDP	Black or African American Alone, Not Hispanic or Latino	Asian Alone, Not Hispanic or Latino	Hispanic or Latino (of Any Race)	Total Minority ^{a,b}
Topanga CDP	1.7%	10.4%	12.6%	28.3%
City of Malibu	0.5%	2.6%	12.0%	22.9%
City of Los Angeles	8.8%	11.8%	48.1%	71.5%*

NOTES:

CDP = Census-Designated Place

^a Percentage of total population that did not report their race as White alone.^b Numbers with asterisk (*) represent areas where the minority population is meaningfully greater than the overall minority population of the affected area.

SOURCE: U.S. Census Bureau 2022a.

**TABLE 4-2
INCOME AND POVERTY FOR CENSUS-DESIGNATED PLACES AND CITIES IN THE STUDY AREA (2021)**

Geography	Mean Household Income	Percentage of Individuals with Family Income below Poverty Threshold ^a
Topanga CDP	\$121,010	5.8%
City of Malibu	\$162,716	11.0%
City of Los Angeles	\$65,290	16.9%

NOTES:

CDP = Census-Designated Place

SOURCE: U.S. Census Bureau 2022a.

Minority Populations

According to the federal Council on Environmental Quality (CEQ) guidelines for environmental justice analyses (CEQ 1997), 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. CEQ guidance does not define the term “meaningfully greater”; however, the Federal Interagency Working Group on Environmental Justice NEPA Committee’s *Promising Practices for EJ Methodologies* (FIWGEJ 2016) suggests that the 50 percent approach and the “meaningfully greater” approach should be used together, and that “[t]he Meaningfully Greater analysis requires use of a reasonable, subjective threshold (e.g., ten or twenty percent greater than the reference community).” This analysis embraces the NEPA Committee’s advice on this approach.

Information regarding racial and ethnic diversity in the study area was derived from the 2020 census by the U.S. Census Bureau. Table 4-1 summarizes selected racial and ethnic characteristics of populations within the study area that could be affected by the Proposed Project.

The final column in Table 4-1 presents the “total minority” population percentage. Overall, the Topanga CDP, City of Malibu, and City of Los Angeles include a total minority population of approximately 40 percent, which is less than 50 percent and thus, as a reference population, does not represent a minority population (U.S. Census Bureau 2022a). Furthermore, the Project area is located entirely within the Topanga CDP. When considered individually, this area includes a much lower percentage minority population than 50 percent (28.3 percent), which does not represent a minority population.

Because the study area has a minority population of less than 50 percent, the “meaningfully greater” approach is used here to identify minority populations that exceed the percentage of the Project area. As explained above, no official threshold defines this term, and a lead agency must select a threshold that provides a reasonable and meaningful basis of comparison. Given the range of minority population concentrations in the Project vicinity, an inclusive threshold is used to acknowledge areas of particularly high minority populations: CDPs and incorporated cities within the potential area of environmental impact that have concentrated minority populations greater than the overall study area’s approximate 40 percent considered to be “meaningfully” greater. Only the City of Los Angeles meets the criteria. However, consideration of all areas within the City of Los Angeles would not be appropriate, as most impacts of the Proposed Project would be highly localized. The Pacific Palisades residential neighborhoods of the city of Los Angeles, located approximately 1.5 miles east of the Project area, is the most likely area to be affected by the Proposed Project (e.g., traffic impacts on PCH). A review of the census tracts within Pacific Palisades indicated no greater than 21 percent minority populations in these areas, which does not exceed 40 percent, and thus would not be “meaningfully greater” than the majority population percentage in the general population (U.S. Census Bureau 2022b).

Low-Income Populations

The CEQ environmental justice guidance 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” (CEQ 1997, page 25). Guidance from USEPA (2016) recommends the use of census data on poverty income as one indicator, as well as other available data. Unlike the CEQ guidance on minority populations, none of the environmental justice guidance documents contains a quantitative definition of the proportion of low-income individuals that defines a low-income population. The annual statistical poverty thresholds are based on family income. A threshold of 50 percent of individuals in families with incomes below the poverty threshold (similar to the 50 percent threshold used to identify a minority population) would be an overly restrictive threshold for identifying a low-income population due to the nature of the poverty thresholds, which are not adjusted for regional costs of living, and are below levels commonly considered low-income in many areas of California.

For the purposes of this environmental justice analysis, the method of identifying low-income populations within the study area must account for regional costs of living. Therefore, this analysis uses a comparative approach and identifies a low-income population if the proportion of

people with family incomes below the poverty threshold is greater than that within the general population; in other words, if the percentage of such people in any of the communities considered is greater than 16.9 percent, which is the poverty rate in the greater City of Los Angeles area (U.S. Census Bureau 2022a). As shown in Table 4-2, the Project area does not include CDPs or cities that have mean incomes below this figure, and therefore no nearby populations meet the threshold for low-income populations, as shown in Table 4-2.

4.7.2 Significance Thresholds and Criteria

For the purposes of this EIR and consistency with NEPA and CEQA-Plus Guidelines, applicable local plans, and agency and professional standards, the Proposed Project would be considered to have a significant effect on environmental justice if it would:

- Affect the health or environment of minority or low-income populations disproportionately.

4.7.3 Impacts and Mitigation Measures

As discussed above, the study area analyzed for environmental justice impacts does not contain a relative low-income population based on the criteria set forth above in Section 4.7.1. As such, the Proposed Project does not have the potential to affect the health or environment of low-income populations disproportionately. No impact would occur.

The Topanga CDP includes all areas where the Proposed Project would occur and does not contain a meaningfully greater minority population (greater than 40 percent). Furthermore, the environmental impacts of construction, operation, and maintenance activities on the environment or public health would not be significant. Based on the analyses of impacts provided in Chapter 3 of this EIR, the Proposed Project would not have significant effects related to air quality, noise, traffic, water quality, water supply, or hazards and hazardous materials. Therefore, no impact would occur.

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CHAPTER 5

Growth Inducement

5.1 Overview

The CEQA Guidelines (Section 15126.2[e]) require that an EIR discuss the potential growth-inducing impacts of a proposed project. The CEQA Guidelines provide the following guidance for such discussion:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project would involve construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. As such, based on this CEQA definition, the Proposed Project would not result in a direct impact because no housing would be provided; thus, the Proposed Project would not have direct growth potential.

Therefore, assessing the growth-inducement potential of the Proposed Project involves answering the question: “Would implementation of the Proposed Project indirectly support economic or population growth, or the construction of additional housing?”

Implementation of the Proposed Project would not result in substantial permanent employment that could indirectly induce population growth. Construction activities would create some short-

term construction employment opportunities over the approximately 60-month duration of construction; however, given the number of opportunities created, persons from outside of the Los Angeles County workforce would not be required.

Minimal numbers of new permanent employees would likely be required for operation of the Proposed Project, including any future Topanga State Park visitor services. As described in Chapter 2, *Project Description*, proposed visitor services include one new and/or existing concession; Topanga Ranch Motel structures that would be restored and used for a mix of visitor services, which could include overnight accommodations (Project Alternatives 3 and 4 only); and beach facilities. In addition, the Proposed Project could include a new trail loop and improved parking through the Project area. Although the Proposed Project could establish new visitor services in the Project area, new trail alignments, and expansion of the existing Topanga Beach area, it is not expected to draw significant amounts of new visitors to Los Angeles County. Instead, the Project area would largely be used by visitors who already come to the area for other recreational opportunities.

The number of visitors to the area could increase slightly with implementation of the Proposed Project. The addition of visitor services and recreational resources in the area could foster longer stays by visitors, which would increase economic activity in the Project area. However, this increased economic activity would not likely be great enough to cause new residents to move to the region, leading to population growth. Furthermore, the Proposed Project is designed to meet the objectives established in the Topanga State Park General Plan, the guiding policy document for subsequent operation and land-use management of the park. These objectives are focused on maintaining and restoring natural processes and wildlife corridors, improving water quality, and enhancing visitor services. Because the Proposed Project would not foster growth beyond what the Topanga State Park General Plan projects for the area, it would not eliminate any obstacles to growth in the Project area.

Alternatives 3 and 4 both include the potential for overnight accommodations and a visitor-serving concession, which would exceed the wastewater treatment capacity of existing closed septic systems. An opportunity to connect Project facilities with the Los Angeles County Sanitation Districts (LACSD) public sewer system is currently being investigated as one of several wastewater options. Preliminary conversations with the County indicate that this potential connection could accommodate the amount of wastewater potentially generated by visitor services/concessions under any of the proposed Build Alternatives (Alternatives 2, 3, and 4). Inclusion of the DBH lifeguard and public restroom building is also likely possible.

In the event the sewer wastewater option is pursued, several facilities along the 1-mile-long sewer extension between the Project site and the LACSD facilities near the intersection of PCH and Coastline Drive would likely be interested in connecting to the LACSD sewer. These include the gas station on the northeast corner of Topanga Canyon Boulevard (TCB) and PCH and the restaurant on Mastro's Point. However, these and any other connections to the LACSD sewer from non-Project facilities are unlikely to be feasible without significant improvements to the

existing LACSD and City of Los Angeles sewer facilities beneath PCH. Such improvements are out of the scope of the Proposed Project.

At present, the Project area is outside the County's service sphere and thus a process for annexation would be required. Connecting to the County sewer system is not expected to significantly increase County treatment or delivery demands and would not accommodate any wastewater treatment needs associated with population growth in the Project area. Therefore, implementing wastewater Option 3, sewer, would not be growth accommodating.

Under all Build Alternatives, the length of the existing 79-foot PCH bridge would be expanded to accommodate a widened lagoon riparian area. However, the existing roadway capacity of PCH would not be expanded, and thus there would be no indirect effects related to population growth or the construction of additional housing. Construction and operation of the Proposed Project would not involve installing new infrastructure that would indirectly support population growth, but rather would provide accessory facilities to support access to and use of the Project area. Overall, although implementation of the Proposed Project could increase economic activity in Los Angeles County by creating another recreational resource for visitors and residents, the Project would not indirectly result in short- or long-term population growth. As such, impacts related to growth inducement would be less than significant.

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CHAPTER 6

Alternatives Analysis

6.1 Overview of Alternatives Analysis

According to CEQA, an EIR must describe a reasonable range of alternatives to a proposed project that would feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the proposed project’s significant environmental effects. Section 15126.6(f) of the CEQA Guidelines provides direction on the required alternatives analysis:

The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

The alternatives considered may include a different type of project, modification of the project, or suitable alternative project sites. An EIR need not consider every conceivable alternative to a project. Rather, the alternatives must be limited to ones that meet the project objectives, are feasible, and would avoid or substantially lessen at least one of the significant environmental effects of the project. “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA California Public Resources Code Section 21061.1). Section 15126.6(b) of the CEQA Guidelines states an EIR:

...must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

Section 15126.6(d) of the CEQA Guidelines provides further guidance on the extent of the alternatives analysis required:

The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative

would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

The EIR must briefly describe the rationale for selection and rejection of alternatives and the information the lead agency relied on when making the selection. It also should identify any alternatives considered but rejected as infeasible by the lead agency during the scoping process and briefly explain the reasons for the exclusion. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects.

Section 15126.6(e) (1) of the CEQA Guidelines also requires that the No Project Alternative must be addressed in this analysis. The purpose of evaluating the No Project Alternative is to allow decision-makers to compare the potential consequences of the proposed project with the consequences that would occur without implementation of the proposed project.

Finally, an EIR must identify the environmentally superior alternative. The No Project Alternative may be the environmentally superior alternative to the proposed project based on the minimization or avoidance of physical environmental impacts. CEQA Guidelines (Section 15126.6(e)(2)) requires that, if the environmentally superior alternative is the No Project Alternative, the EIR shall identify an environmentally superior alternative among the other alternatives.

6.1.1 Project Objectives

The objectives of the Proposed Project are as follows:

- Expand the lagoon ecosystem to improve estuarine hydrologic functions and to protect endangered species.
- Enhance coastal resilience for essential facilities in the Project area.
- Optimize beneficial reuse of excavated sediment by increasing sediment replenishment via nearshore placement and long-term conveyance increased by a wider bridge to the littoral cell¹ while maintaining the integrity of the surf break.
- Protect the surf break and beach recreation.
- Improve water quality and restore coastal wetland habitat and species diversity within the Topanga Creek watershed.
- Increase safety and coastal access for pedestrians and cyclists, including for visitors with disabilities.
- Improve evacuation and emergency service routes through the Project area.
- Improve and enhance coastal access and recreational facilities.

¹ *Sediment cells*, also known as *littoral cells*, are reaches of shoreline that encompass the intertidal and nearshore movement of sediment. A sediment cell basically consists of zones of erosion, transport, and deposition.

- Manage and maintain the lagoon ecosystem consistent with the guidelines in the Topanga State Park General Plan.
- Replace the narrow 1933 PCH bridge to accommodate lagoon restoration and recovery of anadromous steelhead trout.
- Establish a visitor-serving “Gateway Corner” at the northwest corner of the intersection of PCH and TCB, consistent with the Topanga State Park General Plan goal of providing a coastal gateway to the park.
- Manage historic and archaeological resources in the Project area consistent with the guidelines in the Topanga State Park General Plan

6.1.2 Potentially Significant Impacts of the Proposed Project

Chapter 3 of this Draft EIR identifies potential impacts associated with all Proposed Project Alternatives for each environmental issue area in Appendix G of the *CEQA Guidelines*, including cumulative impacts. Mitigation measures have been identified to reduce potentially significant impacts to a less than significant level where feasible. The analysis concludes that direct and cumulative impacts to Historical Resources would be significant and unavoidable under Alternative 2. In addition, the analysis concludes that direct and cumulative impacts to Tribal Cultural Resources would be significant and unavoidable under Alternative 4. No other significant and unavoidable impacts were identified for any of the build alternatives. Specific impacts and all mitigation measures are provided in Table ES-1 in the Executive Summary of this Draft EIR.

6.2 Alternatives Rejected from Further Consideration

Section 15126.6(c) of the State CEQA Guidelines requires that an EIR “identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process,” as well as explain the reasons for the Lead Agency’s determination. An alternative may be eliminated from consideration if it (1) fails to meet most of the project’s basic objectives, (2) is infeasible, or (3) is unable to avoid significant environmental impacts.

The following alternative was considered and eliminated from further evaluation: Southern Alignment of PCH was proposed in the 2004 Project Study Report/Project Development Support document but due to increasing pressure from SLR, this alternative is no longer under consideration.

6.3 Alternatives to the Proposed Project

As shown in Chapter 3, *Environmental Analysis*, of this Draft EIR, the Proposed Project would result in potential significant and unavoidable impacts to historical resources and tribal cultural resources. The Proposed Project would also result in several potential project impacts that were reduced to less than significant with the incorporation of mitigation measures as stated above in Section 6.1.2, *Potentially Significant Impacts of the Proposed Project*. The following alternatives to the Project were selected to inform evaluation of the Project in light of the significant and

unavoidable environmental impact of the Project , the objectives established for the Project (listed above), the feasibility of the alternatives considered, and public input received during the scoping period:

- Alternative 1 – No Project/No Build – Managed Decline
- Alternative 2 – Maximum Lagoon Habitat
- Alternative 3 – Limited Lagoon Habitat Expansion
- Alternative 4 – Maximum Managed Retreat

Alternative 1 is the No Project/No Build –Managed Decline pursuant to *CEQA Guidelines* Section 15126.6(e). According to the *CEQA Guidelines*, discussion of the No Project Alternative must include a description of existing conditions and reasonably-foreseeable future conditions that would exist if the project were not approved. Alternatives 2, 3, and 4 were developed pursuant to CEQA Guidelines Section 15126.6(a). The components and activities that are proposed under each of the four Project Alternatives are summarized in **Table 6-1**.

**TABLE 6-1
PROJECT ALTERNATIVE COMPONENTS COMPARISON**

Proposed Project		Project Alternatives			
Project Site	Proposed Project's Restoration, Use, or Activity	Alt 1	Alt 2	Alt 3	Alt 4
Restoration /Enhancement within Project Boundary	Total acreage of restored/enhanced open space (acreage)	None	39.24	38.54	38.71
Topanga Lagoon	Expanded lagoon and wetlands (acreage)	No expansion Currently 3.6	9.5	7.7	7.6
	Expanded riparian bank habitat areas (acreage)	No expansion Currently 21.4	23.0	23.7	23.7
	Grading (acreage)	None	Grade 13.6 acres on outer edge of lagoon	Grade 12.8 acres on outer edge of lagoon	Grade 14.4 acres on outer edge of lagoon
	Soil removed (CY)	None	Remove 256,000 CY lagoon 56,000CY roadway 23,000 CY ADL contaminated soil 335,000 CY TOTAL Two Options for soil fate have been identified: 1) Use for nearshore nourishment for clean subset (preferred), 2) haul off for disposal	Remove 166,000 CY lagoon 56,000CY roadway 23,000 CY ADL contaminated soil 245,000 CY TOTAL Two Options for soil fate have been identified: 1) Use for nearshore nourishment for clean subset (preferred), 2) haul off for disposal	Remove 210,000 CYlagoon 58,000CY roadway 26,000 CY ADL contaminated soil 294,000 CY TOTAL Two Options for soil fate have been identified: 1) Use for nearshore nourishment for clean subset (preferred), 2) haul off for disposal

Proposed Project		Project Alternatives			
Project Site	Proposed Project's Restoration, Use, or Activity	Alt 1	Alt 2	Alt 3	Alt 4
Pacific Coast Highway	Expand existing 79 ft bridge	No expansion of bridge Currently 79 ft	Lengthen bridge to 460 feet; no change to the alignment	Lengthen bridge to 460 feet; no change to the alignment	Lengthen bridge to 460 feet; alignment would be relocated slightly north
	Bus stop improvements	No new bus stop improvements	New bus stop with bench/shade on both North and South sides of PCH.	New bus stop with bench/shade on both North and South sides of PCH.	New bus stop with bench/shade on both North and South sides of PCH.
	Pedestrian crossing under PCH bridge	No changes Currently 1 path under PCH on east side of lagoon	New undercrossing and trails on both east and west sides of lagoon	New undercrossing and trails on both east and west sides of lagoon	New undercrossing and trails on both east and west sides of lagoon
Topanga Beach	Beach expansion	No expansion Beach reduced due to continued coastal erosion	Expand beach to 4.39 acres with an additional ~1 acre outside the immediate lagoon restoration area.	Expand beach to 4.42 acres with an additional ~1.1 acre outside the immediate lagoon restoration area.	Expand beach to 4.56 acres with an additional ~ 1.1 acre outside the immediate lagoon restoration area.
	DBH facilities: lifeguard building, and public restroom, and helipad	No modification to existing facilities would be implemented. Lifeguard and public building would continue to be undermined by coastal erosion.	Lifeguard and public restroom building and restroom relocated upslope of their current location. The helipad and new two car parking garage would be relocated upslope. Bioswales and rain gardens installed to improve water quality runoff to the beach and lagoon.	Lifeguard and public restroom building a relocated upslope and to the east of their current location. The helipad would be relocated to the western edge of the existing parking lot and the new two car parking garage would be located under the helipad at the beach access road level. Bioswales and rain gardens installed to improve water quality runoff to the beach and lagoon.	Lifeguard and public restroom building relocated upslope and to the north east, with the new two car parking garage and helipad on the beach level. Bioswales and rain gardens installed to improve water quality runoff to the beach and lagoon.
Coastal Access Parking	CDPR Fee spaces (NE side of lagoon includes concession, public, and Topanga Ranch Motel)	70	41	67	49
	CDPR Fee/Free concession spaces (NW side of lagoon)	81	0	0	0
	TCB Gateway Corner Coastal Access Parking Spaces Added (Fee)	23	93	93	93
	PCH shoulder Non Conforming spaces (Free)	79	53	53	51
	TCB shoulder Non Conforming spaces (Free)	40	40	40	40

Proposed Project		Project Alternatives			
Project Site	Proposed Project's Restoration, Use, or Activity	Alt 1	Alt 2	Alt 3	Alt 4
	DBH spaces FEE (South east side of lagoon)	97	61	53	84
	DBH spaces FEE (South west side of lagoon)	0	26	26	26
	Total Public Parking Spaces	390	314	332	343
Topanga State Park Visitor Services (Programmatic)	Topanga State Park and Concession and Topanga Ranch Motel parking lot	No improvements	Concession parking would be reconfigured and restricted to 20 spaces on the east side of the lagoon.	Concession parking would be reconfigured and restricted to 20 spaces plus 20 motel spaces on the east side of the lagoon.	Concession parking would be reconfigured and restricted to 20 spaces plus 15 motel spaces on the east side of the lagoon.
	CDPR development at the Gateway Corner	No improvements none of the features would be implemented	~ 5,500 sf of one-story structures Similar under all Build Alternatives plus 93 parking spaces with trail leading to the intersection with PCH.	~ 5,500 sf of one-story structures Similar under all Build Alternatives plus 93 parking spaces with trail leading to the intersection with PCH.	~ 5,500 sf of one-story structures Similar under all Build Alternatives plus 93 parking spaces with trail leading to the intersection with PCH.
	Topanga Ranch Motel	No modification to existing facilities would be implemented and deterioration of buildings would continue	Removal of all 25 structures	Retain 20 structures for restoration	Retain 15 structures for restoration
	Onsite Visitor Services Business Leases	No modifications would occur, structures would continue to deteriorate	Remove 4 of 5 leasee buildings and remodel retained ~2,400 sq ft building	Remove 4 of 5 leasee buildings and remodel retained ~2,400 sq ft building	Remove 4 of 5 leasee buildings and relocate and remodel the retained ~2,400 sq ft building
	Wastewater Treatment Upgrades	No new or updated on-site wastewater treatment facilities	New CDPR onsite wastewater management system with ~8,000 gpd capacity. Three options available: Option 1: onsite Subsurface Drip Irrigation; Option 2: onsite Seepage Pits; and Option 3: Sewer. DBH may connect to sewer if selected.	New CDPR onsite wastewater management system with ~12,500, gpd capacity. Two options available: Option 2: onsite Seepage Pits; Option 3: Sewer. DBH may connect to sewer if selected.	New CDPR onsite wastewater management system with ~11,500, gpd capacity. Two options available: Option 2: onsite Seepage Pits; Option 3: Sewer. DBH may connect to sewer if selected.
Nearshore Nourishment	If the preferred Nearshore Nourishment Option is approved by regulatory agencies	No nearshore nourishment to occur.	~ 256,000 CY of material to nourish nearshore	~ 166,000 CY of material to nourish nearshore	~ 210,000 CY of material to nourish nearshore

6.4 Comparison of Project Alternatives

As stated previously, an EIR must describe a reasonable range of alternatives to a proposed project that would feasibly attain most of the basic project objectives and would avoid or substantially lessen the majority of the proposed project’s significant environmental effects. As concluded in Chapter 3 of this Draft EIR, removal of the Topanga Resort Hotel would result in direct and cumulative Significant and Unavoidable impacts to Historical Resources under Alternative 2. In addition, shifting PCH northward would result in direct and cumulative Significant and Unavoidable Impacts to Tribal Resources under Alternative 4. This alternatives analysis has been prepared to evaluate how the alternatives for this project compare regarding environmental impacts, environmental benefits, and meeting the Project objectives. It should be noted that each Alternative summarized above in Table 6-1 is discussed fully in Chapter 2, *Project Description*, and analyzed thoroughly in Chapter 3, and thus, alternatives descriptions and impact analyses are not described in detail in this chapter.

CEQA Guidelines Section 15125(a)(1) defines the baseline condition generally as the condition at the time of the publication of the NOP, with an exception as follows: “*Where existing conditions change or fluctuate over time...a lead agency may define existing conditions by referencing historic conditions or conditions expected when the project becomes operational... supported with substantial evidence.*” A summary of the significance of the impacts for each environmental resource under all Alternatives is provided below.

6.4.1 Summary of Environmental Impacts

Table 6-2 summarizes the conclusions of the environmental impact analysis fully described in Chapter 3, including the need for mitigation measures to achieve less than significant impacts. All Build Alternatives (Alternatives 2, 3, and 4) would have impacts associated with constructing and operating the proposed project features. Impacts associated with the No Project Alternative 1 assume that future conditions will result in degraded conditions at the site. However, since these conditions are not project impacts, no level of significance has been assigned to these effects and no mitigation measures would be applicable. Rather, Table 6-2 briefly describes the areas where future degradation is assumed for Alternative 1.

**TABLE 6-2
SUMMARY OF IMPACT ANALYSIS BY ALTERNATIVE**

Environmental Resource	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
Aesthetics	Continued deterioration	LTSM	LTSM	LTSM
Air Quality	No Impact	LTS	LTS	LTS
Biological Resources	Continued deterioration of biological resources	LTSM	LTSM	LTSM
Cultural Resources	Continued deterioration of historic resources	SU	LTSM	LTSM
Energy	No Impact	LTS	LTS	LTS

Environmental Resource	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
Geology, Soils, Seismicity, Topography, and Paleontology	Unabated coastal erosion impacts and slope failures	LTSM	LTSM	LTSM
Greenhouse Gas Emissions/Climate Change	No Impact	LTS	LTS	LTS
Hazards and Hazardous Materials	Increased risks from SLR	LTSM	LTSM	LTSM
Hydrology/Floodplain and Water Quality/Stormwater Runoff	Continued deterioration of water quality and flood impacts	LTSM	LTSM	LTSM
Land Use and Land Use Planning	Non-conforming land uses	LTSM	LTSM	LTSM
Noise and Vibration	No Impact	LTSM	LTSM	LTSM
Public Services	Continued deterioration of septic system	LTSM	LTSM	LTSM
Parks and Recreation	Coastal erosion impacts, no trails	LTSM	LTSM	LTSM
Transportation and Circulation	Continued deterioration of bridge	LTSM	LTSM	LTSM
Tribal Cultural Resources	No Impact	LTSM	LTSM	SU
Utilities and Service Systems	Continued deterioration and non-conforming uses	LTSM	LTSM	LTSM
Wildfire	Increased risk	LTSM	LTSM	LTSM

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant Impact with Mitigation Incorporated

SU = Significant and Unavoidable

6.4.2 Summary of Beneficial Effects

Table 6-3 provides a summary comparison of the anticipated benefits of each alternative. The comparison includes benefits to the natural environment as well as to the built environment.

**TABLE 6-3
COMPARISON OF PROJECT BENEFITS IN THE NATURAL AND BUILT ENVIRONMENTS**

		Project Alternatives			
Environment	Project Improvement	Alt 1	Alt 2	Alt 3	Alt 4
Natural Environment	Fish passage and refugia habitat for endangered fishes	Fish passage remains limited and no refugia habitat for juvenile steelhead or tidewater gobies created	Opportunity for fish passage increases as the peak flow velocities are reduced although breach events are not as frequent. Refugia habitat created is more than either Alternative 3 or 4.	Opportunity for fish passage increases slightly due to some peak flow reduction but breach events are consistent with Alternative 1 due to east bank constraints. Passage opportunity less than Alternative 2 or 4. Substantial increase in refugia habitat compared	Opportunity for fish passage increases as the peak flow velocities are reduced but breach events are consistent with Alternative 1 due to east bank constraints. Passage opportunity better than Alternative 3 but less than Alternative 2.

		Project Alternatives			
Environment	Project Improvement	Alt 1	Alt 2	Alt 3	Alt 4
				to Alternative 1, decrease in refugia habitat created than for either Alternative 2 or 4.	Substantial increase in refugia habitat compared to Alternative 1. Increase in refugia habitat created than for Alternative 3, but less than Alternative 2.
	Flood reduction and water quality improvement	Existing flood and water quality problems will remain.	Maximum peak velocity flow reduction and water quality improvement potential.	Some peak velocity flow reduction but decreased habitat expansion results in less water quality improvement than other Build Alternatives. Better than Alternative 1 but less than Alternative 2 or 4.	Some peak velocity flow reduction but decreased habitat expansion results in less water quality improvement than other Build Alternatives. Better than Alternative 1 and 3 but less than Alternative 2.
	Sea Level Rise and coastal erosion resilience	Coastal erosion compresses natural habitat areas and continues to reduce recreational beach area and undermine lifeguard facility. No accommodation for SLR.	Provides maximum room for lagoon and creek to evolve and retreat in response to SLR. Reduces potential for coastal erosion.	Provides some room for lagoon and creek to evolve but restricts that to west side only. Reduces potential for coastal erosion mostly on the west side.	Provides room for lagoon and creek to evolve and retreat on west side and moves north creating additional beach to provide buffer so reduces potential for coastal erosion and SLR. New bridge alignment is most resilient to future coastal erosion and SLR.
Built Environment	Topanga State Park General Plan implementation	No change	Least amount of visitor serving amenities. Greatest benefit to natural environment and sensitive species living within the Park.	Greatest benefit to visitor serving concessions and least benefit to natural environment and sensitive species of the three Build Alternatives.	Less amount of visitor serving amenities than Alternative 3 but more than Alternative 1 or 2.
	Coastal access/emergency visitor services	No improvements to emergency services response and general coastal access.	Improved access to project area through improved parking, bus and bicycle resources, Improved movement through site through expansion of trail network between properties and on both sides of creek. Improved emergency services by collocating helipad and hydrant with lifeguard tower. Greater than Alternative 1, same as Alternatives 3 and 4.	Improved access to project area through improved parking, bus and bicycle resources, Improved movement through site through expansion of trail network between properties and on both sides of creek. Improved emergency services by collocating helipad and hydrant with lifeguard tower. Greater than Alternative 1, same as Alternatives 2 and 4.	Improved access to project area through improved parking, bus and bicycle resources, Improved movement through site through expansion of trail network between properties and on both sides of creek. Improved emergency services by collocating helipad and hydrant with lifeguard tower. Greater than Alternative 1, same as Alternatives 2 and 3.

6.4.3 Comparison of Impacts for Each Alternative

Table 6-4 provides a summary comparison of the environmental impacts of each alternative. The discussion below provides some brief explanation for the scores. The lower the score, the fewer impacts to environmental resources would occur.

Aesthetics

All three Build alternatives would improve the aesthetics of the site compared to the No Project Alternative 1 through expanding natural habitat, refreshing the old deteriorating structures, removing trash and debris, and providing management to wildlife areas. Under the No Project Alternative 1, the structures on site would continue to deteriorate, diminishing the character of the site.

Air Quality

All three Build Alternatives would increase air emissions during construction. However, emissions would not exceed significance thresholds for any alternative. Once the project is built, air emissions would be similar to the No Project Alternative 1.

Biological Resources

All three Build Alternatives would improve the condition of the lagoon, wetlands, riparian vegetation, and upland habitats compared with the No Project Alternative 1. Alternative 2 would result in the greatest expansion of the lagoon and therefore would have the greatest benefits to special status biological resources including the southern steelhead trout and tidewater goby due to flow reduction and increased refugia habitat, although breach events could be fewer. The expansion would provide greater opportunities for the establishment of aquatic refugia especially for tidewater gobies and enhanced opportunities for fish passage and an overall increase in habitat quality, quantity and diversity. Breach events and opportunities for fish passage for Alternatives 3 and 4 are consistent with existing conditions. Alternative 4 provides the most expansion of beach area with more lagoon than Alternative 3 but less than Alternative 2. The restored habitats would replace areas of invasive species and would clear the area of trash and debris. Heightened management of the park area would reduce impacts to the habitat values associated with unauthorized human usage of the site. Under the No Project Alternative 1, the habitat values at the site would continue to deteriorate due to unauthorized access, pollutant loading from surrounding areas, proliferation of invasive species, degraded water quality, high velocity storm flows, and reduced refugia.

Cultural Resources

All three Build Alternatives, as well as Alternative 1 No Project, would adversely affect the existing structures on the site that are listed or determined eligible for NHRP/CRHR. The Topanga Ranch Motel is eligible for listing under the National Register of Historic Places and the California Register of Historical Resources. Alternative 2 would completely remove this historic feature and would therefore result in the greatest impacts to historic resources compared with the other alternatives. Alternative 3 would retain and restore some of the structures retaining most of their historic configuration. Alternative 4 would also retain some of the Ranch Motel but less than Alternative 3 and retain only a portion of its historic configuration. Under the No Project Alternative 1, the Ranch Motel would continue to deteriorate and eventually become a safety hazard and blight on the property. As a result, the analysis considers that of all four alternatives,

Alternative 3 would most benefit to historic resources on the site, and Alternative 2 would have the greatest impact.

Energy

All three Build Alternatives would increase energy usage during construction, but would not result in wasteful energy use. Once the project is built, energy consumption would be greatest under Alternative 3 since it would support the most visitor serving concession opportunities. However, none of the energy usage would be considered wasteful and would be similar to the No Project Alternative.

Geology

All three Build Alternatives would improve slope stability to reduce risks of bank erosion and collapse at the site. Under the No Project Alternative 1, the slope failure and beach erosion would continue unabated along the lagoon periphery and along the coast. Eventually, slope failure and beach erosion will affect the built structures including the lifeguard building and PCH.

Greenhouse Gases

All three Build Alternatives would increase air emissions during construction. However, once the project is built, air emissions would be similar to the No Project Alternative 1.

Hazards and Hazardous Materials

All three Build Alternatives would utilize fuels and other hazardous materials to support construction activities. Under the No Project Alternative 1, hazardous building materials such as lead based paint associated with the degrading structures would continue to affect soils and stormwater runoff quality.

Hydrology

All three Build Alternatives would construct storm drain systems including the installation of rain-capture areas to infiltrate stormwater, improving runoff water quality. In addition, the redesigned lagoon would allow for more natural functioning of the coastal lagoon, improving water quality for native species. Under the No Project Alternative 1, high velocity stormflows would continue to scour the narrow lagoon, impacting availability of habitat for southern steelhead trout and tidewater goby. In addition, water quality would continue to deteriorate due to degradation of on-site structures if left unabated.

Land Use

All three Build Alternatives would be consistent with the Topanga State Park General Plan. All Build Alternatives will require alterations in land ownership with the most change for Alternative 4. The No Project Alternative 1 would be inconsistent with the Topanga State Park General Plan since upgrades would not be conducted and the Topanga State Park General Plan objectives are not realized. Under the No Project Alternative 1 the site would not receive the “managed-retreat”

upgrades which offset anticipated erosion impacts from SLR. Otherwise, the land uses designations would not change for any of the alternatives.

Noise

All three Build Alternatives would increase noise during construction. However, once the project is built, noise would be similar to the No Project Alternative 1.

Public Services

All Build Alternatives would improve emergency services by collocating the lifeguard tower with helipad and providing a hydrant. No affects to other public services including police, fire, or libraries would occur. The project involves improvements to park infrastructure to support future uses. The No Project Alternative 1 would not upgrade the site to support future uses.

Recreation and Parks

Each of the Build alternatives would improve coastal access and visitor services at the existing Park compared with the No Project Alternative 1. Alternatives 3 and 4 would provide more opportunities for visitor services through retention of portions of the Topanga Ranch Motel than Alternative 2. The No Project Alternative 1 would not improve public access to the beach and would not improve safety for park visitors. No new visitor services would be provided to modernize the site, improve access, create trails, decrease unauthorized parking, or improve safety at the Topanga State Beach. The beach would continue to be subject to erosion due to SLR, reducing the size of the recreational beach area.

Transportation

Each of the Build Alternatives would construct a new bridge that would result in some slowing of traffic at times although within the bridge area all four lanes of PCH will be remain open at all times. Under the No Project Alternative 1 the bridge would not be improved and the beach access and parking would not be affected by construction.

Tribal Cultural Resources

Alternatives 2 and 3 would avoid impacts to Tribal Cultural Resources. Alternative 4 would result in a significant and unavoidable impact to Tribal Cultural Resources due to the impacts of the PCH roadway alignment and DBH facilities placed further inland than the other two alternatives. The No Project Alternative would avoid impacts to these resources.

Utilities and Service Systems

Each of the Build alternatives would require rerouting utilities within PCH including water supplies, communications, and electricity. Utilities and service systems would be maintained during construction. Once constructed the project would have no effect on these utilities.

Wildfire

Each of the Build alternatives would implement fuel zone management requirements within and around the perimeter of the Park to improve wildfire hazard management compared to the No Project condition.

**TABLE 6-4
ENVIRONMENTAL IMPACT SEVERITY FOR EACH ALTERNATIVE COMPARED WITH THE NO
PROJECT ALTERNATIVE**

Environmental Resource	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
Aesthetics	0	-1	-1	-1
Air Quality	0	+1	+1	+1
Biological Resources	0	-3	-1	-1
Cultural Resources	0	+2	-2	-2
Energy	0	0	0	0
Geology, Soils, and Mineral Resources	0	-2	-2	-2
Greenhouse Gas Emissions	0	0	0	0
Hazards and Hazardous Materials	0	-1	-1	-1
Hydrology and Water Quality	0	-2	-2	-2
Land Use and Planning	0	-3	-3	-3
Noise	0	0	0	0
Public Services	0	-1	-1	-1
Recreation and Parks	0	-2	-3	-3
Transportation	0	+1	+1	+1
Tribal Cultural Resources	0	0	0	+2
Utilities and Service Systems	0	0	0	0
Wildfire	0	-1	-1	-1
Total	0	-12	-17	-15

NOTES:

(-3) = Impacts considered to be substantially reduced when compared with Alternative 1.

(-2) = Impacts considered to be moderately reduced when compared with Alternative 1.

(-1) = Impacts considered to be somewhat reduced when compared with the Alternative 1.

(0) = Impacts considered to be equal to the Alternative 1.

(+1) = Impacts considered to be somewhat increased when compared with Alternative 1.

(+2) = Impacts considered to be moderately increased when compared with Alternative 1.

(+3) = Impacts considered to be substantially increased when compared with the Alternative 1.

Where significant unavoidable impacts would occur across different alternatives but there are impact intensity differences between those alternatives, numeric differences are used to differentiate alternatives (i.e., in some cases, there are differences at the individual impact level, such as differences in number of impacts or relative intensity).

6.5 Ability to Meet Objectives

Table 6-5 provides a comparison between each suggested Alternative. Alternative 1 does not meet any of the Project objectives. Alternatives 2, 3, and 4 would meet all Project objectives.

**TABLE 6-5
ALTERNATIVES COMPARISON TO PROJECT OBJECTIVES**

Objective	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
Expand the lagoon ecosystem to improve estuarine hydrologic functions and to protect endangered species.	No. Alternative 1 would not expand the lagoon footprint and there would be continued impacts from flooding and peak flows, deterioration of lagoon habitat quality and limited fish passage.	Yes. Alternative 2 would result in the greatest expansion of the lagoon ecosystem. Alternative 2 would therefore result in the greatest improvement to habitat quality relative to the other Alternatives. Under Alternative 2, the lagoon mouth is expected to be closed more often from November through May, during the rainy season. Provides maximum refugia for tidewater gobies and juvenile steelhead although not as much fish passage opportunity that is better than Alternative 1 and 3 but equal to Alternative 4. Alternative 2 provides for the most improvement for fish passage.	Yes. Alternative 3 would expand the lagoon ecosystem, but would include less acres than Alternatives 2 and 4. Model results for Alternatives 3 show little change in closure of the lagoon mouth but provides some increased refugia habitat for tidewater gobies and juvenile steelhead and limited change to fish passage opportunities which is better than 1 but not as good as Alternatives 2 and 4. Alternative 3 provides for some improvement for fish passage. Lagoon hydrology and habitat quality benefits under Alternative 3 would therefore be improved more than Alternative 1, but less than Alternatives 2 and 4.	Yes. The lagoon ecosystem would be expanded to greater acreages than Alternatives 1 and 3, but would be less than acreages proposed under Alternative 2. Model results for Alternatives 4 show little change in closure of the lagoon mouth but provides some refugia habitat for tidewater gobies and juvenile steelhead and limited change to fish passage opportunities which is better than 1 and 3 and equal to Alternative 2. Alternative 4 provides for some improvement for fish passage. Lagoon hydrology and habitat quality benefits would therefore be improved more than Alternatives 1 and 3, but less than Alternative 2.
Enhance coastal resilience for essential facilities in the Project area.	No. Under Alternative 1, sea level rise and coastal erosion would continue to reduce the available beach area and further damage existing facilities.	Yes, this alternative includes restoration of more natural side channels connected to the western side of the existing lagoon based on historic topography, expand the floodplain and potential channel areas on the east side, and would allow the lagoon system to evolve to accommodate changing sea level and storm surge conditions. To provide additional protection from sea level rise within the Topanga Beach area, the existing lifeguard and public restroom building would be demolished and a building with footprint and materials similar to existing would be relocated directly upslope of their current location, and along the edge of the beach access road,	Yes, implementation of the west side improvements noted in Alternative 2 would occur, however the east side would be restricted by retention of the fill under the Topanga Ranch Motel. This limits the ability of the lagoon and creek to accommodate to sea level rise. Similar to Alternative 2 additional protection from SLR for the lifeguard and public restroom building would be accomplished by relocating the facilities inland and upslope of its current location. Improvements to coastal resilience within the Project area would be better than Alternative 1, but less than Alternatives 2 and 4.	Yes, implementation of the west side improvements noted in Alternative 2 would occur, and due to moving PCH north there would be greater beach area with potential for living shoreline buffers providing maximum protections of infrastructure for sea level rise. The east side would still be somewhat restricted by retention of the fill under the Topanga Ranch Motel. Similar to Alternative 2 additional protection from SLR for the lifeguard facility would be accomplished by relocating the facilities inland and upslope of its current location. Improvements to coastal resilience within the Project area would be better than Alternative 1 and 3, and potentially equivalent but different from Alternative 2.

Objective	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
Optimize beneficial reuse of excavated sediment by increasing sediment replenishment via nearshore placement and long-term conveyance increased by a wider bridge to the littoral cell while maintaining the integrity of the surf break.	No. The sediment filling the lagoon would not be beneficially used	Yes. The excavated sediment would be used to nourish the near shore if approved by USACE.	Yes. The excavated sediment would be used to nourish the near shore if approved by USACE	Yes. The excavated sediment would be used to nourish the near shore if approved by USACE
Protect the surf break and beach recreation.	Yes. The surf break would respond to SLR. No. Coastal erosion would continue to degrade the beach.	Yes. The surf break would respond to SLR as no changes are planned below the MHHT line. This alternative expands the beach face by 30-50 ft on both the west and east sides and provides additional recreation and living shoreline protection areas. This alternative is better than Alternatives 1 and 3 but not as good as Alternative 4.	Yes. The surf break would respond to SLR as no changes are planned below the MHHT line. This alternative expands the beach face by 30-50 ft mostly on the west side and provides additional recreation and living shoreline protection areas. This alternative is better than Alternatives 1 but not as good as Alternatives 2 and 4.	Yes. The surf break would respond to SLR as no changes are planned below the MHHT line. This alternative expands the beach face by 50 – 90 ft on both the west and east sides and provides the most additional recreation and living shoreline protection areas. This alternative is better than Alternatives 1, 2 and 3. redy
Improve water quality and restore coastal wetland habitat and species diversity within the Topanga Creek Watershed.	No. No improvements to riparian or upland habitat would occur and water quality would continue to degrade and impacts to endangered species in the lagoon would continue.	Yes. Project Alternative 2 provides the greatest increase in lagoon, wetland, and riparian habitat. Expansion of the lagoon would create essential wetland and riparian habitat for the tidewater goby and juvenile steelhead and for many other native species. Project Alternative 2 also includes implementation of the largest lagoon area and would therefore provide the greatest benefit to water quality.	Yes. Alternative 3 would expand the lagoon ecosystem, but would include less acres than Alternatives 2 and 4. Water quality, coastal wetland habitat, and species diversity under Alternative 3 would therefore be improved more than Alternative 1, but less than Alternatives 2 and 4.	Yes. Alternative 4 would expand the lagoon ecosystem to greater acreages than Alternatives 1 and 3, but would be less than acreages proposed under Alternative 2. Water quality, coastal wetland habitat, and species diversity under Alternative 4 would therefore be improved more than Alternatives 1 and 3, but less than Alternative 2.
Increase safety and coastal access for pedestrians, cyclists, and for visitors with disabilities.	No. ADA and staff parking and access at the beach level would be retained, however, no improvements to safety or coastal access would occur. Limited bus stop access and no bicycle facilities would continue.	Yes. Alternative 2 would provide more convenient, safer pedestrian access by expanding the waiting area at the TCB/PCH intersection and provide safe access under PCH on both sides of the lagoon. Improved bus stop area and bicycle parking would be created close to new paths. ADA and staff parking and access at the beach level would be retained in all Project Alternatives. ADA compliant	Yes, implementation of all features described for Alternative 2 would occur.	Yes, implementation of all features described for Alternative 2 would occur.

Objective	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
		trail sections are incorporated into the plan.		
Improve evacuation and emergency service routes through the Project area.	<p>No. The No Build Alternative would not improve public access and the single underpass on the east side would remain.</p> <p>No evacuation, or emergency service route improvements would occur.</p>	<p>Yes. Coastal access would be improved under Alternative 2.</p> <p>The PCH bridge span would be elongated which would reduce shoulder parking but there would be controlled ingress and egress into the parking lots on PCH.</p> <p>The new helipad site would re-located to the east side of the lagoon for improved access by the lifeguards and emergency responders. Additionally, the Topanga Beach parking lot would be modified to accommodate a new access road to the beach lifeguard building and garage.</p> <p>A dirt emergency route from PCH to the beach level would be constructed on the west side of the lagoon provide lifeguard access to the western beach even during times when the lagoon mouth is open.</p>	Yes, implementation of all features described for Alternative 2 would occur..	Yes, implementation of all features described for Alternative 2 would occur.
Improve and enhance coastal access and recreational facilities.	<p>No. The No Build Alternative would not improve public access and the single underpass on the east side would remain.</p> <p>No bus stop or bicycle improvements would occur.</p> <p>The existing 266 coastal access parking spaces would remain. (Note that 124 spaces are concession exclusive.)</p>	<p>Yes. Coastal access would be improved under Alternative 2.</p> <p>A new underpass trail would lead from visitor parking on the north side of PCH directly to the beach on both sides of the lagoon.</p> <p>The PCH bridge span would be elongated which would reduce shoulder parking but there would be controlled ingress and egress into the parking lots on PCH.</p> <p>The new helipad site would re-located to the east side of the lagoon for improved access by the lifeguards and emergency responders. Additionally, the Topanga Beach parking lot would be modified to accommodate a new access road to the beach lifeguard building and garage.</p>	Yes, implementation of all features described for Alternative 2 would occur. However, only 265 parking spaces which is 1 less than existing spaces would be provided throughout the Project area, which is less than the other Project Alternatives.	Yes, implementation of all features described for Alternative 2 would occur. However, 294 parking spaces which is 28 more spaces, would be provided throughout the Project area, which is more than the other Project Alternatives.

Objective	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
		<p>The areas around the existing bus stops would be improved to be more welcoming to public transportation users.</p> <p>A dirt emergency route from PCH to the beach level would be constructed on the west side of the lagoon provide lifeguard access to the western beach even during times when the lagoon mouth is open.</p> <p>In total, 273 parking spaces would be provided, which is 7 more spaces than exisis throughout the Project area, which is more than Alternative 3, but less than Alternative 4.</p>		
Manage and maintain the lagoon ecosystem consistent with the Topanga State Park General Plan.	No. The Project area would continue to deteriorate with only emergency reactive measures implemented. Expect degradation due to human use and encroachment pressure, invasive weed spread, exacerbated by habitat compression to SLR and increase of extreme weather events. No lagoon restoration would occur as prescribed in the Topanga State Park General Plan.	Yes. Alternative 2 would provide maximum lagoon ecosystem enhancement. The enhancement designs are scientifically based and include habitat restoration plans that account for sea level change, sediment loads, and coastal processes. The features above would ensure consistency with this General Plan Goal.	Yes, Alternative 3 would be implemented in coordination with local agencies and would enhance the lagoon ecosystem in a manner that is consistent with Topanga State Park General Plan Goals. It provides for a better lagoon ecosystem than Alternative 1 but less than Alternative 2 or 4.	Yes. Alternative 4 would be implemented in coordination with local agencies and would enhance the lagoon ecosystem in a manner that is consistent with Topanga State Park General Plan Goals. It provides for a better lagoon ecosystem than Alternative 1 and 3 but less than Alternative 2.
Replace the narrow 1933 PCH bridge to accommodate lagoon restoration and anadromous steelhead trout recovery.	No. The No Build Alternative would not include construction of a new bridge.	Yes. Under Alternative 2, the Caltrans bridge would be expanded (from 79 to 460 feet) to accommodate a widened lagoon riparian area, which would lower flow velocities to improve adult steelhead migration opportunities and increase refugia areas for tidewater gobies and juvenile steelhead, as well as the quantity and quality of lagoon habitats.	Yes. Similar to Alternative 2, Alternative 3 would expand the Caltrans bridge and accommodate lagoon restoration and anadromous steelhead trout recovery.	Yes. Similar to Alternative 2, Alternative 4 would expand the Caltrans bridge and accommodate lagoon restoration and anadromous steelhead trout recovery. Under this alternative, the alignment of PCH would move slightly north to provide greater SLR resiliency.

Objective	Alternative 1 – No Action/ Managed Decline or No Build	Alternative 2 – Maximum Lagoon Habitat	Alternative 3 – Limited Lagoon Habitat Expansion	Alternative 4 – Maximum Managed Retreat
<p>Establish a visitor serving “Gateway Corner” at the intersection of PCH and TCB, consistent with the Topanga State Park General Plan, to provide a coastal gateway to the Park.</p>	<p>No. The No Build alternative would not include relocation or removal of existing structures, nor would new visitor services be constructed in the Project area.</p>	<p>Yes. All new development at the Gateway Corner would be limited in size and scale to protect the rural/urban interface and create an inviting entrance to lower Topanga State Park. Structures would include a park office, ranger house, maintenance facility and a small outdoor interpretive pavilion/restroom. A small picnic area would also be included.</p> <p>Improved wastewater management would be provided for an onsite SDI system, onsite seepage pit area or connection to sewer.</p>	<p>Yes. Similar to Alternative 2, new CDPR development would be located at the Gateway Corner (intersection of TCB and PCH) would include a small outdoor interpretive pavilion/restroom and maintenance facility. A small picnic area would also be included.</p> <p>Improved wastewater management would be provided for an onsite seepage pit area or connection to sewer.</p>	<p>Yes. Similar to Alternative 2, new CDPR development would be located at the Gateway Corner (intersection of TCB and PCH) would include a small outdoor interpretive pavilion/restroom and maintenance facility. A small picnic area would also be included.</p> <p>Improved wastewater management would be provided for an onsite seepage pit area or connection to sewer.</p>
<p>Manage historic and archaeological resources in the Project area consistent with the Topanga State Park General Plan.</p>	<p>No. Sensitive resources would remain as is as or degrade as only demolition would occur in these areas. However, the historic motel structures would continue to deteriorate similar to existing conditions and would conflict with the goals and guidelines of the Topanga State Park General Plan, which include goals for protection of the Park’s historical resources.</p>	<p>Yes. Alternative 2 would remove the historic Topanga Ranch Motel and other existing visitor-serving uses resulting in a significant impact of the project. However, the action would be consistent with the General Plan objectives of optimizing targeted values while implementing professional measures to ensure consistency with General Plan Goals.</p> <p>Impacts to paleontological resources would be mitigated. Alternative 2 would avoid buried archaeological resources during construction.</p>	<p>Yes. Alternative 3 would retain and restore 20 of the historic structures on site.</p> <p>Installation of a AOWTS or sewer connection would be required to avoid impacts to sensitive resources</p> <p>Similar to Alternative 2, Alternative 3 would include professional measures to ensure consistency with General Plan Goals.</p>	<p>Yes. Alternative 4 would retain and restore 15 of the historic structures on site but it could have impacts to sensitive archaeological resources. The action would be consistent with the General Plan objectives of optimizing targeted values at the site avoiding impacts to historic and archaeological resources to the extent practicable.</p> <p>Installation of a AOWTS or sewer connection would be required to avoid impacts to sensitive resources</p> <p>Alternative 4 would result in a significant impact to a tribal cultural resource due to the inland placement of the PCH highway alignment and DBH facilities. However, similar to Alternative 2, Alternative 4 would include professional measures to ensure consistency with General Plan Goals.</p>

6.6 Environmentally Superior Alternative

CEQA requires that a Draft EIR identify the environmentally superior alternative of a project other than the No Project Alternative (CEQA Guidelines Section 15126.6(e)(2)). One of the primary purposes of the alternatives analysis is to identify project alternatives that may avoid or substantially lessen significant project impacts (CEQA Guidelines Section 15126.6). With incorporation of mitigation measures, the Proposed Project would result in Significant and Unavoidable impacts to historic resources.

Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, when the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from the remaining alternatives. As summarized in Table 6-4, Alternative 3 would result in the fewest environmental effects compared with the No Project/No Build alternative. As a result, Alternative 3 is considered the environmentally superior alternative. As outlined in Table 6-4, Alternative 3 would result in the greatest benefits and meet the most project objectives. Therefore, Alternative 3 is considered the Environmentally Superior Alternative.

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CHAPTER 7

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